

FOREWORD

InScience Press is delighted to publish this book entitled *Education Applications & Developments VI* as part of the Advances in Education and Educational Trends books series. These series comprise the work of authors' and editors' to address global research in the Education area.

In this sixth volume, a dedicated 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. Part of our mission is to serve society with these initiatives and promote knowledge, therefore it requires the reinforcement of research efforts, education and science and cooperation between the most diverse studies and backgrounds.

The contents of this 6th edition show us how to navigate in the most broadening issues in contemporary education and research. In particular, this book explores four major topics within the broad theme of Education, corresponding to four sections: "Teachers and Students", "Teachers and Learning", "Projects and Trends" and "Organizational Issues". Each section comprises chapters that have emerged from extended and peer reviewed selected papers, originally published last year in the proceedings of the International Conference on Education and New Developments (END) conference series (<http://end-educationconference.org/>). This meeting occurs annually always with successful outcomes. Original papers have been selected and the authors were invited to extend and to submit them to a new evaluation's process. Afterwards the authors of the accepted chapters were requested to make the necessary corrections and improve the final submitted chapters. This process has resulted in the final publication of 27 high quality chapters organized into 4 sections. The following sections' and chapters' abstracts provide some information on this book's contents.

Section 1, entitled "Teachers and Students", provides studies within educational programs and pedagogy for both teachers and students.

Chapter 1: *The Relationship between Student's Approaches toward Learning and Academic Achievement in the Chinese Context*; by Chuang Wang, Qimeng Liu, Jian Liu, & Tianxue Cui. This study examined the relationship between Chinese high school students' approaches toward learning and their academic achievements. Participants consisted of 14,021 eleventh graders from an eastern province in China. They took the National Standardized Test in three subject areas: Chinese language, mathematics, and English language. The total score was used as an indicator of their academic achievement. Students' approaches toward learning were measured in three aspects: self-confidence in learning, learning interests, and study habits. Questionnaires of self-confidence in learning and learning interests were adapted

from PISA 2006 and PISA 2012. Study habits were measured with the questionnaire adapted from Academic Adjustment Inventory (AAT). The Pearson correlation and hierarchical linear regression results showed that the dimensions of students' approaches toward learning were significantly related to academic achievements. Results of analysis of variance after the control of student gender and socioeconomic status suggested that the top 25% of students in dimensions of approaches toward learning scored significantly higher than the bottom 25% of students with small effect sizes in their performance on the final examinations. This study suggests that helping students build good approaches toward learning may improve their academic achievements. Educators are recommended to put more effort into helping students cultivate learning confidence and developing interests in learning. Classroom teachers are advised to guide students in fostering good study habits and make study plans.

Chapter 2: *Portfolio as a Strategy to Improve Career Adaptability Resources*; by Liliana Faria. This study aimed to determine whether the levels of career adaptability resources could be increased through the use of a portfolio writing strategy. Based on a mixed methods approach, the study used the design quasi-experimental, with two independent groups and with repeated measures, together with a focus group. Forty students (17 from the experimental group; 23 from the control group) in university-work transition completed the Portuguese version of the Career Adaptation Scale. The pre-test survey was administered at the beginning of the semester of the curricular unit of personal and professional development project (PPDP) in both groups. This was followed, in the experimental group, by a fourteen-week portfolio writing intervention, under the PPDP. In the control group, the PPDP followed the traditional expository teaching methodology. After completing the intervention procedure, post-test research was conducted by both groups. Five students from the experimental group also participated in a focus group of feedback on the writing of portfolios under the PPDP. The results revealed that writing the portfolios contributed to a career adaptability resources increase as well as for the confidence, self-knowledge and knowledge of the market opportunities of these students. The use of portfolios in the PPDP unit course is recommended.

