FOREWORD

InScience Press is gratified to publish this book entitled *Education Applications & Developments* as part of the Advances in Education and Educational Trends series.

In this volume, a devoted set of authors explore the Education field, contributing to the frontlines of knowledge. Success depends on the participation of those who wish to find creative solutions and believe their potential to change the world, altogether to increase public engagement and cooperation from communities. Therefore, serving society with these initiatives and promoting awareness, as part of our mission, requires the reinforcement of research efforts.

These series of books comprise authors and editors work to address generalized research, albeit focused in specific sections, in the Education area. Contents show us how to navigate in the most broadening issues in contemporary education and research.

In particular, this book explores four major divisions within general Education, corresponding to four sections: "Teachers and Students", "Projects and Trends", "Teaching and Learning", and "Organizational Issues". Each section comprises chapters that have emerged from extended and peer reviewed selected papers originally published in the proceedings of the International Conference on Education and New Developments (END) conference series (http://end-educationconference.org/). This meeting occurs annually with successful outcomes. Original papers have been selected and invited to be extended significantly, reviewed, and authors of the accepted chapters requested to make corrections and improve final submitted chapters. This process has resulted in the final publication of 28 high quality chapters organized into 4 sections. The following sections' and chapters' objectives provide information on the book contents.

Section 1, entitled "Teachers and Students", provides studies within educational programs and pedagody for both tutors and students. Each chapter is diversified, mainly addressing thematics in teacher education, programs, curriculum and practice. It also explores student affairs (learning, experiences and diversity) and assessment.

Chapter 1: *Teacher education and professional development: Text production and school management in focus*; by Ana Luzia Videira Parisotto and Renata Portela Rinaldi. This chapter presents the results of a constructive-collaborative research on learning processes of teachers and school administrators, participants in a professional development program. This program involved researchers from two Brazilian universities in the State of São Paulo (one public and one private) and was sponsored by CNPq (Brazil's National Council for Scientific and Technologic Development). Its data were collected by means of written narratives, interactive conversations, and questionnaires. In agreement with the chosen theoretical framework, teacher learning is herein regarded as an ongoing process, influenced by teachers' personal beliefs, understandings, and knowledge of different natures. In addition, teachers and school administrators are believed to need support in order to develop professionally and continued education proposals involving a school-university partnership centered on demands arising from the school partners' work setting are deemed ideal. This chapter focuses on data relating to the teaching of text

production and on the continued education of schoolteachers and administrators in view of implementing democratic-participative school management. Results indicate that participating teachers, administrators, and researchers have successfully constructed new professional knowledge and point to the importance of in-service education at the workplace.

Chapter 2: *Student perception of teachers' National Council for the Accreditation of Teacher Education and California Commission on Teacher Credentialing dispositions*; by Kimberly R. Hudson. The purpose of this quantitative study is to identify what relationship, if any, exists between (a) teachers' perception of their own moods and behaviors that align with National Council for the Accreditation of Teacher Education's (NCATE) teaching dispositions and California Commission on Teacher Credentialing (CCTC) standards within the classroom and (b) their students' perception of teachers' moods and behaviors that align with NCATE teaching dispositions and CCTC standards within the classroom. This study focused on students in Grades 9 through 12. This study also examined whether students' academic achievement, as measured by their course grades, affects students' perception of their teachers' in-class moods and behaviors. It gathered self-report data about (a) students' perceptions of the teacher's dispositions based on students' observations of teacher behavior in the classroom and (b) teachers' self-report about their own dispositions. These dispositions are conceptually equated with teacher attitudes and are based on the NCATE dispositions. The Student Perception Survey created by the researcher was used to gauge the students' perception of particular dispositions observed within the classroom setting. The National Council for the Accreditation of Teacher Education dispositions state there are certain attitudes and behaviors teachers should use in the classroom, which align with the dispositions measured by the Student Perception Survey. This method was selected to assess the relationship between (a) the NCATE dispositions as indicated by current observable moods, attitudes, and behaviors as perceived by students, and (b) student grades. The results of the study suggest that the disposition of belief of a student's ability to learn is being accurately perceived and being displayed by the teachers in the classroom. The findings also suggest that although the students like their teachers, the students perceive that their teacher's treatment as unfair whether it be toward themselves or other students, therefore the disposition of fairness is not being accurately displayed in the classroom

