

Preface

In view of the numerous challenges in the new millennium, a fundamental concern about the current paradigm of education has emerged. The quest for a paradigm shift to adapt to the ecological changes and to ensure relevance of education to the future needs of our younger generations is in progress. Being raised are numerous questions that challenge the current philosophy, design and practice of education in nearly all subject areas, ranging from information technology, science, and mathematics to social sciences and languages. Then, the major trends of development in teacher education inevitably inform and affect the efforts of research and innovation in subject teaching and subject teacher development. Further, given the fact that knowledge and skills are going to be outdated very quickly in this new era, educators have begun to reconsider and even reconceptualize the role and meaning of subject knowledge and skills in subject education.

When the above issues of subject teaching, teacher education, and teacher development are considered together, we would note that, within the context of searching for paradigm shift triggered by the interactive forces of globalization, localization, and individualization in education, the relationships among paradigm shift, curriculum development, subject teaching, and teacher education must be highlighted, clarified, and rationalized.

With the staunch support from the Kluwer Academic Publishers, Hong Kong Institute of Education, and *Asia-Pacific Journal of Teacher Education and Development*, this book is published to contribute to the ongoing debates in subject teaching and teacher education within the context of paradigm shift. This book also aims to contribute to the creation of a new knowledge base that can support the endeavors at different levels for teaching effectiveness and teacher development in different parts of the world. This edited volume has 22 chapters prepared by 36 international scholars, who are experienced and renowned scholars and researchers from different parts of the world. All the chapters had gone through a rigorous peer review and revision process with the support of numerous anonymous international reviewers.

The chapters are grouped into three sections: "Information Technology,

Science, and Mathematics”; “Social Sciences and General Studies”; and “Languages”. And the chapters revolve around the theme of enhancing teaching effectiveness and effectuating paradigm shift in subject curriculum, pedagogy, and teacher education in response to the challenges in the new millennium. As a whole, this book reports to the international readers some important efforts of research and innovation that have been done in different parts of the world as well as implications that can be drawn to promote effective teaching, teacher education, and paradigm shift in different subject areas of education.

The chapters represent an important collection of international endeavors committed to facilitate the much needed paradigm shift in subject curriculum and pedagogy and to reinforce the quest for a new knowledge base that can support the search for new conceptions, models, perspectives, innovations, and practices for teaching effectiveness and teacher development. We believe all these efforts will finally make an important contribution to the future of our students and teachers in this new era of globalization and transformation. Thus, we hope, educators and researchers will find this publication a major source of stimulation and a useful reference.

At last, we would like to thank the international scholars, reviewers, and authors who have helped and contributed to the publication at different stages. In particular, we are greatly indebted to Ms. Christine Chiu, Ms. Clara Fong, Miss Iris Kam, Miss Chi Yan Lee, Miss Fanny Liu, Miss Emily So, and Ms. Polly Tse for their professional or clerical support given at various points of time to this book project.

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