Chapter 3: *(Re)Career Scale: Pilot Study for the Validation of a Scale About Career Post-Career Transitions*; by Joana Carneiro Pinto. This article aims to validate the factorial structure of the (Re)Career Scale: Coping Styles, which evaluates how late adults think and feel about career changes, in particular the transition to a career post-career. A career post-career is a development phase that takes place after the formal retirement of a job/ continued work and requires the involvement in a set of developmental tasks related to one's own, the environment, and the decision-making and planning (Pinto, in press). Thirty-six items were developed, considering the literature review of the main career development models. These items were administered to a total of 95 Portuguese late adults (31 (32.6%) men and 64 (67.4%) women; $M_{age}=62.91$; $SD_{age}=6.901$), of which 47 are in an active professional situation and 48 already retired. The Exploratory Factor Analysis (EFA) indicated a three-dimensional career post-career model considering a set of developmental tasks

related to Identity, Opportunity and Adaptation. The final version of 30 items has good psychometric properties, with Cronbach's alphas ranging from .82 to .89. The descriptive study and the correlation between the three dimensions suggest that the scale has potential to be used in research and intervention programs to support the transition to a career post-career.

Chapter 4: *Integrating Core Competencies in Professional Music Training Curriculum—The Tainan University of Technology Experience*; by Hua Hui Tseng. Music curriculum integration in professional music training involves the exploration of how educators can integrate individual competency items developed by Teachout's (1997) three categories of skills/knowledge components, namely, teaching, personal, and musical skills and behaviors, into the music education curriculum. The purpose of this paper is to use Denis's (2017) skills/knowledge competency of university coursework as the enquiry lens. The focus is skills/knowledge competency with the three subsections for personal, teaching, and musical skills and behaviors that need to be shaped in different ways to successfully convey music content to students. Insights into the results of the necessary skills/knowledge components are gained through using the example of the Music Department at the Tainan University of Technology, Taiwan. The findings demonstrate that music curriculum integration with a competency-based approach to practice helps with successfully implementing classroom management strategies.

Chapter 5: *Pre-Service Engineer Educators Learning Mathematics: Mapping the Lived Complexity*; by Katerina Kasimatis, Andreas Moutsios-Rentzos, Nikolaos Matzakos, Varvara Rozou, & Dionisios Kouloumpis. In this paper, we adopt a systemic perspective to investigate the teaching of mathematics in ASPETE, which is a tertiary education institute in Greece that offers a two-faceted degree: an engineer degree and a pedagogical degree as engineer educator. We focus on the complex lived reality of first year Electrical Engineers and Mechanical Engineers students through a multileveled affective mapping of their studying in ASPETE, including: approaches to study, confidence in learning mathematics, conceptions about mathematics and its role in their studies and career, and views about mathematics teaching effectiveness (considering both what they actually experienced and what they would prefer to experience). The students were found to show a lack of preference for the surface approach (though not combined with a preference for a deep approach), a neutral-positive confidence in learning mathematics, and to be satisfied by the teachers' effectiveness. Confidence in learning mathematics appeared to be central in the identified dynamic affect system, whilst their conceptions about mathematics seemed to be related with the desired characteristics of mathematics teaching. The students of the two departments differed in their levels of confidence in learning mathematics, which we posit that is linked with the qualitatively different affective complexity they experience.

Chapter 6: *Coastro: @N Astronomy Condo – Teachers’ Attitudes and Epistemological Beliefs Towards Science in a Citizen Science Project*; by Ilídio André Costa, Carla Morais, & Mário João P. F. G. Monteiro. An attitude is seen as a hypothetical construct related to a tendency expressed by evaluating a particular entity with some degree of favour or disfavour. In the case of attitudes toward science, these cannot be isolated from understanding science’s processes: the path to produce, refute, and change knowledge. Thus, it is critical to promote public engagement with science-astronomy and technology with the goal of understanding content, but also of understanding what science is and how it is built. In this context, CoAstro: @n Astronomy Condo emerged – a citizen science project starts with the engagement of primary school teachers with the Research Group on the “Origin and Evolution of Stars and Planets” at the Instituto de Astrofísica e Ciências do Espaço (IA). A semi-structured interview was conducted to study teachers' attitudes and epistemological beliefs towards science and the changes promoted by CoAstro. The interview was performed before and after the development of the CoAstro. It involved nine primary school teachers with no degree in science and who volunteered to participate in CoAstro. The results show that there has been an increase of interest in astronomy and the reinforcement of epistemological beliefs.