Chapter 3: *Academic transition and peer tutoring: A case study at the University of Padova*; by Lorenza Da Re and Giuseppe Zago. According to the European Space for Higher Education document by the Confederation of European Rectors' Conferences, research, teaching activities, and orientation/tutoring programs enhance the university's educational offer. Students entering the university who are not fully aware of the challenges ahead risk abandoning their endeavours. Cognitive-social approach theories highlight the importance of preparatory activities assisting students in making appropriate decisions and in facing new challenges. Like many European counterparts, the University of Padova (Italy) has initiated tutoring services including pre-enrollment orientation, freshman welcoming activities, ongoing tutoring initiatives, and outgoing orientation. "Open Day," an initiative organized by the University's Tutoring Service of the Teacher Education Program, is an aspect of that service. Junior tutors, students enrolled in second-cycle degree courses, organize the initiative each year by holding workshops for new students interested in various degree courses. In this chapter it is described the University's tutoring service in all of its manifestations and in particular focusing on the "Open Day" orientation

experience. This observational study falls within the context of the project promoted by the University whose aim was to analyse developments and trends in higher education, and to assist students in achieving academic success.

Chapter 4: *Levels of adjustment to college, gender and academic achievement in first-year Spanish students*; by Mª Fernanda Páramo, Carolina Tinajero, and Mª Soledad Rodríguez. The documented difficulties that emerging adults experience during the transition to university, combined with the changing needs at this stage of life, have brought increased international attention to the adjustment of first-year university students and their academic achievements. However, surprisingly few studies have addressed this relationship in first-year students in Spain. The present chapter explores the relationships between levels of adjustment, gender and academic achievement in a sample of 300 first-year university students in Spain. The Student Adaptation to College Questionnaire (SACQ) was administered to assess adjustment. Multivariate analysis revealed that students with lower levels of academic and institutional adjustment to college achieved less well academically than students with intermediate and higher levels of adjustment. The students' average grade prior to starting university was entered in the analysis as a covariate. Gender had no significant effect on first-year academic achievement. Academic adjustment is the dimension that best explains academic achievement in females and males. Nevertheless, female and male students differed with respect to the effects of adjustment on their academic achievement; no significant effect was observed for institutional adjustment in male students. Theoretical and practical implications for the study of students' adjustment to university and academic performance are discussed.

Chapter 5: *Primary teacher mathematics anxiety, teacher efficacy and mathematics avoidance*; by Sharon Jaggernauth and Madgerie Jameson-Charles. This exploratory study examines the relationships among mathematics anxiety, mathematics teacher efficacy, and mathematics avoidance, among 68 primary teachers in Trinidad and Tobago, using a self-reporting questionnaire. Stata12 was used to compute means and standard deviations, and to conduct correlation, means-difference, and regression analyses. High mathematics anxiety was associated with low teacher efficacy and high mathematics avoidance among both male and female teachers. There were no significant relationships among mathematics anxiety, mathematics teacher efficacy, and mathematics avoidance by age and years of teaching experience. Gender was a significant factor for mathematics avoidance, with males reporting significantly higher mathematics avoidance than females. While a regression model with teachers' gender, age, teaching experience, and mathematics attainment could not significantly predict mathematics anxiety, mathematics attainment significantly predicted mathematics anxiety, and mathematics anxiety significantly predicted mathematics teacher efficacy. Further research is imperative to determine if mathematics anxiety is problematic at the primary level, with priority to unearthing links between teacher anxiety and student anxiety, and how student achievement, attitudes and beliefs are affected by teacher mathematics anxiety. Such research should inform teacher preparation and development programs to strengthen teachers' efficacy beliefs by addressing teachers' mathematics anxiety by equipping teachers with tools to manage their anxiety and strengthen individual efficacy beliefs about teaching mathematics.

