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The Education University of Hong Kong

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教育未來國際論壇

23-25 April 2024

Proceedings

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Faculty of Education and Human Development 教育及人類發展學院
FACULTY OF HUMANITIES 人文學院 Humanity can broaden the Way
FACULTY OF LIBERAL ARTS AND SOCIAL SCIENCES 博文及社會科學學院
Graduate School 研究生院
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International Congress on Educational Futures 2024
國際未來教育論壇 2024

Proceedings 論文集

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Message from the Organisers

The “International Congress on Educational Futures 2024” (ICEF 2024) organised by The Education University of Hong Kong (EdUHK) took place both virtually and physically from 23 to 25 April 2024. The congress is positioned to take place at a significant time for the education sector, when both the Covid-19 pandemic and the unprecedented advancements in technologies are combining their impact to fuel fundamental changes. The congress welcomed stakeholders from early childhood, primary, secondary, and tertiary levels in local, national, and international organisations.

ICEF 2024 featured five keynote speeches, six symposia, 1 doctoral student consortium and 18 paper presentation sessions. Embracing a hybrid format, ICEF provided an interactive platform for academics, researchers, practitioners, and professionals in higher education and K-12 sectors to exchange innovative approaches to learning and teaching.

As we are celebrating the 30th Anniversary of the University, an achievement worth commemorating and collaborating upon, we have curated five key strands for this Congress. These diverse themes attracted a significant number of participants.

- International, Regional and National Co-operation for Educational Development and Innovation
- Metaverse, AI and STEAM Education
- New Humanities Education
- Values Education, Teacher Conduct and Well-being
- Educational Leadership and Curriculum Development for the Future

This year we have the privilege of welcoming speakers and participants both in person and online. We have invited five renowned experts as keynote speakers. They are:

- Professor Phillip Dawson, Co-Director of the Centre for Research in Assessment and Digital Learning at Deakin University.
- Professor Huang Ronghuai (黃榮懷教授), Co-Dean and Professor of Smart Learning Institute at Beijing Normal University;
- Professor Hafdís Guðjónsdóttir, Professor Emerita at the School of Education, University of Iceland; and
- Professor Li Wei (李嵬教授), Director and Dean of UCL Institute of Education at University College London;
- Dr. Sobhi Tawil, Director of Future of Learning and Innovation at UNESCO.

ICEF 2024 calls for papers from scholars around the world. This year, the Congress received a total of 101 submissions by 179 authors from mainland China, Hong Kong, Indonesia, India, Australia, Brazil, France, Macao, Japan, Canada, Malaysia, Mexico, Philippines,

Singapore, Switzerland and some other regions. Table 1 shows the statistics of regions of the authors.

Table 1. Statistics of Regions of ICEF 2024 Authors

Regions/ Countries	No. of Authors	Regions/ Countries	No. of Authors
Hong Kong	101	Japan	1
Mainland China	52	Canada	1
Indonesia	6	Malaysia	1
India	4	Mexico	1
Australia	3	Philippines	1
Brazil	2	Singapore	1
France	2	Switzerland	1
Macao	2	**Total**	**179**

Each submission underwent a thorough review process, with a minimum of three programme committee members assigned to review each paper during the first round. The results of these reviews were then subjected to meta-review by the chair and co-chairs of the corresponding strand. Following this rigorous evaluation, a total of 78 papers were accepted for presentation at ICEF 2024 (please refer to Table 2).

Table 2. Statistics of paper acceptance of each strand in ICEF 2024

Strand	Accepted Full Paper	Accepted Abstract	Accepted	Rejected	Acceptance Rate
International, Regional and National Co-operation for Educational Development and Innovation	3	14	17	1	94%
Metaverse, AI and STEAM Education	4	19	23	5	82%
New Humanities Education	2	4	6	1	86%
Values Education, Teacher Conduct and Well-being	3	14	17	3	85%
Educational Leadership and Curriculum Development for the Future	4	11	15	13	54%
Total			**78**	**23**	**77%**

We would like to extend our heartfelt appreciation to the dedicated and hardworking strand coordinators, namely Professor John Nguyet Erni, Professor Kerry John Kennedy, Professor Kong Siu-Cheung, and Professor Bruce John Macfarlane. They played a vital role in coordinating the review process for over 100 abstracts and full papers submitted to ICEF

2024. Their meticulous efforts ensured a fair and comprehensive assessment of the submissions. Our gratitude also extends to the programme committee members who diligently reviewed and provided valuable comments on the submitted papers. Their expertise and insights significantly contributed to the selection of high-quality papers for presentation at the Congress.

The success of ICEF 2024 would not have been possible without the collective contributions of the strand coordinators and programme committee members. We appreciate their commitment to maintaining the highest standards of academic excellence in the review process. My heartfelt gratitude goes to the organising committee, composed by colleagues from Centre for Learning, Teaching and Technology, Faculty of Education and Human Development, Faculty of Humanities, Faculty of Liberal Arts and Social Sciences, and Graduate School, which makes ICEF 2024 a great success.

We will organise the “International Conference on Learning and Teaching 2025”. We sincerely hope that our conference will bring inspirations and a magnificent experience to all the online or physically attending participants. We look forward to meet you again next year.

Professor LEE Chi Kin John
Chairperson of the Organising Committee

Professor CHENG May Hung May
Co-Chairperson of the Organising Committee

International Congress on Educational Futures 2024

1. Organisation

Organising Committee

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Chair Professor of Educational Leadership, The Education University of Hong Kong

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Metaverse, AI and STEAM Education

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New Humanities Education

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Values Education, Teacher Conduct and Well-being

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Educational Leadership and Curriculum Development for the Future

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The Education University of Hong Kong

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2. Keynotes

Keynote 1 - Developing Transpositioning Capacities for Educational Futures in the 21st Century

10:45 – 11:45, 23 April 2024 (Tuesday), Room 1

Speaker

Professor LI Wei 李嵬
Director and Dean
UCL Institute of Education
University College London

Chair

Professor GU Ming Yue Michelle
Dean of Graduate School
Professor of Department of English Language Education
The Education University of Hong Kong

Abstract

Zygmunt Bauman characterised the 21st century as 'liquid modernity' where 'change is the only permanence, and uncertainty the only certainty' (Bauman, 2000). Individuals are compelled to spontaneously and simultaneously engage in multiplex virtual networks that support everyday life, requiring continuous expansions of our communicative repertoire. One has to adapt to new and different ways of learning and being; one has to develop a capacity for Transpositioning. Transpositioning foregrounds a susceptibility to constant change, with a view to transcending any given position. It refers to a processual and iterative shifting of the identity position of an actor-in-communication; i.e., the process in which individuals allow their stance with regard to any given proposition to be in flow-and-flux as they interact with others. To be in flow-and-flux means to release oneself (one's self) from given frameworks and habitual patterns of thought, generating possibility spaces in which one develops new routes (cf. roots) of thinking in conjunction with other participants and cultivates an affect of empathy for others. This talk discusses the concept of Transpositioning in detail, with examples of digital communication and lived experiences of multilingual transnationals. It invites the participants to think how educational systems and practices should adapt to ever-changing demands of life in liquid modernity and how they can enhance Transpositioning capacities needed for the 21st century.

Speaker Bio

Li Wei is Director and Dean of the UCL Institute of Education at University College London (UCL), where he also holds the Chair of Applied Linguistics. His research covers many different aspects of bilingualism and multilingualism, including the acquisition of multiple

languages in childhood, family language policy, education policy and practice regarding bilingual and multilingual learners of minoritized and transnational backgrounds, and the cognitive benefits of language learning. He is co/author of over 20 books and edited collections and over 130 journal articles and book chapters. His current journal editorships include the International Journal of Bilingual Education and Bilingualism and the Applied Linguistics Review. He founded the biennial International Symposium on Bilingualism in 1997 and was founding editor of a number of international journals including International Journal of Bilingualism, Chinese Language and Discourse, Global Chinese, Educational Linguistics and Research Methods in Applied Linguistics. He has won the British Association of Applied Linguistics Book Prize twice, for the Blackwell Guide to Research Methods in Bilingualism and Multilingualism (with Melissa Moyer) and Translanguaging: Language, Bilingualism and Education (with Ofelia Garcia). He is a fellow of the British Academy, Academia Europaea, Academy of Social Sciences, UK, and the Royal Society of Arts. His previous posts include Pro-Vice-Master (Research and Postgraduate Studies) at Birkbeck, and Head of the School of Education at the University of Newcastle.