Chapter 7: *Design Based on ICF - The training courses for in-service teachers*; by Laura Sara Agrati. The International Classification of Functioning, Disability and Health (ICF) allowed to adopt that new of 'functioning', which refers to bodily structures and functions, activity and participation and interaction between these and personal and environmental factors. The model is increasingly becoming the reference for the planning/organization of inclusive interventions, in Europe and in the Italian schools: it has been one of the main topics (l. 107/2015) in the last three-year Italian teacher training plan. The work presents procedures the early results of three professional training courses evaluation (2017-2019). The courses involved 73 in-service teachers and aimed to enhance the design skills of Individualized Education Plan (IEP) on ICF model. According to the Kirkpatrick Model, the evaluation has been conducted on the teachers’ ‘learnings’ and ‘transfer’ detected through pre-post test and a document analysis of the IEP. The study highlighted few linguistic and semantic difficulties and a better teachers’ sensitivity to the environmental component of the functioning. It offers some useful hints for the construction of a possible trans-national platform (as sharing of practices, data-base) about the training of school teachers on ICF bio-psychosocial model, as well as arguments regarding the tools for verifying the effectiveness of teachers training interventions.

Chapter 8: *Evaluation of a Factor that Influences School Failure in a Group of Adolescents in Iasi County - Fatigue*; by Adriana Albu, Mihaela Vlada, & Florin Dima. School activity is characterized by high physical and mental demands. Any failure to adapt these requests to the possibilities of the age group can be associated with school failure. The study was carried out on a group of 208

students from the 9th grade from three high schools in Iasi county. A questionnaire regarding school activity and the causes of the phenomenon of school fatigue was applied. The results were processed using Pearson's chi-squared test. The students are constantly preparing only for certain subjects (72.59%). In most cases (65.86%) adolescents admit that they have been taught how to study only in certain subjects. Fatigue is often present in 58.65% of students. The students attribute the occurrence of this phenomenon to the numerous subjects they have to study (55.76), the large volume of homework (51.92%), insufficient sleep (48.55%), teachers being too strict (25%), or the breaks being too short (25%). Special attention must be paid to nighttime sleep which is insufficient in 66,82% of cases. Many factors that generate school fatigue must be known and carefully assessed in order to reduce the frequency of this phenomenon.

Chapter 9: *Creating an Image of People with Disabilities in Literature Lessons*; by Nikoletta Gulya, & Anikó Fehérvári. Inclusive education provides an opportunity for students with disabilities to learn with their non-disabled peers. However, inclusive classrooms do not guarantee that non-disabled students will accept or form friendships with students with disabilities. Therefore, there is a need for intervention that facilitates the acceptance of students with disabilities. Literary works are a readily available resource in education to help students learn about society's diversity and its cultural contexts, as long as they depict these social groups appropriately. This study aimed to identify the different recurring patterns of the disability conception within the content of youth literature in primary education, employing content analysis. The research results reveal that people with disabilities are extremely underrepresented and depicted stereotypically in the examined literary works. This representation can reinforce students' negative attitudes toward people with disabilities. Therefore, the stereotypical content should be clarified and discussed during the lessons.

Chapter 10: *Subject Teachers and Enhancement of Students' English Proficiency in Selected Senior Six Classrooms in Rwanda*; by Speciose N. Ndimurugero, & Gloriose Mugirase. This study was conducted in Sixth Form schools in Huye District in Rwanda. The researchers' concern was that most secondary school leavers enter university with low proficiency in English, the medium of instruction. The researchers focused on subject teachers because subject-related courses are allotted more hours than English. The study aimed to explore whether subject teachers offered any assistance in boosting students' English proficiency. The research drew on Language across the Curriculum (LAC) and Content and Language Integrated Learning (CLIL) approaches. LAC stipulates that all teachers are language teachers, that subject teachers and language teachers should work jointly, and that language should be taught across the curriculum. CLIL recommends that content be learnt through a second language and that the subject and the language be taught at the same time. For validity and reliability purposes, the current study made use of both qualitative and quantitative data collection and analysis methods. Findings revealed

that only some of the subject teachers used strategies that could help promote their students' English proficiency. Findings also indicated that content and English language teachers did not collaborate and that the students were not proficient in English. In accordance with these findings, recommendations were made.