Chapter 6: *The teacher's development plan in the initial teaching degree*; by Susana Aránega Español. The teacher is a key factor in the teaching-learning process, with a complex profile combining varied types of knowledge, a wide range of skills, and the

teacher's own personality. In initial training a great deal of the knowledge and skills necessary to the profession are acquired, but such essential elements as personal and social competences are rarely explored to the depth they deserve. In this chapter it is presented an innovation project carried out with trainees on their initial teaching degree, aimed at developing the personal and social competences. This study includes a process of reflection designed to foster the habit of self-analysis a working teacher needs. In order to achieve this it's devised and carried through a four-phase sequence of activities through which a personal development plan was drawn up and assessed.

Chapter 7: *The influences and motivations for becoming a preschool teacher: Turkish case*; by Belkıs Tekmen and Güler Küçükturan. Teacher candidates' motives for becoming a preschool teacher are very crucial for their success and satisfaction in their career. Acceptance and recruitment policies of the teacher candidates to the preschool teacher education program are current topics in Turkey for the improvement studies of the education system. This chapter aims to identify the factors influencing teacher candidates' career choices and to reveal if their perceptions change after entering the program. Data was gathered through semi-structured questionnaire and analyzed descriptively by content analyses. Participants were preschool teacher candidates from different education faculties attended the Preschool Teacher Education Student Congress (PTESC, 2014) hosted by Baskent University, Ankara. Finding a permanent job, having additional scores at the entrance, considering it as a female suited profession and interest in children care were some of the main motives declared by the teacher candidates.

Chapter 8: *The bridge between theory and practice*; by Güler Küçükturan and Belkıs Tekmen. Practicum courses at the senior year of the preschool teacher training programs are essential to transfer theoretical knowledge into practice. Although the theoretical part of the preschool teacher training program applied in every education faculty in Turkey is mostly standard and prepared by the Higher Educational Council, there are differences related with the school characteristics, classroom teacher and the course advisor's expectations from the teacher candidates. In this study, daily activity plans prepared by the senior students of the preschool teacher education program from five different universities located in Ankara are analyzed by content analysis in terms of variables such as selected outcomes, activity types, materials, group activities, developmental areas focused and assessment methods. These variables not only show the instructional planning skills of the teacher candidates but also their teaching philosophy, creativity, interdisciplinary transfer and child care philosophy. It is expected that, by finding out these areas to be strengthened, both the theoretical and the practical dimensions of the teacher education will be improved.

Chapter 9: *Calculated questions and e-Cheating: A case study*; by Juan Carlos González de Sande. Many learning management systems permit to configure a questionnaire based on an existing item bank. This item bank should be large enough in order to assure that the students do not know the questions (and the corresponding right answer without any study) after several colleagues have solved the questionnaire. A way to minimize this problem is by creating a very large item bank (several thousands of items). In many engineering and science disciplines is an easy task to automatically generate random numerical variants of the same question. The answer of such question is numerical and it is obtained after some calculation using one or more parameters that are randomly assigned by the learning management system. This type of questions is called "calculated questions". Even using calculated questions, there are some students that correctly answer the questionnaire in such

a fast time that make the instructors think they have obtained some unfair advantage. During the time that some of these questionnaires was open, it has been introduced a new calculated question and followed the evolution of the wrong/right answers over time. The focus of attention is on the students that solved the questionnaire in a fast time. Results show that after a few hours and after the first tenth of students have answered the new question, a surprisingly high proportion of students that solve the questionnaire in a fast way, answer the new question correctly.

Section 2, entitled "Projects and Trends", delivers chapters concerning, as the title indicates, education viewed as the center for innovation, technology and projects, concerning new learning and teaching models. Knowledge in different usabilities, communication, software and new methods of teaching and learning are used to compile these works.

Chapter 10: *HbbTV history and its educational possibilities: Teaching options in times of the Internet*; by Joan-Francesc Fondevila-Gascón, Pedro Mir-Bernal, Marta Carreras-Alcalde, and Swen Seebach. Hybrid Broadcast and Broadband TV (HbbTV) is a new device that combines common visual and audio media consumption like we know it with the possibilities of the Internet. As a consequence, HbbTV facilitates not only new forms of consumption, but provides us with new possibilities in education. Schools and other educational institutions like universities have started to explore the advantages of this new technology with regards to its ability to create more horizontal, creativity fostering dynamics. Within this chapter the authors demonstrate how HbbTV, as a convergence tool, provides useful results for students and professors when installed in the seminar room. The discussions are exemplified with results from the mixed method research. Final results point out that the HbbTV transforms educational space into a multimedia environment with completely new possibilities and challenges for students and teachers. On the basis of the analysis and possible results, the authors will give some recommendations for using HbbTV and multimedia technologies in teaching and co-learning.