Keynote 2 - Designing Assessment for an Age of Artificial Intelligence
14:00-15:00, 23 Apr 2024, Tuesday, Room 1

Speaker
Professor Phillip DAWSON
Co-Director
Centre for Research in Assessment and Digital Learning
Deakin University

Chair
Professor XU Guandong
Chair Professor of Artificial Intelligence
Director of Centre for Learning, Teaching and Technology
Director of University Research Facility of Data Science & Artificial Intelligence
The Education University of Hong Kong, Hong Kong

Abstract
Artificial intelligence is capable of producing outputs that satisfy the requirements of some high-stakes assessments across a range of disciplines including law, medicine and engineering. This has driven concerns about a new wave of artificial-intelligence-enabled cheating, as well as questions about the sustainability and authenticity of current assessment practices. This presentation explores how assessment needs to change for a time of artificial intelligence. It draws upon work the presenter has done as one of the leaders of the major Australian project Assessment reform for a time of artificial intelligence, which was funded by the Australian higher education regulator. The presentation's main focus is resolving the tension between preparing students for a world pervaded by artificial intelligence, and ensuring the integrity and security of assessment.

Speaker Bio
Professor Phillip (Phill) Dawson is the Co-Director of the Centre for Research in Assessment and Digital Learning (CRADLE) at Deakin University. His research focuses on how address the many perceived 'threats' to assessment validity in a digital world. These threats span the use of artificial intelligence for cognitive offloading, the (in)security of online exams, assessment that is not inclusive, and beyond. His two latest books are Defending Assessment Security in a Digital World: Preventing E-Cheating and Supporting Academic Integrity in Higher Education (Routledge, 2021) and the co-edited volume Re-imagining University Assessment in a Digital World (Springer, 2020). Phill initially studied artificial intelligence and cybersecurity before his PhD in higher education. Beyond validity, he conducts broader research into assessment, which includes work on assessment design and feedback. In his spare time Phill performs improv comedy and produces the academia-themed comedy show The Peer Revue.

Keynote 3 - Values Education, Teacher Conduct and Well-being
10:00-11:00, 24 Apr 2024, Wednesday, Room 1

Speaker
Professor Hafdís Guðjónsdóttir
Professor Emerita
School of Education
University of Iceland

Chair
Professor CHENG May Hung May
Vice President (Academic)
Chair Professor of Teacher Education
The Education University of Hong Kong

Abstract
The world we live in is changing fast in several ways but often we feel that educational practices are transforming slower than many of us would like. In my presentation the focus will be on education; schools and teachers; students and learning. I will discuss values education and put emphasis on learning to know, to do and to be. I will consider how education can help students develop their personalities and grow physically and emotionally. My focus will be on possibilities for schools to create learning spaces for the well-being of students where they can carry out their social, moral, and democratic responsibilities and learn to live together and transform themselves and society. Teachers are the key persons to make these transformations happen and my focal point will be teachers´ professionalism, well-being, and a responsive professional practice. Teachers can work on transforming their practice through self-study methodology and I will introduce these possibilities.

Speaker Bio
Dr. Hafdís Guðjónsdóttir is a professor emeritus at the University of Iceland, School of Education. She completed her Ph.D. at the University of Oregon in 2000, her theses Responsive professional practice: Teachers analyze the theoretical and ethical dimensions of their work in diverse classrooms, focused on teachers' professionalism in inclusive schools. Prior to working at UI, she taught for 25 years at comprehensive schools in Iceland. As a professor at UI, Hafdís focuses on responsive practice and innovative teaching methods accommodating for diverse groups of students in inclusive classrooms. Her research projects focus on inclusive practices, multicultural education, and teacher education. From the perspective of constant changes, critical theory, pedagogy, and teacher professionalism she researches with teachers and students. Her research methodology is qualitative, participant and teacher research, action research and self-study of education practices. She has published numerous articles, book chapters and books and was one of

the editors of the International Handbook of Self-Study of Teaching and Teacher Education Practices. Hafdís has collaborated with scholars from around the world and has been a guest professor at the Victoria University in Melbourne and the University of Northern Iowa. Hafdís is co-editor-in-chief of Teaching and Teacher Education: An International Journal of Research (TATE). Before she was an assistant editor of TATE and on the journal's editorial board. Hafdís was a co-editor of the Icelandic Journal of Education and edited special issues. Hafdís is active in the Self Study of Teacher Education Practices Special Interest Group (S-STEP), a network at the America Education Research Association (AERA). She was the chair of S-STEP in 2015–2017 and a program chair in 2007–2010.

Keynote 4 - Global Education at the Crossroads: Transforming Education for Sustainable Futures

13:00-14:00, 24 Apr 2024, Wednesday, Room 1

Speaker

Dr Sobhi TAWIL
Director
Future of Learning and Innovation
UNESCO

Chair

Professor LEE Chi Kin John
President and Chair Professor of Curriculum and Instruction
The Education University of Hong Kong

Abstract

We are at a critical historical juncture in global development with multiple crises threatening our shared future. Humanity faces an urgent choice between “breakdown or a breakthrough” (UN 2021). It is an existential choice between continuing on an unsustainable path, or radically changing course (UNESCO 2021). Education is key to changing course and shaping alternative futures. Current educational models, approaches, and practices need to be critically reviewed and renewed if they are to transform the future. At the current crossroads in global development, we must reframe our understanding and action. We must move beyond the dominant narrative of educational adaptation and reform to prepare for probable futures and shift towards a language of empowerment and transformation to shape alternative longer-term futures.

Speaker Bio

Sobhi Tawil (PhD) is Director of the Future of Learning and Innovation team at UNESCO where he currently leads the Futures of Education initiative, as well as work on technology and innovation in education. He has some 30 years of experience in teaching, education policy analysis, research and program management with diverse institutions and organizations, including the International Committee of the Red Cross (ICRC), the Graduate Institute for International and Development Studies (Geneva), as well as the Network for International Policies and Cooperation in Education and Training (NORRAG). He has also worked on issues of education policy in relation to identity-based conflict, social cohesion, and citizenship. Sobhi Tawil holds a PhD in Education and Development from the Graduate Institute for Development Studies in Geneva.

Keynote 5 - Metaverse, AI, And STEAM Education in China's Digital Transformation
11:15-12:15, 25 Apr 2024, Thursday, Room 1

Speaker
Professor HUANG Ronghuai
Co-Dean and Professor, Smart Learning Institute
Beijing Normal University

Chair
Professor KONG Siu-Cheung
Research Chair Professor of E-Learning and Digital Competency
Director, Artificial Intelligence and Digital Competency Education Centre
The Education University of Hong Kong

Abstract
Get ready to embark on a journey into the future of education as we explore the transformative power of the Metaverse, AI, and STEAM Education, guided by China's digital transformation blueprint. Discover how China leads the way in AI-driven educational innovation, revolutionizing learning experiences across various disciplines. Through compelling case studies, we will reveal how AI technologies empower educators, engage students, and foster interdisciplinary skills. China's unwavering commitment to building a digitally savvy workforce is evident through its pioneering efforts in AI-enhanced education. In this keynote, we will delve into China's groundbreaking initiatives and their profound implications for global education. We will also share the work of the UNESCO Chair on AI in Education. Join us as we unlock the potential of AI in education, reshaping how students learn and how educators teach, and propelling China toward a digitally advanced educational landscape.