Chapter 11: *Education Executives Views about the Development of Authentic Learning and Assessment Environments*; by Katerina Kasimatis, & Theodora Papageorgiou. The aim of this study is to investigate how the concept of “authentic learning” and “authentic assessment” is formed in the discourse of education executives with previous teaching experience in primary and secondary education. Authentic learning is based on the theory of social constructivism, according to which the social nature of knowledge is emphasized and the learner builds knowledge by creating meaningful authentic activities. Authentic assessment is described as a dynamic form of assessment which focuses on the skills developed by students during the learning process (Woolfolk, 2007). The design of learning environments is based on the nine features of authentic learning, constructivism and the theory of embedded learning (Herrington, 2006). In this study examples of authentic activities that support authentic learning environments in which a variety of authentic techniques are used and they are related to different subjects are presented. The sample of the study consisted of 114 adults participating in a training program as a qualification for their professional development during the year 2018-2019. Quantitative analysis of the data was conducted. The analysis of the data revealed that an authentic learning environment consists of experientiality, interdisciplinarity, team work, problem solving, self-assessment, peer-assessment, real-world relevance, which are characteristics of authentic learning and assessment. Moreover, the implementation of authentic learning activities can lead to the development of the cognitive, metacognitive, social and communicative skills of the 21st century.

Section 2, entitled “Teaching and Learning”, offers research about foundations in the education process itself, in various contexts, both for tutors and students.

Chapter 12: *The Importance of Bilingualism in the Primary Classroom*; by Edina Kulenovic. The main purpose of this study was to give account of the importance of early bilingualism in the primary classroom and to ascertain if being bilingual from an early age is an advantage or a hindrance. In the context researched here (Primary school teachers and Primary trainee teachers in England), the paper seeks to determine how early bilingualism has influenced the respondents' education, career choices and overall learning and teaching experience at school. Action research was used in this study. The key findings concluded that early bilingualism has impacted positively on the respondents' education and life choices and that being bilingual from an early age is an advantage. On the other hand, there are some negative influences, but they are outweighed by the benefits that knowledge of home languages bring. It is hoped that this study will encourage primary teachers, trainee

teachers and parents to look at bilingualism as an opportunity and utilise bilingual learners' linguistic and cultural knowledge in order to create an environment where students and teachers have the opportunity to learn and develop together.

Chapter 13: *Do You Study or Work? - Project based learning as an enriching experience in education;* by Teodomiro Boronat, Luis Quiles-Carrillo, Octavio Fenollar, Juan Ivorra-Martinez, & Néstor Montanes. Project Based Learning (PBL) is a very popular teaching strategy nowadays because it offers a great number of advantages and/or opportunities from a teaching point of view, such as achieving a deeper learning, developing teamwork and leadership skills, or getting the student to take control of what and how to learn. For all these reasons, the authors believe that, in the context of the Master's studies, as the last studies before insertion into working life, the PBL can be a very appropriate teaching methodology, since well thought out it will prepare students for the real situations that they will later experience in their professional lives. The objective of this work is to present the experience of the application of PBL in the development of a common project for four subjects of the University Master in Engineering, Processing and Characterization of Materials, taught at the Polytechnic School of Alcoy, belonging to the Polytechnic University of Valencia (UPV).

Chapter 14: *Enhancing Learners' Intrinsic Motivation Using Student Teams Achievement Divisions (STAD) in Multicultural Classrooms of South Africa;* by Charles Sechaba Masoabi, & Gregory Alexander. This chapter is drawn from a PhD study that employed Student Team's Achievement Divisions as a learning technique to enhance learners' intrinsic motivation in Technology Education within a South African multicultural school. The authors over the years observed learners' actions, and interactions in Technology classes and realised that some of the learners find it difficult to engage in behaviour that arises within themselves - an aspect known as intrinsic motivation. Most learners in the Technology class, registered no concerns in obtaining low scores or failing the subject. However, a minority of the learner population obtained high achievement scores and maintained interest throughout lessons. This study explored the development of the ZPD in a cooperative learning context. The authors used STAD, as a cooperative learning technique, in motivating learners intrinsically to increase their participation in class activities. The study explored STAD in 1) closing the gap between pedagogy and content knowledge, and 2) intrinsically motivating learners to develop high levels of achievement in the subject of Technology. This study employed the Bricolage design in gathering data from two Grade eight Technology classes over a six-month period. The findings indicated that the learning environment cultivated learners' development, curiosity, and positive attitude toward Technology.