Chapter 11: *Concept maps as knowledge-building and argument-systematizing tools: Experimenting with undergraduate students*; by Marcus Vinicius Santos Kucharski. In the second semester of 2012, a first experiment with concept maps (CMs) as pre-writing and collaborative work technology with 130 undergraduate students in Curitiba (Brazil) proved to be a powerful team-spirit and argumentative competence-building resource. Constructed over the principles of meaningful learning, andragogy, concept mapping and the efficacy of using CMs in collaborative working scenarios, the experiment showed noticeable quality gain in works presented by the study population in three different undergraduate courses, showing an average of 15% higher grades. The research design, application and a first discussion of its results are hereby presented.

Chapter 12: *Does creativity rely on expertise? How the Danish reform-pedagogical agenda is related to present attempts to understand and facilitate creativity and personal expression among children*; by Mikkel Snorre Wilms Boysen. According to creative theory, expertise is considered a precondition for creativity. The assumption is that the individual must master the common and accepted rules and techniques in order to create something new and valuable. Plenty of empirical documentation supports this hypothesis. However, real life cases demonstrate that this assumption may be too simple. Occasionally people achieve great success as creative individuals without much expertise. Additionally,

empirical studies show that expertise sometimes may inhibit creativity instead of promoting it. In a pedagogical setting these ambiguities seem to be further reinforced by contemporary trends such as technology, globalization and individualization. What are in fact the proper rules of, for instance, music, drama, and visual arts? Do we need to learn basic skills if we can apply technology? How can general rules, individual preferences and expressions coexist? In the chapter, the balance between creativity, learning and expression are discussed from several angles. Firstly, the author seeks to sketch a specific Danish historical inherited approach to creativity. Secondly, the author presents exploratory fieldwork that suggests new ways to understand and facilitate creativity among children.

Chapter 13: *A U.S. University's development of an inclusive early childhood education preparation program: The journey*; by Deborah G. Wooldridge, Mary M. Murray, and Dawn Shinew. This chapter focuses on a U.S. university's development of an Inclusive Early Childhood Education program. This innovative program is designed to prepare teachers to work successfully with all learners, including students with disabilities. Graduates of this interdisciplinary program earn three teaching licenses, one for general education classrooms, one for special education classrooms, and one for working with children ages birth to three years. The authors ground the program's development in the U.S. federal legislation that laid the foundation for increased access for and service to children with disabilities. In addition, the authors describe the philosophical underpinnings and curriculum for the new program, and identify the specific outcomes from this newly developed program. Preliminary lessons about this process that might assist other programs considering similar strategies are presented.

Chapter 14: *Evaluating MOCEP's pilot program in Lebanon in Palestinian camps*; by Ahmad Oweini and Ghassan Issa. This study purports to evaluate the piloting of the Mother Child Educational Program (MOCEP) sponsored by Arab Resource Collective (ARC) in Lebanon to measure the effectiveness of this home-based early intervention program on both mothers and their children, with respect to its proposed goals and objectives. Eighty-eight Palestinian mothers from six organizations/camps for Palestinian refugees participated in the study. The second and third phases of the program, training of mothers by trainers and program implementation on children, were assessed. The program's effectiveness was measured by way of two questionnaires completed by the mothers, one assessing children's performance and the other examining mothers' performance. Questionnaires were filled out in two stages: pre- and post- participation in the program. Results showed significant improvement in children's performance, the mother-child relationship, and enhancement of the home environment in a way that makes it more conducive to child development. This study has important implications for addressing the needs of Palestinian children through MOCEP. It also highlights the obstacles that impede its proper implementation.