Speaker Bio
HUANG Ronghuai is a Professor of Education at Beijing Normal University (BNU) and holds multiple prestigious roles in the field. He is currently the Co-Dean of BNU's Smart Learning Institute, the Director of the National Engineering Research Center of Cyberlearning and Intelligent Technology, and the Director of the Educational Informatization Strategy Research Base in Beijing, under the Ministry of Education of the People's Republic of China. Additionally, he serves as the UNESCO Chair on Artificial Intelligence in Education and the Director of the UNESCO International Research and Training Centre for Rural Education. In addition to his academic endeavors, Professor Huang holds important leadership roles, including serving as a Member of the Expert Group on Artificial Intelligence Technology Innovation at the Ministry of Education, and the Editor-in-Chief of Springer's Journal of Computers in Education and Smart Learning Environment. With extensive expertise in educational informatization, smart learning environments, technology-supported innovative

teaching, and artificial intelligence in education, Professor Huang has received notable accolades throughout his career. He has been honored with the National Award for Outstanding Teaching Achievement, the Science Research Famous Achievement Award in Higher Institutions, the Science Research Famous Achievement Award in National Education, and the titles of Beijing Famous Teacher and Beijing Outstanding Teacher. Professor Huang's contributions extend beyond recognition, as he has actively participated in over 100 national, provincial, and ministerial projects. His influential ideas have reached wide audiences through the publication of more than 300 academic papers and over 40 books, both domestically and internationally.

3. Symposia

Symposium 1 - Navigating the Complexities of Language: Multilingualism and Intercultural Communication in the Changing Context
12:00-13:00, 23 April 2024 (Tuesday), Room 1

Abstract
The upcoming symposium will bring together three distinguished scholars from the UCL Institute of Education to delve into the multifaceted areas of multilingualism, translanguaging, intercultural communication and linguistic landscape. This symposium presents cutting-edge insights to unveil the cognitive, educational, and sociocultural dimensions of language learning and use. The implications for language policy and educational policy making will be discussed.

Chair

Professor GU Ming Yue Michelle
Dean of Graduate School,
Professor of Department of English Language Education
The Education University of Hong Kong

Panelists

Professor LI Wei 李嵬
Director and Dean
UCL Institute of Education, University College London

Speaker Bio
Li Wei is Director and Dean of the UCL Institute of Education at University College London (UCL), where he also holds the Chair of Applied Linguistics. His research covers many different aspects of bilingualism and multilingualism, including the acquisition of multiple languages in childhood, family language policy, education policy and practice regarding bilingual and multilingual learners of minoritized and transnational backgrounds, and the cognitive benefits of language learning. He is co/author of over 20 books and edited collections and over 130 journal articles and book chapters. His current journal editorships include the International Journal of Bilingual Education and Bilingualism and the Applied Linguistics Review. He founded the biennial International Symposium on Bilingualism in 1997 and was founding editor of a number of international journals including International Journal of Bilingualism, Chinese Language and Discourse, Global Chinese, Educational Linguistics and Research Methods in Applied Linguistics. He has won the British Association of Applied Linguistics Book Prize twice, for the Blackwell Guide to Research Methods in Bilingualism and Multilingualism (with Melissa Moyer) and Translanguaging: Language, Bilingualism and Education (with Ofelia Garcia). He is a fellow of the British Academy, Academia Europaea, Academy of Social Sciences, UK, and the Royal Society of Arts. His

previous posts include Pro-Vice-Master (Research and Postgraduate Studies) at Birkbeck, and Head of the School of Education at the University of Newcastle.

Professor ZHU Hua

Director of International Centre for Intercultural Studies, IOE,
UCL Institute of Education, University College London

Speaker Bio

Zhu Hua is Professor of Language Learning and Intercultural Communication and Director of International Centre for Intercultural Studies at the Institute of Education, University College London (UCL). She is an elected Fellow of the Academy of Social Sciences, UK and Fellow and Elected Board member of the International Academy for Intercultural Research. She is Chair of the British Association for Applied Linguistics (BAAL) since 2021. Her main research interests span across multilingual and intercultural communication and child language. She has led a number of research projects and knowledge transfer projects funded by the UK research councils including AHRC, ESRC, the Leverhulme, British Academy and the Academy of Medical Science. She is a book series co-editor for Routledge Studies in Language and Intercultural Communication and Cambridge Key Topics in Applied Linguistics and Cambridge Elements in Applied Linguistics.

Professor John O'REGAN

Professor of Critical Applied Linguistics, IOE Vice-Dean (International)
IOE, Faculty of Education and Society, University College London

Speaker Bio

John O'Regan is Professor of Critical Applied Linguistics and Vice-Dean (International) at IOE, Faculty of Education and Society, University College London. He is also Deputy Director of the International Centre for Intercultural Studies (ICIS) and the Programme Director of the MA Intercultural Communication. As Vice-Dean (International) John is responsible for all IOE global partnerships and international engagement. In his academic work and research John specialises in English as a global language, intercultural communication and critical discourse analysis, and has wide interests in political economy, critical social theory and international history. John worked for many years as a trainer in intercultural communication for the Council of Europe (1992-99) and has been a teacher trainer and educator in many international contexts, including Chile, Bolivia, Indonesia and China. In the UK, John was Co-Chair of the International Association for Languages and Intercultural Communication (IALIC) (2004-8) and a member of the IALIC Board (2000-16). He was for many years also Editor of the journal Language and Intercultural Communication (2008-15). John has published widely, including in Applied Linguistics, Globalisation, Societies and Education, Language Sciences, and Journal of the Royal Asiatic Society Hong

Kong. He is the co-editor of three books: Travelling Languages: Culture, Communication and Translation in a Mobile World (O'Regan, Wilkinson & Robinson, 2014), Intercultural Dialogue: Questions of Research, Theory and Practice (Holmes, Dooly & O'Regan, 2016) and Education and the Discourse of Global Neoliberalism (Gray, O'Regan & Wallace, 2021). His most recent book is Global English and Political Economy (O'Regan, 2021).

Symposium 2 – Inclusive Values for Troubling Times: Creating Caring Societies
15:15-16:45, 23 Apr 2024, Tuesday, Room 3

Chair

Professor Kerry J KENNEDY
Emeritus Professor; Advisor (Academic Development)
Department of Curriculum and Instruction
The Education University of Hong Kong

Distinguished Panelists

Professor Rupert Maclean AO
Honorary Professors;
Department of International Education
The Education University of Hong Kong

Abstract

Learning During an Age of Disruption and Turmoil: It will be argued there is a pressing need for the substantial re-engineering of education and schooling, in support of achieving effective and sustainable lifelong learning societies, during a time of all-pervasive change and disruption. These changes and disruptions are occurring within individual countries, at the regional level, and worldwide.

Dr Miron BHOWMIK
Assistant Professor
Department of Education Policy and Leadership
The Education University of Hong Kong

Abstract

Learning to be an anti-racist: Many societies around the world are increasingly becoming diverse and multicultural. Digital technologies and social media are also bringing multiculturalism to the members of the societies that are supposedly mono-cultural. This presentation will discuss the learning needed to be an anti-racist to function with respect and care in multicultural spaces.

Dr Jan GUBE
Assistant Professor
Department of Curriculum and Instruction
The Education University of Hong Kong

Abstract

Learning to teach about diversity: Supporting learners with diverse needs and cultural orientations has been a key equity goal of education systems globally. Yet, to some, learning

to teach about diversity sensitively and equitably remains debated. This presentation will address the role of caring as a keystone to enacting inclusive values in diverse classrooms.

Dr Zhenzhou ZHAO
Assistant Professor
Department of Curriculum and Instruction
The Education University of Hong Kong

Abstract

Learning to be a citizen: It will be argued there is a pressing need for the substantial re-engineering of education and schooling, in support of achieving effective and sustainable lifelong learning societies, during a time of all-pervasive change and disruption. These changes and disruptions are occurring within individual countries, at the regional level, and worldwide.

Discussant

Dr Jason Cong LIN
Assistant Professor
Department of International Education
The Education University of Hong Kong

Symposium 3 – Educational Development & Curriculum Innovation in the Greater China Region

14:00-16:00, 24 Apr 2024, Wednesday, Room 1

Abstract

Distinguished and experienced professionals are invited to share their views on the trend of educational development & curriculum innovation in the Greater China Region (as a geographical notion) and what will be the next move in this area. How could the stakeholders co-operate and respond for future education?