Chapter 15: *MOOCs for Bridging the School - University Gap*; by Ilaria Merciai, Ruth Kerr, & Gaetana Melchionna. This chapter presents an update of the MOOC orientation strategy implemented by Federica Web Learning, Centre for Innovation, Experimentation and Diffusion of Multimedia learning at the University of Naples, Federico II since January 2019 and already published in the same year. A solid orientation strategy is designed to support students in their university choice and prepare them for the intellectual demands of university life and study. According to OECD, graduate numbers in Italy increased in 2019 from 20% to 28% (25-34 age range), and Italy has high numbers of post-graduate degree holders. However, overall graduate numbers are still relatively low compared to other European member states and dropout rates continue to be high, as do the numbers of students changing degree course after one or two years of study. In line with the updated DEAP, Digital Education Action Plan (2021-2027), and Italian Ministerial recommendations, the Federica MOOC-based orientation strategy explores ways of bridging the gap between school and university in a 3-pronged approach designed to address students' choice of degree subject and university; preparation for university entrance exams and difficult modules; and last but not least, raising student self-awareness to help them adapt to change as they shape their future.

Chapter 16: *Digital Engines at Work: Promoting Research Skills in Students*; by Olga Suleimanova, Marina Fomina, & Albina Vodyanitskaya. The paper focuses on the digital teaching and research practices which make an indispensable integral component of upscale education. The authors compare traditional approaches to education against the much demanded by the society, promising approaches which heavily rely on the digital engines. Most relevant – education-wise – features of centennials / millennials, also referred to as “digital natives”, are taken into account. The digital teaching practices and digital research practices that can be used in teaching are outlined; teaching and research potential of some digital engines is examined. Corpus-based experiment along with the analysis of search engine results, cultural-linguistic research through Google and Yandex searching, Tropes Zoom's content analysis and some other methodological novelties that can be used in the classroom as well as facilitate and substantiate the research results are analysed.

Chapter 17: *Nature of Science Interdisciplinary Teaching at Primary School Based on Symmetry and the Search of Invariants*; by Simone Brasili, & Riccardo Piergallini. The project is situated in the field of teaching physics, generally speaking, science education. It aims at studying the interplay between physics and mathematics, introducing an interdisciplinary approach based on the modern concept of symmetry or sameness within change (i.e., invariance). The interdisciplinary methods integrate the process skills common to discovery-based science and problem-based mathematics, typically of Nature of Science (NoS) modelling. We designed a teaching-learning sequence (TLS) and implemented it in an Italian primary school on a sample group (N = 96). Research conforms to pre- and post-test design with a control group. The resulting data were examined through a mixed method. We assess the effectiveness of the TLS by analysing the learning changes in the level of pupils' knowledge of symmetry. The findings show that the pupils were in the regime of competence for grasping the changed view of symmetry. It

also provides ideas that the concepts of symmetry and invariance will allow building the architecture of more extensive scientific knowledge. The study of transformations and invariants facilitates the acquisition of cognitive procedures fitting in many domains, modelling and generalization processes. This research contribution brings important suggestions for designs of successive steps in the learning path on symmetry.

Section 3, entitled “Projects and Trends”, presents chapters concerning, as the title indicates, education viewed as the center for innovation, technology and projects, concerning new learning and teaching models.

Chapter 18: *Self-Produced Videos in a Flipped Classroom for Engineering Students and Nursing Students*; by Joar Sande, Ingvild Leite, & Lars Kyte. The study investigates the differences in nursing and engineering students’ perceptions of videos made by the teachers as part of a flipped classroom, and whether these videos contribute to a good learning environment. The sample consists of 21 engineering students, 17 nursing students and 17 pre-engineering students. Overall, all three student groups are satisfied with the quality of the videos. The nursing students watched videos more before the learning sessions than the other two groups. All students think videos produced with simple tools are technically satisfactory and make it easier for the students to understand the material, which leads to increased learning outcomes. They express that videos are more motivating, and that they learn more from watching a video than reading course material. Nursing students expressed a higher degree of agreement with replacing traditional lectures in other subjects with videos. All student groups think the learning environment has been good. The results indicate a connection between the learning environment being good and the videos working satisfactorily.