Chapter 15: *Aspects of pragmatic communication difficulties in persons with symptomatic speech disorders*; by Kateřina Vitásková and Alena Říhová. The principal objective of the presented chapter is to introduce, from the theoretical point of view, the various specifics of disturbed pragmatic language level in people with Autism Spectrum Disorders (ASD). In the following part, mainly empirically, it will be present the particular results of research examinations (Disturbed communication skill and the impact of its symptomatology on inter-disciplinary cooperation of professionals and the affected family in a complex intervention (Pdf_2012_012). Communication deficits in selected forms of disturbed

communication skills focused on evaluating the partial determinants of verbal and non-verbal components of communication in special education practice, Faculty of Education at Palacky University (n. PdF_2013_021, main investigator: Kateřina Vitásková), the partial results of which map, and render an analysis of, speech and language therapeutic intervention in people with ASD. Towards the end of the chapter, the authors aim to acquaint the reader with a research focused on the global detection of pragmatics in people with ASD, considering the element of non-verbal communication (GAČR, Pragmatic language level in people with ASD, 14-31457S, 2014/2016, main investigator: Kateřina Vitásková).

Chapter 16: *Education for nurses in the context of sustainable development*; by Ruta Renigere. The aim of this chapter is to improve education for nurses in line with ESD by implementing the ecological approach in nursing studies. The objectives of the research are these: 1) to define and assess the theoretical basis of the ecological approach; 2) to assess the possibility of implementing the ecological approach; 3) to work out and approbate the course An Ecological Approach in Patient Care. "Basic Principles of Deep Ecology" by Arne Naess and George Sessions, "The Ecology of Human Development" by Urie Bronfenbrenner, and the five ESD pillars of learning to know, learning to be, learning to live together, learning to do, and learning to transform oneself and society constitute the theoretical basis of the ecological approach. The ecological approach also draws on Florence Nightingale's observations about the significance of the care environment and theories of nursing related to the environment. The environment of nursing education and practice should be regarded as a complex system of learning, socialization, and culture that consists of subsystems which affect sustainable development. In that context, the observations of theoreticians of nursing studies on the effect of the environment on human health, a person's autonomy in the care process, human experience regarding health and illness, as well as the union of art and craft in patient care, are significant. In assessing the possibility of implementing the ecological approach in nursing studies, the need to incorporate its principles in all courses of the study program and to work out a special course, An Ecological Approach in Patient Care, was evident. It would also be useful to work out and implement a professional development course for faculty members of colleges. The theoretical basis of the ecological approach, as well as the ecological competence model developed by the author and the study course An Ecological Approach to Patient Care, has been improved and approbated in the College of Medicine since 2009. The course is worth 3 credit points (according to the European Credit Transfer System – ECTS). Four groups of students and 180 students have taken this course. As a result, the ecological competence of nurses is being formed and developed. That, in turn, promotes the positive development of education for nurses and a healthy environment, as well as a holistic, patient-centered care and a subject-subject relationship in the care process.

Chapter 17: *Custom developed software to simulate the use of UV/Vis spectroscopy in quantitative chemical analysis*; by Emilia Bertolo and Simon Clay. Software which simulates the use of typical analytical chemical techniques provides students with additional ways of learning about these techniques. This chapter presents a free software package called UV-Vis-Sim, which can be used to simulate the use of an Ultraviolet/Visible (UV/Vis) spectrometer in quantitative chemical analysis. UV/Vis spectroscopy uses a simple linear model of absorbance, the Beer-Lambert Law. For quantitative information on a compound, the UV/Vis instrument must first be calibrated

using solutions of known concentrations: the calibration curve generated allows measurement of unknown concentrations of that compound. The software allows any compound to be analysed if its UV/Vis spectrum is known. The instructor version can be used to define constraints similar to those encountered in the lab. Students use the student version to "prepare" their set of standard solutions based on their own calculations. The program then measures the absorbance of standards and unknown sample(s). The results can be copied into a spreadsheet and the data treated following standard procedures. The data will be individual to the students, depending on their choices and calculations. The software was used in a problem-based learning exercise, to simulate the analysis of samples from a potentially contaminated river.