Chair

Professor LEE Chi Kin John
President;
Chair Professor of Curriculum and Instruction
The Education University of Hong Kong

Distinguished Panelists

Professor LEI Wanpeng
Professor and Dean
College of Education
Central China Normal University

Professor LI Jun
Professor
Faculty of Education
Western University

Professor SONG Huan
Professor
Faculty of Education
Beijing Normal University

Professor TAN Chuanbao
Jingshi Distinguished Professor
Beijing Normal University

Professor WANG Jian
Professor
Jing Hengyi School of Education
Hangzhou Normal University

Professor YU Yongping
Professor
School of Education Science
Nanjing Normal University

Professor YU Zeyuan
Professor
Faculty of Teacher Education,
Southwest University

Symposium 4 – How to Think about Sustainable Futures in Education: Interactive Areas

15:00-16:30, 24 Apr 2024, Wednesday, Room 2

Chair

Professor Kerry J KENNEDY
Emeritus Professor;
Advisor (Academic Development)
Department of Curriculum and Instruction
The Education University of Hong Kong

Co-Chair

Dr Euan AULD
Assistant Professor
Department of International Education
The Education University of Hong Kong

Distinguished Panelists

Dr Margarita PAVLOVA
Director
UNEVOC Centre (Hong Kong)
The Education University of Hong Kong

Ms Miranda WONG
Director
The Hong Kong Federation of Youth Groups Leadership Institute

Prof YANG Wenming
UNEVOC Centre (Shenzhen Polytechnic)
Shenzhen Polytechnic University

Dr XIONG Weiyan
Assistant Professor
Department of International Education
The Education University of Hong Kong

Symposia Description

This Symposium addresses a variety of perspectives on how to think about education within the context of Sustainable futures. The papers make lateral movements between Thailand (Bangkok) and the Greater Bay Area, from urban spaces to higher education institutions, and exploring related environmental and digital transformations. The first three papers focus on sustainable habitats as the spaces where everyone can be critically and proactively engaged in discussions and actions towards a more-than-human future. The subsequent papers move to a comparison of higher education institutions and the promise of evaluating, collecting and disseminating 'best practice' to nurture sustainable futures. Each of the papers is empirically grounded, approaching the question from different but intersecting theoretical perspectives to promote dialogue not only on how to think about sustainable futures in education, but how innovation might inspire sustainable change in practice through international, regional and national co-operation.

The first paper (Dr Margarita Pavlova, The Education University of Hong Kong) refers to sustainable urban development as presented in sustainability agenda at the international level as one of the policy goals. The paper refers to the need to engage all social groups into its realisation and argues that the role of education is to ensure transformation of positive values into a desirable behavior. The paper refers to the project on ethnic minorities in Hong Kong and an opportunity that non-formal learning can bring in terms of green skills development that is one of the enabling factors for development of sustainable cities.

The second paper by Ms. Miranda Wong shares the importance of education-plus approach in preparing youth for future through non-formal education (i.e. extra-curricular activities). The HKFYG has advocated for 6 future skills including Wellness Management; Digital Skills; Life Planning; Innovation and Problem Solving; Resilience and Crisis Management; and Communication and Cooperation. Through working closely with partners from the government, the business and social sectors, diversified learning opportunities and value education are provided for youth from all walks of life to equip themselves with hard and soft skills and mindsets needed for future. Such activities as "Hong Kong 200" Leadership Project and $avvy Planner Workshops will be used as examples to illustrate the points.

The third paper (Prof Yang, Wenming, Shenzhen Polytechnic University) invites us to think of sustainability with regard to the digital transformation of education and societies, a shared future for all education institutions from K12 to higher education. The paper notes the lack of clarity among education leaders regarding what the digital transformation actually means and how to implement it from vision to execution. Suggesting that international cooperation could be an effective approach to addressing this urgent issue, the paper introduces the work of the UNESCO Chair on digitalization in TVET, and some of the solutions and practices it has collated for international sharing.

The fourth paper (Dr Xiong, Weiyan, The Education University of Hong Kong) discusses the teaching and learning for sustainability competencies at eight UGC-funded universities in Hong Kong. Specifically, this talk aims to 1) examine the current status of teaching and learning for sustainability at eight UGC-funded universities; 2) identify the challenges of integrating sustainability into teaching and learning at eight UGC-funded universities; and 3) identify the good practices of integrating sustainability into teaching and learning at eight UGC-funded universities. It closes by reflecting on how the innovations shared in the previous papers may help inform sustainability practices in the Greater Bay Area.

Symposium 5 – Elite or Idiot? Do Our Students Have Choices in the Digitalized World in the Coming 10 Years?
10:00-11:00, 25 Apr 2024, Thursday, Room 1

Chair

Professor KONG Siu-Cheung
Research Chair Professor of E-Learning and Digital Competency
Director, Artificial Intelligence and Digital Competency Education Centre
The Education University of Hong Kong

Distinguished Panelists

Professor HUANG Ronghuai
Co-Dean and Professor
Smart Learning Institute
Beijing Normal University

Professor HU Xiangen
Chair Professor of Learning Sciences and Technologies
Director of IHERD and Educational Research Centre (ERC)
The Hong Kong Polytechnic University

Abstract

Over the next decade, we may find ourselves immersed in a society where AI is pervasive, where there is a possibility that independent thinking may diminish. The allure of AI is evident, yet the real challenge lies in harnessing AI to enhance human well-being, not hinder it. The true test lies not in resisting AI, but in weaving it into our human experience for empowerment. As educators, it is crucial to develop students' independent thinking skills and to educate them to work with AI as partner. This symposium will delve into key issues in working with AI when it is becoming immersive in every aspect of our society.

Symposium 6 – Teacher, Teaching and Teacher Education Under a Globalized World
09:30-11:00, 25 Apr 2024, Thursday, Room 2

Abstract
This symposium explores diversified perspectives of renowned educational researchers on the issues and futures of teachers and teacher education under a globalized world with impact of AI and technology. Specific questions entail: How would AI and technology affect the roles and work of teachers and what are the implications for future teacher learning and teacher education in universities? What are the key roles of teachers in a globalized world with high level of technology use and application of AI-generative tools and metaverse? How could educational researchers and teacher educators across universities in different countries and places co-operate to enhance the quality of teaching and teacher education? What are the possible reform approaches for teacher education curriculum?

Chair

Professor LEE Chi Kin John
President;
Chair Professor of Curriculum and Instruction
The Education University of Hong Kong

Distinguished Panelists

Professor Dr. Birol AKGÜN
President;
Turkish Maarif Foundation (TMF)

Professor YIN Hong-biao
Chairperson & Professor,
Department of Curriculum and Instruction,
The Chinese University of Hong Kong

Professor CHIANG Tien-Hui
Distinguished Professor,
School of Educational Science,
Anhui Normal University

4. Doctoral Student Consortium
cum Postgraduate Student Sharing of L&T @EdUHK Festival 2024

14:00-16:30, 24 Apr 2024, Wednesday, Room 3

Chair

Professor GU Ming Yue Michelle
Professor of Department of English Language Education
Dean of Graduate School
The Education University of Hong Kong

Co-Chairs

Dr LEUNG Ka Man Carman
Associate Professor
Department of Health and Physical Education
The Education University of Hong Kong

Dr MATSUNOBU Koji
Acting Head and Associate Professor
Department of Cultural and Creative Arts
The Education University of Hong Kong

Invited Speaker (1)

Dr MA Xiaojuan
Associate Professor
Department of Computer Science and Engineering
The Hong Kong University of Science and Technology

Topic

Charting the Future of AI in Project-Based Learning

Abstract

Students' increasing use of Artificial Intelligence (AI) presents new challenges for assessing their mastery of knowledge and skills in project-based learning (PBL). The growing integration of Artificial Intelligence (AI) in student learning presents new challenges for assessing learning outcomes. This talk presents our exploration of the potential of students' AI usage data as a novel material for PBL assessment. We conducted workshops with college students, encouraging them to speculate an alternative world where they could freely employ AI in PBL while needing to report this process to assess their skills and contributions.

Our research yielded various scenarios of students' use of AI in PBL and ways of analyzing such usage grounded by students' vision of how educational goals may transform. We also found that students with different attitudes toward AI exhibited distinct preferences in how to analyze and understand their use of AI. Based on these findings, we discuss future research opportunities on student-AI interactions and understanding AI-enhanced learning.