Chapter 19: *Holistic Educational Approach: Cooperative Learning and Mindfulness in the Training of Future Teachers*; by Consolación Gil, & María Dolores Gil-Montoya. Traditional educational instruction is being replaced by new, more holistic paradigms requiring both a methodological change and a new definition of the role of the teacher and students. This study proposes a new education paradigm based on active teamwork methodologies (such as cooperative learning) and mindfulness techniques. Cooperative learning is a well-known strategy that has obtained very positive results in the development of competences and skills. Mindfulness techniques favor the development of attitudes and values as well as increased inner-calm, resulting in lower levels of stress and anxiety among both students and teachers. The proposed paradigm was implemented in a course of the master’s degree program for Secondary School Teachers at the University of Almeria (Spain). The results show that students were more engaged with the learning process and developed a greater sense of responsibility and empathy, not only towards their own learning but also to their classmates’ learning. The procedure included the application of the Mindful Attention Awareness Scale (MAAS) at the beginning and at the end of the course to measure the evolution of the students in different items related to mindfulness.

Chapter 20: *Interdisciplinary Innovation Camp for Nursing and Engineering Students at WNUAS*; by Eivind Standal Husabø, Dagrun Kyrkjebø, & Joar Sande. Western Norway University of Applied Sciences (WNUAS) in cooperation with Junior Achievement Sogn og Fjordane, organizes interdisciplinary innovation camps for nursing and engineering students. The student assignments are given by local businesses and organizations. This study's objective is to evaluate and develop new programs for innovation camps, as well as to share ideas with educators working with this type of learning activity. A qualitative method was used, and a focus group interview was conducted involving nursing and engineering students (n=8). The students were satisfied with innovation camp as a method for learning, and the learning outcome was good. They regard innovation camp as a diverging learning method. The students are lacking a common understanding of innovation and entrepreneurship before participating at the event, the assignments were too limited, and they were not challenging enough for creative thinking. This study leads to several conclusions to improve upcoming innovation camps at WNUAS. The improvements can be separated into two categories:

1. The students need to be better prepared for the event.
2. The assignments need to be more open.

Chapter 21: *Today's Higher Education at a Crossroads - The critical point and paradigm shift in the educator's role*; by Cezar Scarlat. Observing the different progress rates of the available data, information and knowledge (on one side) and human capacity to process these available data, information and knowledge (on the other side), the author becomes aware of the higher pace of the first – in the midst of impetus of new communication and information technologies – and argues that, at this point in time, we are eye-witnessing a real education paradigm shift. The education system is at a critical point in time (call it critical point in education – CPE) when the educator's role must change from knowledge repository to skilled, expert knowledge explorer and identifier, switching from teaching the subject to teach students how to pick the right and relevant information related to the subject – from the ocean of available data. The current corona-crisis – which started by the time when the ideas for this chapter were put together – made this question more acute, asking for re-thinking the education system and educator's role. This chapter launches the thesis of the education paradigm shift – in that respect of the educator's role in the predictable future, to provoke a discussion, and to open a research path, for higher education strategists, policy makers, scholars and educators.

Chapter 22: *The Educational and Therapeutic Benefits of "Content-Focused Accessible E-Learning Material" for Visually Impaired University Students*; by Chikako Ota. The idea of "educational therapy" is quite different in Japan compared to foreign countries, especially in the US, where educational therapy is quite advanced. Therefore, this study determines the educational therapeutic benefits of the author's "Content-Focused Accessible E-Learning Material" for English self-learning, based on the concept developed in the US, particularly focusing on visually impaired students. These students experience various difficulties in higher

education, such as 1) the absence of learning materials in braille, 2) commercial unavailability of magnification-capable learning materials and digital materials, and 3) lack of text-to-speech function in many learning materials. To study whether the material had any therapeutic benefits for these students, the author obtained feedback from 33 students. The feedback was based on the following questions: (1) technical aspects: Did the material reduce/rid the load/concern they felt; and (2) mental aspects: Did the material increase the willingness/autonomy or decrease anxieties and did they feel accomplished or motivated to improve their longitudinal English self-study? The findings show that the material was beneficial to them in five ways. The goal of this study was accomplished to a considerable degree; the use of this material reduced students' mental burden in learning based on both qualitative and quantitative feedback from visually impaired students.