Chapter 18: *Exploring the views of pre-service teachers on the use of the e-Portfolio as a learning platform*; by Caroline Koh, Woon Chia Liu, Stefanie Chye, and Mingming Zhou. In the educational context, the e-portfolio provides a platform for social interaction between learners, allowing them to record, share and reflect upon their learning and achievements, thus encouraging greater ownership of learning. This chapter assessed users' perceptions of the e-portfolio in a number of domains, with investigations on the e-portfolio's effectiveness as a learning tool and whether it enhanced self-regulation and motivation to learn. The study involved around 326 pre-service teachers enrolled in the initial teacher education program at the National Institute of Education, Singapore. The participants used the open-access Google Site as the platform for their e-portfolios in the course of their one-year program. The institution provided the pre-service teachers with technical support and guidance on how to build, maintain and use their e-portfolios. A survey was administered at the end of the program to assess the participants' perceptions of the e-portfolio in terms of its usefulness, and ability to enhance learner motivation. Generally, the study revealed that the student teachers understood the value of keeping their e-portfolios, and this was one of the key motivating factors for e-portfolio usage.

Chapter 19: *Written narratives: Potentialities for research and teacher professional development*; by Renata Portela Rinaldi and Ana Luzia Videira Parisotto. This chapter presents some results from an investigation conducted along with a teacher professional development program called "Programa de Desenvolvimento Profissional de Formadores e Professores dos Anos Iniciais do Ensino Fundamental no Local de Trabalho: uma Parceria entre Universidade-Escola – UNESP". In light of this context, we seek to understand the contributions of this program based on a university-school partnership developed and implemented collaboratively at the school. The tools that were employed for investigation and continued education consisted of written narratives from the participating school administrators' and teachers' reflective journals collected at weekly in-person meetings with the researchers. Participants included administrators and teachers from a public school and researchers and undergraduate and graduate students from two universities (one public and one private) in the State of São Paulo, Brazil. The results indicate that written accounts are a useful tool for professional development by means of formative and investigative proposals and point to changes in the ways participants perceive themselves and others.

Chapter 20: *New methods of teaching: Interdisciplinarity approach and mathematical modeling*; by Olga Nikolaevna Kapelko and Georgiy Gennadievich Malinetskiy. Every epoch has its own specific style of education connected with contemporary instruments and tasks. The problems of our civilization differ from the ones of the previous epoch very much and demand new approaches in educational technologies. The situation in the

Educational field now is the following. It is divided into many parts of special disciplines. It is useful for learning; but in real life we deal with complicated systems and complicated problems. To find solutions to such problems we need to unite specialists from different specialties and fields of knowledge. In this chapter the authors want to discuss the preparation of students for interdisciplinary methodology during educational processes. The best way is to use mathematical modeling and the authors are using new methods of modeling connected with a synergy approach. It is also discussed the creation of the methodological base for using it in education.

Chapter 21: *What do we need for quality education: The introduction of collective reasoning into the educational process and pedagogy of the future*; by Alla Vasilievna Guseva, Ekaterina Kozina, and Olga Nikolaevna Kapelko. The pedagogy needs to realize a strategic goal of the education of human being. If we pose a question - is a person just a small part of a social mechanism that has to be equipped with the necessary special competencies to conform to its place or; should the personality be in harmony with his/her abilities when using their abilities and skills for the benefit of the society? The answer to this question lies in the understanding of the ways of a progress of pedagogical process. The authors argue that the progress of the development of educational systems is possible through the understanding of how individuals reason and think. The authors in this chapter use a special model of thinking created to help to develop the educational process. At the basis of the argument, pedagogy has always been and will be a socially-relevant science. Physiological, psychological and intellectual parts are always interlinked in the upbringing, formation and education of the student. These experiences collectively lead to the development of an intellectual activity and assist a better societal socialization and adaptation. Today the evolution of the humanity happens so rapidly that with each year's new complex demands are being placed on graduating students to obtain new qualities: constant readiness for change, lifelong-learning skills, the ability to adapt quickly to the changing environment and some degree of professional experience.

Section 3, entitled "Teaching and Learning", offers research about foundations in the education process itself, in various contexts, both for educators and students.