Speaker Bio

Xiaojuan Ma is an associate professor of Human-Computer Interaction (HCI) at the Department of Computer Science and Engineering (CSE), Hong Kong University of Science and Technology (HKUST). She received the Ph.D. degree in Computer Science at Princeton University. She was a post-doctoral researcher at the Human-Computer Interaction Institute (HCII) of Carnegie Mellon University (CMU), and before that a research fellow in the National University of Singapore (NUS) in the Information Systems department. Before joining HKUST, she was a researcher of Human-Computer Interaction at Noah's Ark Lab, Huawei Tech. Investment Co., Ltd. in Hong Kong. Her background is in Human-Computer Interaction. She is particularly interested in data-driven human-engaged AI (HEAI) and Human-Engaged Computing (HEC) in domains including but not limited to education, health, and design.

Invited Speaker (2)

Professor GAO Xuesong Andy
Professor
University of New South Wales, Australia

Topic

Learning and Teaching Languages in a Brave New World

Abstract

While technology has been playing an important role in facilitating the learning and teaching of languages, the rise of generative AI tools generates significant challenges for language teachers, who fear being replaced by technology. Researchers now need to identify a repertoire of essential skills, knowledge, competencies, attributes, and dispositions that human beings should retain as language users. Researchers also should reorient research on individual differences (ID) in terms of theoretical diversification, methodological improvement, and pedagogical innovation. ID-related findings can then enable language teachers to help language learners to acquire these desirable attributes and dispositions in a Brave New World.

Speaker Bio

Xuesong (Andy) Gao is a Professor of Language and Literacy Education at the School of Education, University of New South Wales, Australia. His research interests include language learning, language education policy, and language teacher education. He co-edits

the International Journal of Applied Linguistics for WILEY and edits the English Language Education Book Series for Springer.

Outstanding Alumna Speaker from FEHD

Dr LIU Huinan
Research Assistant Professor
Department of Special Education and Counselling
The Education University of Hong Kong (EdUHK)

Speaker Bio

Huinan Liu is a research assistant professor at the Department of Special Education and Counselling at The Education University of Hong Kong, Hong Kong SAR, China. She obtained an MA degree in criminology from The University of Hong Kong and a PhD in psychology from The Education University of Hong Kong. Her core research interest is mental health problems and deviant behaviors. Along this line, she is interested in the underlying mechanism of psychological resilience and the pathway of desistance among people involved with the criminal justice system. She serves as an editorial board member of Social Inclusion and an ad-hoc reviewer for academic journals, such as BMC Public Health, BMC Psychiatry, BMC Geriatrics, PeerJ, Stress& Health, and Cogent Medicine.

Research Postgraduate (RPg) Student Speakers

Charla Rochella Santiago-SAAMONG
RPg Student
The Education University of Hong Kong

Melissa Pearl CALDWELL
RPg Student
The Education University of Hong Kong

Abstract

While technology has been playing an important role in facilitating the learning and teaching of languages, the rise of generative AI tools generates significant challenges for language teachers, who fear being replaced by technology. Researchers now need to identify a repertoire of essential skills, knowledge, competencies, attributes, and dispositions that human beings should retain as language users. Researchers also should reorient research on individual differences (ID) in terms of theoretical diversification, methodological

improvement, and pedagogical innovation. ID-related findings can then enable language teachers to help language learners to acquire these desirable attributes and dispositions in a Brave New World.

Doctor of Education (EdD) Postgraduate Student Speakers

WONG Cho Yee Nathania
EdD Student
The Education University of Hong Kong

CHENG Lingling
EdD Student
The Education University of Hong Kong

Abstract

This presentation examines the current state of support for students with special educational needs (SEN) in Hong Kong local and international schools, with a focus on fostering inclusive education. We explore effective strategies for teaching academic concepts to SEN students, emphasizing the importance of breaking down complex ideas into manageable components. Additionally, we highlight the significance of comprehensive support through individualized approaches that cater to learning diversity in the classroom, as well as pullout and after-school services. By implementing these strategies, we aim to create an inclusive educational environment that nurtures the diverse needs of all students, supporting their academic growth and success while promoting inclusivity in education.

Masters of Ceremonies (MC)

PAN Yingying
RPg Student
The Education University of Hong Kong

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- **New Humanities Education**

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- **Values Education, Teacher Conduct and Well-being**

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Strand

International, Regional and National Co-operation for Educational Development and Innovation

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Comparative Analysis of Leadership Performances and Emotional Intelligence in Chinese and American School Principals: A Cultural Perspective

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Abstract: This study conducts a comparative analysis of leadership performances and Emotional Intelligence (EI) among school principals in China and the United States. Utilizing Hofstede's cultural dimensions framework, the paper discusses the impact of distinct cultural backgrounds on principals' leadership and EI. The findings show that there is a larger power distance and high uncertainty avoidance in the Chinese context. Principals perform a more authoritarian, and long-term orientation. On the contrary, American school principals reveal a lower power distance and uncertainty avoidance, emphasizing individualism and democratic decision-making. Accordingly, the principals' EI performances in both countries are influenced by these cultural differences, which also affect their leadership performances and effectiveness. Despite these variances, this paper emphasizes that understanding and managing emotions is critical for educational leaders, regardless of their cultural setting. It also suggests that there are opportunities for reciprocal learning. Both Chinese and American principals can enhance their leadership capabilities by understanding and integrating aspects of others' leadership performances. In the context of globalization and cross-cultural interactions, this study highlights the importance of EI in principals' leadership and provides insight into policies and practices that aim to promote global educational progress. In addition, future research can enrich these findings through empirical methods for deeper understanding.

Keywords: Comparative Analysis, Leadership, Emotional Intelligence, Principals, Culture

1. Introduction

The role of education in society extends beyond the simple transference of knowledge, it is a cornerstone in crafting the future of our communities. Occupying the leading position of the educational system, school principals carry duties that exceed conventional managerial tasks. They are expected to cultivate a learning environment that propels student exploration and learning and guides their school toward educating objectives (Crow et al., 2002; Ediger, 2014). In this process, the effectiveness of leadership is regarded as a pivotal element in successful educational outcomes, shaping the comprehensive performance of a school and the satisfaction among teachers (Duan et al., 2018). Moreover, research has highlighted the significant influence of a principal's EI and leadership performances on these parameters (Gómez-Leal et al., 2022; Wirawan et al., 2019).

However, most of these studies have been confined to single cultural settings, leaving a substantial gap in our understanding of principals' EI and leadership performances within multicultural contexts. As we navigate an era of intensified global educational collaboration, the emergence of international schools, and an evident shift toward diversity, it is essential to have a comprehensive and diverse understanding of school leadership practices. Moreover, as the two largest economies in the world, both China and the United States hold significant positions in global economic, political, and educational fields. Simultaneously, the education systems of China and the United States are highly representative within their respective cultures and regions. The American education system exemplifies Western educational models, while the Chinese education system reflects the influences of the East, particularly Confucian culture (Hofstede, 2011).

Furthermore, analyzing and understanding the manifestations of EI and leadership performance in different cultural systems can prompt scholars and school leaders to engage in cultural consciousness and reflection. They can recognize the strengths and limitations of their cultural assumptions, thus acquiring more diversity and a global perspective in the process of educational globalization, and better meet the challenges brought about by cross-cultural development.

This study endeavors to fill this gap, using Hofstede's cultural dimensions as an analytical framework to comparatively examine the EI and leadership performances of school principals in China and the U.S. The value of this research lies in its cross-cultural perspective, enhancing our understanding of principal leadership and EI from various cultural standpoints, and thus fostering the development of more comprehensive, efficient, and diverse leadership strategies within the education sector.

2. Literature Review

2.1. Hofstede's Cultural Dimensions Theory

Hofstede's cultural dimensions theory, put forth by Dutch psychologist Geert Hofstede, serves as a widely utilized framework in the exploration of cross-cultural research (Hofstede, 1984). This theoretical framework presents a systematic and scientific approach for discussing the comprehensive of culture on human behavior. At its core, the theory posits that culture can be quantitatively characterized through various dimensions, and the variations in these dimensions across cultures can shed light on the behavioral disparities among nations. Initially, Hofstede (1984) introduced four fundamental cultural dimensions: power distance, individualism versus collectivism, masculinity versus femininity, and uncertainty avoidance. Subsequently, the framework was enriched with two additional dimensions: long-term versus short-term orientation, and indulgence versus restraint (Hofstede & Minkov, 2010).