Chapter 23: *Integrating Students with Refugee and Asylum Seeker Backgrounds into School: Teachers' Perspectives*; by Maura Sellars. The critical aspect of refugee and asylum seeker education has become almost a worldwide phenomenon. The difficulties of language, culture, acceptance and resettlement all impact on a school's capacity to support these students and ensure that they access to best educational opportunities possible in many countries which are dominated by neoliberalized education systems. Neoliberalized education systems are dominated by the five Cs (Competitiveness, Conformity, Conservatism, Convention and Commerce) and are the antithesis of the European educational child-centred traditions conceived by Pestalozzi, Froebel, Steiner and others. This writing draws on a research project designed to establish the perspectives of members of a school community about belonging. It was conducted in a primary school in urban Australia which has a reputation for developing inclusive practices and an ethos of belonging for its diverse homeland population and its refugee and asylum seeker population which comprised 40% of the school enrolment at the time of the investigation. The research indicated the importance of the teacher perspectives, values and beliefs and has implications for teachers of refugee and asylum seeker students everywhere. It also has implications for preservice teacher education and the importance of preparation to specifically support these cohorts of students and their communities in addition to being flexible and open to change.

Chapter 24: *School Principal Leadership in Remote South Africa: A Leadership and Management Challenge*; by Leentjie Van Jaarsveld. To understand the circumstances under which principals in remote areas exercise their leadership and management, an investigation was conducted in the Northern Cape province, South Africa. This province is characterised by small towns with few residents. The infrastructure is not up to par, and in some cases, the socio-economic conditions are extremely poor. Unemployment is a big problem in the villages. The uniqueness of this study lies in the fact that after 1994, with the abolition of apartheid, the farmers withdrew their children from the schools and no longer supported the schools as before. As a result, the principals experienced many more challenges. The study followed a qualitative, phenomenological design from the interpretivist paradigm. The sample consisted of ten principals. Semi-structured interviews were conducted with the principals. The inductive data analysis process was used. The required

ethical clearance was obtained from the Research Ethics Committee of the North-West University and the Department of Education of the province. The results reveal that principals in remote areas, in the absence of technology, infrastructure, and support bases, have to use their skills creatively, and they need the support of the community, teachers, school management, and governing body.

Section 4, entitled “Organizational Issues”, gives a glance on tools for implementing organizational learning and change in the education context.

Chapter 25: *The Evolution of China's Private Education Policy: Historical Review and Path Analysis*; by Li Yang. Based on the policy texts of private education since the founding of the People's Republic of China and from the perspective of historical institutionalism, this article draws the following three conclusions. First, being shaped by changing policies from the state, the development process of China's private education could be divided into four main stages: the stage of being eliminated (1949~1978), recovery and preliminary development (1978~1992), thriving continually (1992~2016), and under classified management as well as standardized development (from 2016). Second, the evolution of private education policy has experienced punctuated equilibrium and gradual transformation as two main modes, which is determined by critical junctures and path dependence. Third, government power and market mechanism play the role of dynamic mechanism of institutional change. To conclude, the article suggests that the state should further clarify the respective responsibilities of the government and the market mechanism to realize the positive mutual interaction.

Chapter 26: *Professional Support Measures for Novice Teachers in Latvia*; by Anda Grinfelde, Inga Vanaga, & Līga Paula. Retention of novice teachers in education system is a serious problem in Latvia. Mentoring, in-service training and emotional support are crucial for novice teachers to remain and continue working in school. The aim of this research is to explore opinions of Latvian teachers about professional support measures that are available and needed to be introduced for novice teachers. The research results were obtained during an on-line survey (N=1258) conducted by the Latvian Trade Union of Education and Science Employees in 2018, and document analysis. The questionnaire comprised the statements on methodological, financial, material and technological support which were assessed by using 5-point symmetric Likert scale. The results witness about regional disparities mainly between the capital city Riga and other regions. There are statistically significant ($p < 0.05$) differences in opinions of the teachers representing different regions of the country. The respondents agree that there is a lack of well-structured and uniform support system for novice teachers at national level. In general, the teachers are positive about availability of an emotional support and in-service training. The most critical opinions are about material and financial support that novice teachers can access. The authors conclude that policy makers should focus on national teachers' support guidelines.