Chapter 22: *Strategy inventory for language learning: Findings of a validation study in Greece*; by Konstantinos Petrogiannis and Zoe Gavriilidou. Foreign language learning strategies are specific actions or techniques employed by the learner for the purpose of learning language, making learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations, according to Rebecca Oxford. The chapter presents a large scale project's (THALES: 379335) first phase findings regarding the validation of Rebecca Oxford's "Strategy Inventory for Language Learning" (S.I.L.L.) with a Greek sample of 1308 school-aged students from 16 schools representing 5 prefectures and 4 regions of the country. 46% of the students attended the last three grades of elementary school and 54% junior secondary school. Following a series of exploratory factor analyses we decided on a 29-item version retaining Oxford's factor structure. The confirmatory factor analyses revealed a marginal level of fit for the whole sample as well as the elementary school and secondary school sub-samples. The analyses indicated moderate to high internal consistency coefficients for the two- and six-category model of the SILL instrument. Based on these findings a number of analyses were performed regarding differences across all the six SILL first-order categories (memory, cognitive compensation, metacognitive, affective, and social strategies) and the two

second-order categories (direct and indirect strategies) in relation to gender and school level revealing significant differences. The results are discussed in relation to other similar studies and the next phases of the study.

Chapter 23: *Emotion socialization practices of early childhood educators*; by Christelle Robert, Sylvain Coutu, Diane Dubeau, and Annie Bérubé. Because emotional skills learned during the first years of life play a key role in children's adjustment and future academic achievement, the socialization of children's emotions has become an important topic in educational science. Children's preschool experience, in particular, has emerged as a major issue, our understanding of which needs to be extended and consolidated, especially with regard to the impact of adults. While studies have shown that parental socialization practices are related to the development of children's emotional competence, few studies have examined the role played by early childhood educators (ECEs), even though most children under the age of six attend daycare (70% in Quebec, Canada). To improve our understanding of ECEs' practices related to children's emotion socialization, 107 ECEs in Quebec were interviewed, using the Coping with Children's Negative Emotions Scale - Caregiver Version. Results revealed that the ECEs valued positive reactions to the expression of children's negative emotions, in particular, reactions that focus on problem solving. Some individual characteristics (work experience; educational background; perceived stress, job satisfaction and interpersonal reactivity) also appeared to be associated with the nature of the ECEs' reactions to the expression of negative emotions.

Chapter 24: *Emotional literacy education in a Hong Kong university: Reflection and proposal*; by Amy Lee Wai Sum. Since the 1970s, emotional literacy has been advocated as a part of the humanistic education project. While a set of abilities sounds commonsensical, there is a thriving international popular self-help literature business to indicate that our education system has not addressed the subject adequately. Although there have been quite a number of studies in the Western academia, proposing numerous ways to include emotional literacy in the curriculum, discussion in the Chinese education context has not been as active. Hong Kong has seen a lot of changes in its education system in the recent decades, but emotional literacy has not been an important focus of discussion. 2012 saw the change of university curriculum from 3 to 4 years, meaning that students enter university a year younger, after one public examination instead of two. Educators have noted the general emotional immaturity of the younger freshmen, and their inability to handle problems that come with this new identity. This chapter is a reflection on the present educational direction in Hong Kong, and to advocate a more helpful emotional literacy curriculum in the university.

Section 4, entitled "Organizational Issues", gives a glance on tools for implementing organizational learning and change. Themes vary from economic and social programs, as well as equity and values for the educational environment.

Chapter 25: *Reproduction of inequality through private out-of-school education*; by Derya Keskin Demirer. This chapter aims to explore economic and social implications of educational activities taking place outside formal school education. Parallel to the marketization of all public services, private education has become an essential part of education systems across the world. As an important element of this transformation process, out-of-school education has also become prevalent worldwide. While education has traditionally been perceived as an equalizer in societies with different levels of income

levels and social stratification, various forms of outside school learning have been creating opposite effects. Overwhelming scope of central examinations in the education system of Turkey has provided the grounds for the education institutions operating outside school such as private tutoring centers (PTCs), and other preparatory courses. Almost all students attend PTCs at some point during their education, at one level or another, for the hope in attending elite schools and universities. As expected, the ultimate purpose is to achieve a well-paid job and a comfortable position in life. However, only a limited number of PTC goers succeed in entering elite schools and universities as well as in getting well-paid jobs, due to high competition in both university entrance and labor market. This chapter argues that, with the diversity it created, and disparity in access among different social classes, outside school education contributes immensely to the reproduction of inequalities in Turkey, and intends to shed light on the complexity of the issue, beyond the framework of economic supply and demand model.