Despite certain criticisms, including the alleged oversimplification of cultures and overlooking intrinsic cultural diversity and complexity, it is noted that the theory continues to be a widely adopted tool in cross-cultural studies (McSweeney, 2002). Therefore, Hofstede's cultural dimensions theory retains its significant scholarly and practical value within the realm of cross-cultural research, providing an incisive analytical lens for understanding and interpreting behaviors and phenomena across different cultural landscapes.

2.2. Emotional Intelligence

Emotional Intelligence (EI) has gradually become an important research topic for scholars over the past three decades. Reviewing the existing literature, EI was initially defined as an individual's ability to recognize, understand, manage, and utilize emotions (Salovey & Mayer, 1990). As scholars delve deeper, various models of EI have been developed. For instance, the ability model developed by Salovey and Mayer suggests that EI is a cognitive ability associated with accurately perceiving, using, understanding, and regulating emotions (Mayer et al., 2004). In contrast, the trait model proposed by Petrides views EI as a set of self-perceived abilities reflecting how individuals perceive their emotional capabilities (Petrides et al., 2007). The third major model is the mixed model, which combines elements of both the ability model and the trait model. The most representative of this is the model proposed by Goleman (1995), who summarized it into five components: understanding one's own emotions, managing emotions, self-motivation, recognizing others' emotions, and handling interpersonal relationships. Other mixed models, such as that proposed by Bar-On (1997), explore EI in five major areas: intrapersonal skills, interpersonal skills, adaptability, stress management, and general mood.

Although various models for understanding EI have been developed, and they focus on different aspects, they generally share some commonalities. For example, all these models agree that the ability to understand and manage emotions is a crucial foundation for EI. Additionally, each model acknowledges the key role of EI in interpersonal relationships, whether through perceiving and understanding emotions (ability model), self-perceived abilities (trait

model), or a combination of cognitive abilities and personal traits (mixed model). These three EI models emphasize the significant impact of EI on how individuals interact with others.

2.3. Emotional Intelligence in Leadership

The topic of leadership has long been a focal point of scholarly interest. Viewed as a multifaceted construct, it attracts across diverse academic disciplines and has given rise to several definitions. At its essence, however, leadership is an interplay of influencing others to accomplish set objectives. Leithwood (2005) underscore that leadership fundamentally hinges on two pivotal acts: setting a direction and making an impact. This notion holds true within educational settings, where the role of school leaders is to navigate and motivate staff members towards a unified vision and objectives for the school.

When attempting to examine leadership and EI in tandem, they share numerous commonalities, such as the ability to influence and inspire. On this note, George (2000) also highlighted the critical role of emotions in the leadership process, positing that leadership is fundamentally an emotional process where the emotions exhibited by leaders attempt to stir the emotions of their followers. Dasborough et al. (2022) propose that EI can bolster the quality of interactions between leaders and team members. Similarly, Zhou and George (2003) also suggest that EI can amplify leadership effectiveness within the organizational environment.

It is worth noting that among various leadership models, the concept of transformational leadership seems to have a more intimate connection with EI. Research has found that the motivational inspiration and individualized consideration components of transformational leadership are significantly associated with the ability to perceive and manage one's own and others' emotions (Palmer et al., 2001). Within transformational leadership, charisma and inspiring motivation describe the capability of transformational leaders to motivate and inspire employees to strive towards a common goal (Barling et al., 2000). The inherent soft skills in this context comprise the ability to monitor one's own and others' emotions. Moreover, the capacity to inspire motivation is also dependent on the ability to manage emotions.

By integrating and analyzing the concepts and models of leadership and EI, it can be inferred that leaders proficient in understanding and managing their emotions are more likely to garner respect and allegiance from their staff. Conversely, those adept at discerning others' emotions can enhance their communicative exchanges, thereby recognizing and fulfilling employees' expectations, which is an essential facet of inspirational motivation (Wang et al., 2011). Additionally, leaders who manifest empathetic understanding and relational management are positioned to better discern staff needs and provide support, thus propelling the fulfillment of shared objectives.

3. Method

This study employed the theoretical framework of Hofstede's cultural dimensions to compare the leadership performances and EI performances of Chinese and American principals in terms of four dimensions: power distance, individualism and collectivism, uncertainty avoidance, and long-term orientation and short-term orientation (Hofstede, 2001). By reviewing literature on the leadership, EI, and cultural characteristics, the study explored the differences in leadership and EI performance between the two countries.

4. Results and Discussion

Grounded in Hofstede's cultural dimensions, this research identified several disparities in the EI and leadership performances of Chinese and American school principals:

4.1. Power Distance

Hofstede (2001) conceptualized power distance as the degree to which subordinate members of organizations accept and expect an unequal distribution of power. Research has illustrated that China exemplifies a society with high power

distance, in contrast to the United States which exhibits a lower power distance (Hofstede, 2001). This implies that, within the Chinese cultural environment, there's a pronounced stratification in the hierarchy of organizations. This is mirrored by the principal-responsibility system prevalent in China, which endows school principals with definitive authority over the school, thus accentuating the power distance (Walker et al., 2012). Consequently, this often endows principals with considerable sway in decision-making processes. In such a framework, teachers, who occupy a lower rung on the power distance ladder, are often disinclined to engage in critical school decision-making processes. They are prone to acquiesce to directives from above, sometimes despite reservations, due to a dearth of appropriate channels for expression or a reluctance to voice dissent. Such power distance can engender a communication chasm between principals and teachers. Principals may neglect the affective dimensions of teachers and students, lacking emotional perception and empathy in their communications. This might result in policies that do not adequately reflect the authentic needs of teachers and students, thereby impinging upon educational quality and satisfaction. Shengnan and Hallinger (2021) substantiates that high power distance between principals and teachers can diminish the beneficial effects of principal instructional leadership on teacher self-efficacy and professional development.

Conversely, the educational environment in the United States exhibits smaller power distance, which allows school principals to treat teachers and students more equitably. In this context, teachers would anticipate consultation rather than being instructed on what to do (Hofstede, 2011). Matsumoto et al. (2008) found a correlation between lower power distance and better emotional regulation, suggesting that cultures scoring lower on power distance place a higher emphasis on the importance of emotions. This encourages principals to be more receptive to the opinions of teacher and student, fostering a more democratic decision-making environment. Correspondingly, this democratic disposition necessitates principals with high EI to adeptly navigate the emotional landscape states of their staff and students. Similarly, research also indicates that emotionally intelligent principals can better balance democratic decision-making and efficiency, which is beneficial for improving the satisfaction of teachers and students (Kurniawan & Syakur, 2017; Wong et al., 2010). At the same time, it also encourages innovation and change, which complements the smaller power distance in the American educational environment (Phillips et al., 2017; Scott-Ladd & Chan, 2004).

4.2. Individualism and Collectivism

The concepts of individualism and collectivism delineate distinct orientations towards the relationship between an individual and a group. Individualism emphasizes individual independence and self-awareness, while collectivism centers on the group, emphasizing interpersonal relationships and collective welfare (Hofstede, 2001). Scholars have pointed out that collectivist culture regulates and control their emotional expression through socialization processes, thereby preserving intra-group harmony (Sundararajan, 2015). This aligns with Bhullar et al. (2012) findings which suggest that those with a collectivist tendency exhibit better emotional functions. In contrast, individualists tend to articulate their emotions more directly. Interestingly, Scott et al. (2004) observed a lower proficiency in managing personal and others' emotions among individualists, who do not suppress their emotions in the same way as those in collectivist cultures (Matsumoto et al., 2008).

In light of these cultural distinctions, American school principals predominantly exhibit individualistic tendencies, prioritizing personal achievement and self-fulfillment, and fostering innovation and independent thought. Conversely, Chinese school principals might prioritize the accomplishment of collective objectives and the fostering of a harmonious environment, emphasizing team collaboration and coordinated action (Hofstede, 2001). It can therefore be conjectured that the leadership performances of American principals may be more conducive to environments characterized by rapid change and intense competition, whereas the leadership style of Chinese principals may be more suitable for contexts underlining team collaboration and stability.

In terms of emotional intelligence, collectivists often have a more accurate perception of their own and others' emotions, making them better at managing their own and others' emotions (Bhullar et al., 2012). Chinese school principals,

within a collectivist culture, exhibit higher levels of social awareness, empathy, and social skills, which are indeed signs of high EI. Also, studies have indicated that collectivist cultures tend to have better mental health (Bhullar et al., 2012), while individualistic cultures report higher levels of stress and conditions of depression and anxiety (Scott et al., 2004).

