Acknowledgements

The completion of this dissertation involves indebtedness to innumerable sources of wisdom. Looking back, I can hardly ignore the sparks my students have sent to enlighten me over the years of my teaching. The lessons learned as a teacher have indeed become the lights by which I found my way. And yet there are other faces that vividly stand out. To them, thankful acknowledgement is in order. First and foremost is my supervisor, Professor Li Yi-Ping, who has given me ample space of freedom to explore my research interest, and second is my co-supervisor, Professor Leong Hong-Va from the Department of Computing, at Hong Kong Polytechnic University, whose mentor support in nurturing my sharp turns of mind in research ideas, is much appreciated. I still remember his emphatic comment of "putting more meat into your soup." Third is my wife, Doris, who has been patient enough to make rooms and time for my iterative cycles of devoted research and writing, taking care of our kids, bearing with my absence from home owing to conference trips throughout these years. Fourthly is Professor Rik D'Amato, the Director of the Centre for Teaching and Learning Enhancement (CTLE) at the University of Macau, Macau, for his insights into how my academic research could best be channeled into the immediate contributions of teaching and learning, apart from its emphasis in software engineering, especially in the area of e-learning and educational technology. Fifthly is our Vice Rector in Academic Affairs, Professor Simon S.M. Ho for his timely support and encouragement to see to the completion of my thesis work. Last but not the least, I would like to express my sincere gratitude to the following professors whose contributions in the related fields, have been very instrumental to providing advice into executing my research towards productive results: Professor Peter Checkland, from Lancaster University in England, Professor John M Carroll, from the College of Information Sciences and Technology in Penn State University, Pennsylvania (USA), Professor David Bustard, from the School of Computing and Information Engineering, at the University of Ulster from England, Professor Douglas Vogel, from the Department of Information Systems, City University of Hong Kong, Professor Linda Knight, from the School of Computing at DePaul University, Chicago, Illinois in the US, and also Editor-in-Chief of the international Journal of Information Technology Education, published by Informing Science Institute, USA, and Professor Andy Ju An Wang, from the School of Computing and Software Engineering, Southern Polytechnic State University, Georgia, USA.