Chapter 26: *Four-dimensional modeling: A tool for implementing the arts education act in music education at a school in Taiwan*; by Hua Hui Tseng. In this chapter, the merits of using Cooper, Fusarelli, and Randall's four-dimensional model from 2004 as a tool for evaluating policy making when implementing the educational policies for arts education in Taiwan are explored. In 1997, the Arts Education Act directed the Ministry of Education (2000) to implement teaching art theory and techniques at schools, carry out artistic research and creation, and cultivate a diverse group of arts professionals. The reauthorization of the Act in 2000 as the Arts Education Act of 2000 (AEA) mandated that the aptitudes and strengths of gifted students be taken into account and follow the model of the Special Education Project. The evaluation methodology outlined by Cooper and colleagues is structured into a four-dimensional framework, namely, normative, structural, constitutive, and technical, and applied to the policy implementation process. The purpose is to show how the model can be applied to evaluate the implementation of policy using the case of implementing the Arts Education Law at the Tainan University of Technology, Taiwan. Each dimension is applied to analyze the implementation of the AEA policies at the TUT, and in particular, in music education. Application of the model is shown to be beneficial in so much as it provides a means for reflecting on policy implementation and a language through which educational policy in the arts might be constructively developed.

Chapter 27: *The Cosmodernity: A transcultural approach for the global citizenship education proposed by UNESCO*; by Javier Collado Ruano, Dante Augusto Galeffi, and Roberto Leon Inacio Ponczek. This chapter reflect about the "Global Citizenship Education" (GCE) proposed by UNESCO: creating a framework which respect the historic-cultural characteristics of each community and developing a critical consciousness that addresses common responsibility with the global problems of the world-society. A world-society which must develop a new awareness-identity of "Earth-Homeland", where the human being is seen as a same biological specie with the same evolution, because the future history of humanity requires knowledge evolution towards new transhumanists and transnational dialectics concepts in order to prevent future war conflicts. Thus, it is needed new education applications and developments to organize knowledge through a complex, creative, transversal, polysemous, transcultural and transpolitical epistemology that promotes GCE as the causal energy principle of the transformation process of the human being. Metaphorically, GCE has to represent the Big-Bang full of transformative energy in continuously expanding that interacts positively on the lives of people: generating a self-organizing cosmos of infinite potential for personal

fulfillment and improving the quality of life in the communities. Then, the authors propose the Cosmodernity paradigm as transdisciplinary, transnational and transcultural approach to build a new horizon in the GCE proposed by UNESCO for the 21st Century: with the Constellation of Twinned NGOs-schools which develop altruistic educational projects of cooperation in all corners of the Earth-Homeland.

Chapter 28: *Using the Spelit analysis technique for organizational transitions*; by June Schmieder-Ramirez and Leo Mallette. The purpose of this chapter is to describe a new analysis methodology, and provide formats for use, in doctoral level curricula. The acronym SPELIT is an analysis methodology and framework to help understand an organization's environment from the social, political, economic, legal, intercultural and technical perspectives. Developed in the early 2000s, this methodology is sufficiently robust and can be used by undergraduate students, graduate students, and seasoned practitioners doing a market analysis, diagnosis prior to implementing transitions, or benchmarking in anticipation of an intervention. This study shows how this methodology aligns with many change theorists, such as Christiansen, Kaufman, Holcomb, and Cummings and Worley, theorists who stipulate benchmarking or diagnosing the current condition as a first step in the change process. One of the remarkable advantages of the SPELIT analysis methodology is that it can be readily adapted to unique organizations by adding or deleting environments, such as educational, ethical, historical, physical, religious, temporal, and security environments. This paper describes several different formats where the SPELIT analysis methodology has been incorporated at several universities, as incorporated into a doctoral level comprehensive examination curriculum where the students examine organizational transitions.

Special thanks to the above authors, editorial advisory members, and reviewers who contributed with their efforts to make this book possible. Lastly a special thanks to Liliana Silva for the meticulous work of revision and correction of the proofs.

May, 2015

Mafalda Carmo
World Institute for Advanced Research and Science (WIARS)
Portugal