4.3. Uncertainty avoidance

As proposed by Hofstede (2001), uncertainty avoidance refers to the tolerance of ambiguity and uncertainty within an organization. When we draw comparisons between China and the United States, it becomes apparent that Chinese society exhibits a higher level of uncertainty avoidance, which also influences the leadership and EI performances of school principals within these two cultures (Wu, 2006). Specifically, in the Chinese culture, school principals may be more inclined to use standardized leadership strategies to reduce the impact of uncertainty (Wirawan et al., 2019). This predilection often leads them towards a more indirect communication style to avoid potential conflicts and maintain organizational harmony. Notably, Gunkel et al. (2014) discovered a positive correlation between uncertainty avoidance and EI, suggesting that in an organizational culture steeped in uncertainty avoidance, the capacity to accurately perceive and respond to one's own and others' emotions is importance to reduce misunderstandings and maintain harmony.

In contrast, American social culture allows school principals to be more tolerant of uncertainty, fostering a higher receptivity and aptitude for innovation among its members. In interpersonal interactions, they can express their opinions more directly and openly, and they can be more optimistic when facing uncertainty. This provides a more favorable environmental condition and cultural soil for the cultivation of transformational leadership, allowing American principals to take advantage of this to encourage innovation and stimulate teachers' enthusiasm for work.

4.4. Long-term Orientation and Short-term Orientation

The dimension of long-term and short-term orientation concerns whether people tend to focus on the present or the future. In long-term oriented cultures, such as China, people are more inclined to consider long-term development and prepare for the future. In contrast, in short-term oriented cultures, such as the United States, people enjoy immediate gains rather than pursuing long-term benefits in the future (Hofstede, 2001). Societies with a long-term orientation tend to place considerable emphasis on nurturing and sustaining long-term relationships. Therefore, for Chinese school principals, they will observe and understand others' emotions and behaviors more carefully in interpersonal relationships. Gunkel et al. (2014) underscore that such long-term oriented cultures provide a richer platform for the application and expression of EI. In these cultural contexts, individuals actively foster long-term relationships by empathizing with others and managing their negative emotions. Similarly, from the perspective of principal leadership, principals within a long-term oriented culture may be more predisposed to invest time and resources in strategic initiatives, such as faculty development and curriculum design.

In contrast, for American principals, they regard the present as the most important thing and pay more attention to the present. They express their emotions more freely, advocating for direct communication of feelings and perspectives, thereby avoiding excessive emotional suppression. This environment of unrestrained emotional expression allows for more effortless social interactions, consequently enhancing their sense of well-being (Matsumoto et al., 2008). Thus, school environments in the United States often exude more vibrancy and openness, with a pronounced focus on current achievements. These characteristics enable school leaders to make decisions promptly when dealing with school issues, fostering an environment conducive to innovation and change.

4. Conclusion

Culture fundamentally influences our values and norms, resulting in unique patterns of emotional expression and interpretation across different cultural contexts. As education becomes increasingly globalized, with schools incorporating faculty from diverse cultures and fostering frequent international collaborations, the ability to accurately navigate and

manage the emotional terrain of different cultures is becoming paramount. This is a novel expectation for school leaders who demonstrate high EI in the era of globalization. Therefore, an accurate understanding of the impact of cultural factors on school leaders' EI and leadership performances could significantly shape a school's trajectory and growth.

This study utilizes four dimensions from Hofstede's cultural dimensions framework: power distance, individualism versus collectivism, uncertainty avoidance, and long-term versus short-term orientation to understand their influence on the EI and leadership performances of school principals. Although the EI performance and leadership behaviors derived from different dimensions cannot be generalized, the insights from cultural factors on different aspects of EI and leadership are still worth thinking and reflecting on. For example, in a high power-distance culture like China, principals might exhibit a diminished capacity to empathize with the emotional factors of teachers and students, which could hinder effective communication. Yet, within the lens of collectivism, Chinese principals often demonstrate a good aptitude for managing emotions, crucial in maintaining team harmony and stability. This seeming contradiction mirrors the complex, multidimensional, and layered nature of cultural influences.

Therefore, untangling the intricate web of relationships between cultural factors, EI, and leadership performances in school principals is an exploration worth conducting. This exploration holds promise not just for crafting tailored, cross-cultural, and context-specific leadership strategies and EI training programs for China and the United States, but also for enhancing the quality of international interactions in schools amidst globalization, deepening effective communication between leaders and employees within multicultural working environments, and elevating leadership efficacy and organizational climate.

This paper approaches this topic through a literature-based discussion, focusing on the influence of cultural factors on the EI and leadership performances of principals in China and the United States. Future research could adopt empirical approaches to delve deeper into these influences, thereby enhancing the scientific rigor of our findings, providing policymakers with a more evidence-based foundation for decision making, and lending robust support for research into the evolution of leadership in the context of global education.

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运动处方：数据赋能幼儿体育教育新模式构建的实践

Exercise Prescription: Practice of Building a New Model of Data Empowering Preschool Physical Education

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摘要： 随着信息技术的发展，现代化技术成为助推教育发展的重要力量。数据赋能于教育亦成为热门的主题。幼儿体育教育对幼儿身心发展有着不可缺少的作用，但实践开展中存在着教师对幼儿运动能力水平把握不准、幼儿运动能力个性化发展需求难以满足、幼儿运动能力发展评价缺乏科学依据等问题。本研究将以幼儿体育教育为着力点，探寻数据赋能教育的新模式建构，以期数据赋能幼儿体育教育的发展。

关键词： 数据赋能；体育教育；模式

Abstract: With the development of information technology, modern technology has become an important force in promoting the development of education. Empowering education with data has also become a hot topic. Preschool physical education plays an indispensable role in the physical and mental development of young children, but in practice, there are problems such as insufficient accuracy in judging the level of young children's sports ability and difficulty in meeting their individual development needs for sports ability. This study will focus on early childhood physical education and explore new models of data empowerment education, with the aim of empowering the development of early childhood physical education through data.

Keywords: Data empowerment; Physical education; mode

1. 前言

随着现代信息技术的不断发展，数据采集、处理等技术已融入政治、经济、社会、教育等诸多领域，并逐渐成为推进这些领域发展的强劲力量。数据技术对人类社会的影响不仅局限于技术层面，在思维理念、行为模式层面同样带来了巨大的冲击。近年来，各行各业愈发重视数据技术在自身领域发挥的作用，数据赋能成为当前一大重要时代课题。

数据赋能最早起源于人力资源管理的授权赋能概念，意为赋予员工一定额外的权力，是企业自上而下管理的一种形式。随着赋能主体及对象的改变，赋能概念也逐渐发生了变化。孙新波等（2020）对数据赋能相关概念进行梳理并重新定义，数据赋能指特定系统中基于整体观视角创新数据运用场景以及技能和方法的运用以获得或提升整体的能力，最终实现数据赋能价值的过程。教育作为社会大系统的重要组成部分，迫切地需要数据赋能于各种教育情境，使教学更加精准化。但就目前的研究而言，数据赋能教育的相关研究大多集中于决策、机制的构建，缺乏了相关数据赋能模式构建的实践研究。

2. 数据赋能 A 园体育教育的动因

2.1 幼儿园体育教育发展不佳

近几年的研究表明当下幼儿阶段体育活动开展不容乐观，信丹丹(2023)对某市区的幼儿体育教育现状进行调查发现，当下的体育教育存在幼儿运动能力差异大、教师组织体育活动时带着盲目色彩没有目的性和针对性等。结合 A 园创园以来的实践，同样也存在着以上问题，通过各方面的分析产生这一情况的原因可能有以下几个方面：a.体育教育前：教师对幼儿运动能力水平把握不准。A 园教师在判断幼儿运动能发展水平的过程中，多是采用观察、询问等主观性较强的方式，且在过程中教师很难对每一位幼儿进行连续性的追踪式的观察，对于不同幼儿实际运动水平缺乏客观性、精准性和全面性的把握。b.体育教育中：幼儿运动能力个性化发展需求难以满足。A 园体育活动大多根据固有安排好的集体活动开展，较少存在“量身定做”式的体育活动。c.体育教育后：幼儿运动能力发展评价缺乏科学依据。A 园教师在体育教育后一般以幼儿在运动时的状态、运动中的持续时间、运动后的出汗量来判断体育教育的成效和幼儿运动能力的增长，这样的依据缺乏科学性。