Chapter 27: *International Short Students Mobility and Transparency: A Dutch – Russian Perspective*; by Florentin Popescu, Tijmen Weber, & Roman Iskandaryan. This paper investigates the importance of transparency of internationalization and various obstacles and barriers that influence international short student mobility within the European Higher Education Area (EHEA) in particular in the Netherlands and in Russia. Having in mind that due to privacy regulations and availability of data regarding international short student mobility, this article is using a framework based on literature review. The authors analyze patterns in international short student mobility, both between countries and over time, not only by using various literature analyses but as well as interviews and panel discussions at HAN University of Applied Sciences, the Netherlands and Plekhanov Russian University of Economics, Russia, to give this research an qualitative dimension and underline how internationalization and what various factors are relevant to international short student mobility. This article presents an important contribution to this growing field of literature by doing a comparative analysis about the factors which positively improve the international short students mobility. The three folded impact of this paper is obvious for the stakeholders involved: students, institutions and policy makers are responsible for the smooth cooperation and coordination for a better international mobility.

Special thanks to the above authors, editorial advisory members, and reviewers who contributed with their efforts to make this book possible.

May, 2021

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

CONTRIBUTORS

Editorial Advisory Board

- Ana Conboy, *College of Saint Benedict & Saint John's University, USA*
Anja María Mackeldey, *Colegio Alemán Medellín / Universidad de Antioquia, Colombia*
Cezar Scarlat, *University "Politehnica" of Bucharest, Romania*
Charalampos Karagiannidis, *University of Thessaly, Greece*
David Aparisi, *University of Alicante, Spain*
Ellen Whitford, *Georgia Southern University, USA*
Emre Erturk, *Eastern Institute of Technology, New Zealand*
Gina Chianese, *University of Trieste, Italy*
Janaina Cardoso, *Rio de Janeiro State University, Brazil*
Joana Paulin Romanowski, *Pontifícia Universidade Católica do Paraná, Brazil*
Judith Szerdahelyi, *Western Kentucky University, USA*
Katerina Kabassi, *Technological Educational Institute of the Ionian, Greece*
Katerina Vitásková, *Palacky University in Olomouc, Czech Republic*
Laura Rio, *University of Salerno, Italy*
Leela Ramsook, *University of Trinidad and Tobago, Trinidad and Tobago*
Lefkothea Kartasidou, *University of Macedonia, Greece*
Maria Luisa De Natale, *University Cattolica Del Sacro Cuore, Italy*
Milan Kubiato, *Masaryk University, Czech Republic*
Paola Damiani, *University of Turin, Italy*
Pascal Marquet, *University of Strasbourg, France*
Petros Kefalas, *University of Sheffield International Faculty, Thessaloniki, Greece*
Tatjana Portnova, *Russian Center of the University of Granada, Spain*

Reviewers

- Adriana Albu, *Grigore T. Popa University of Medicine and Pharmacy, Romania*
Andreas Moutsios-Rentzos, *National and Kapodistrian University of Athens, Greece*
Anikó Fehérvári, *Eötvös Loránd University, Hungary*
Carla Morais, *Centro de Investigação em Química da Universidade do Porto, Unidade de Ensino das Ciências, Departamento de Química e Bioquímica, Faculdade de Ciências da Universidade do Porto, Portugal*
Charles Masoabi, *Central University of Technology, South Africa*

Ekaterina Kozina, *Trinity College Dublin, Ireland*
Florentin Popescu, *HAN University of Applied Sciences, The Netherlands*
Gloriose Mugirase, *University of Rwanda, Rwanda*
Ilídio André Costa, *Agrupamento de Escolas de Santa Bárbara, Planetário do Porto – Centro Ciência Viva, Faculdade de Ciências da Universidade do Porto, Instituto de Astrofísica e Ciência do Espaço da Universidade do Porto, Portugal*
Joana Carneiro Pinto, *Catholic University of Portugal, Portugal*
Katerina Kasimatis, *School of Pedagogical and Technological Education (ASPETE), Department of Education, Greece*
Khalid Aada, *University of Texas Rio Grande Valle, USA*
Leentjie Van Jaarsveld, *North-West University, South Africa*
Liga Paula, *Latvia University of Life Sciences and Technologies, Latvia*
Liliana Faria, *Universidade Europeia & Socius/CSG, ISEG-Universidade de Lisboa, Portugal*
Marina Fomina, *Moscow City University, Russia*
Maura Sellars, *University of Newcastle, Australia*
Nestor Montanes, *University Politècnica de València, Spain*
Pule Phindane, *Central University of Technology, South Africa*
Speciose N. Ndimurugero, *University of Rwanda, Rwanda*
Teodomiro Boronat, *University Politècnica de València, Spain*