2.2 所处地区教育局支持力度强

A 园地处中国沿海某市区，该市区深耕数字领域，在物联网领域形成了从上游关键控制芯片设计、研发，到中游传感器和终端设备制造，以及下游物联网系统集成以及运维服务等的完整业务体系。该地区产业结构完全具备实现教育数字化转型的技术基础，目前该地区的科技企业已研发出幼儿智能体测、体质监测相关设备。另一方面该地区教育局致力打造教育数字化转型的区域模式，大力支持区域内各校的数字化转型。 无论是技术层面还是政策层面，A 园在数据赋能体育教育上相对于其他地区的幼儿园有一定的优势。

2.3 数据赋能符合幼儿园体育教育发展需要

幼儿体育教育指教师根据幼儿现阶段能力水平制定适合幼儿当下能力的身体锻炼活动以发展幼儿的动作增强幼儿体质。这当中就分成了三个行为活动，教师对幼儿运动能力能力的把握、身体锻炼活动的实施以及幼儿能力提升的评价。而在数据赋能教育领域的相关研究中，大多以人工智能的角度出发构建出教育大脑模式来推进数据赋能体育教育，其实践有三个重要的要素：数据采集的全面感知系统、数据分析的类脑中枢系统、数据监测的反馈系统，并通过不同系统间的配合来实现数据助力教育的提升。这与体育教育的开展逻辑非常契合，将数据采集辅助教师对幼儿运动能力把握、数据分析辅助身体锻炼实施、数据监测辅助幼儿能力提升评价，来构建数据赋能体育教育的新模式能够有效助力幼儿园体育教育的开展。

3. 数据赋能 A 园体育教育的模式构建

3.1 多维数据采集定位能力水平

体育教育主要的目的是提升幼儿的运动能力，运动能力指人参加运动和训练所具备的能力，是人的身体形态、素质、机能、技能和心理能力等因素的综合表现。其不单单包含幼儿的运动技能水平的增长，还包含身体形态、生理等各项指标的增长。A 园在体育教育开展的前配备体质测试设备，将幼儿身体素质、技能水平相关数据进行日常化、定期化采集比对，多维度定位幼儿体育能力水平，协助教师精准把握幼儿能力。

3.1.1 日常化体质数据采集

引进体质监测设备（如图 1）融入幼儿园每日的晨检环节，该设备能够在短时内对幼儿的身高、体重、体温、手部卫生情况、口腔情况进行识别、检测。其运行应用分为两步，体质数据的采集录入和体质数据的比对报告。

·体质数据的采集录入

晨检时，幼儿需站在设备的指定位置按照提示完成站直、放手、张嘴等相应动作，以方便设备对幼儿的脸部特征进行识别确定基本信息后对幼儿的身高、体重、体温、手部卫生情况、口腔情况等多项数据进行采集。所有数据采集完毕后，设备会同步将幼儿考勤及当日晨检结果发送至教师电脑端与家长手机端。

图 1 体质监测设备

·体质数据的比对报告

收集后的数据还会自动录入幼儿园的后台数据库，并对照《国民体质测定标准手册（幼儿部分）》进行数据比对与分析。将身高数据对照《男孩/女孩身高体重标准》、将体重数据对照《3-6 岁幼儿身高标准体重表》形成体质数据比对报告，筛查出身高“矮小”或“偏矮”的幼儿名单和体重过轻或过重的幼儿名单。最后将报告结果发送至各班教师手中，帮助教师对指定幼儿的相关情况进行追踪观察。

3.1.2 定期化运动技能数据采集

运用体测监测仪器（如图 2）辅助教师定期对幼儿的身高、体重、立定跳远、双脚连续向前跳、坐位体前屈、平衡木、10 米折返跑、网球掷远等八项国标测试项目以及 10 米折返爬、握力、15 米障碍跑、吊环、单脚站立等 4 项非国标测试项目数据进行采集。该设备配备

智能芯片，能够及时地对幼儿的测试结果进行统计和录入，并采用童趣化造型、游戏化情境帮助幼儿主动地加入测试，在玩中完成运动技能的数据采集。

采集过程中幼儿在教师的提示下带上手环，按照提示完成指定任务挑战，并到指定位置进行打卡结束测试。测试结果及数据会上传至体测数据云端平台，平台会根据具体的测试情况逐月记录每位幼儿平衡能力、柔韧、上肢力量、下肢力量、以及灵敏素质等各项运动能力的发展情况形成个性化报告，帮助教师判断幼儿运动技能发展状况的同时评定幼儿体育教育的支持成效，为后续更有针对性的指导提供依据和帮助。

图 2 体测监测仪器示意图

3.2 多类运动处方助力能力增长

智能化的数据采集与分析，能够帮助教师横向与纵向精准比较出班级幼儿运动能力的短板。如何针对短板采用合适的运动处方帮助幼儿发展，A 园借助地区企业力量依托数智化技术平台打造园所专属的运动处方资源库，赋能幼儿园体育教育开展。运动能力的提升受到饮食结构、体型体态、技能理解、锻炼次数等因素影响，因此运动处方资源库包含了饮食改善处方、集体教学处方以及晨间锻炼处方三个方面，多类型助力幼儿运动能力增长。

3.2.1 饮食改善处方

在婴幼儿阶段良好的体型体态会直接影响幼儿骨骼、关节、肌肉等运动器官的发育，尤其是过胖的体重不利于幼儿频繁的运动锻炼，严重情况下还会使下肢因负荷过重而弯曲变形。而解决肥胖的方法之一就是饮食结构的改变，在 A 园所打造饮食改善处方中会将过胖幼儿的名单列出，为其在园期间提供照顾餐，即将部分高 GI 值食物替换成低 GI 值食物，并给出家庭食谱处方方便教师做好家园沟通建议。

3.2.2 集体教学处方

运动技能作为动作技能的一种，其习得的起始阶段是需要学习者理解学习的任务，也就是说教师在这个过程中要去讲授技能的要点帮助学习者理解技能的关键点。而幼儿园中的集体教学活动可以帮助幼儿在短时间内获得相应的运动技能点信息，并在原有水平上得到一定发展。但实际开展中由于教师之间的水平存在差异性，无法做到所有技能的正确讲解。因此在集体教学处方中 A 园与企业、高校合作，围绕各项运动技能设计出多种趣味性的教学活动并形成教案百集板块。针对不同的运动技能有专门的集体教学方案，教师可根据班级幼儿运动能力发展需要选择指定的集体教学活动，助力幼儿运动技能的掌握。

3.2.3 晨间锻炼处方

运动技能的习得的后续阶段是需要通过不断地练习熟练动作，最后使得运动技能掌握运动能力的提升。晨间锻炼作为幼儿园体育教育的重要组成部分，其主要作用就在于科学安排每日不少于两小时的户外活动来帮助幼儿集中针对性地对某项技能进行充分锻炼，提升幼儿运动能力增长。A 园对幼儿园各个晨检锻炼场所进行盘点和梳理，结合各年龄段幼儿总体运动素质发展需求以及个性化运动素质发展需要，制定科学合理的晨间锻炼安排表，并依托智能打卡设备实时了解幼儿锻炼频次和质量。

3.3 多方数据监测评价能力成效

3.3.1 以数据评价为直观判断依据

A 园运动处方的整体架构都是建立在数据收集、分析和处理之上的，因此数据本身因其客观、直观、准确的特性成为对幼儿运动能力评价最直接的工具。通过数据，不仅能够评价单个幼儿在单一时刻的各项运动素质和身体素质发展水平，同时能兼顾幼儿长线的动态变化以及幼幼之间的差异，成为教师和家长做出教育决断最重要的依据。

3.3.2 以图像采集为个别发展追踪

A 园依托现代化设备以及家园沟通 app 为幼儿建立个别化相册，无论是在教师端还是家长端都可以实时追踪采集各个体育活动中的运动挑战瞬间，帮助家长与教师横向（与运动能力年龄发展标准）、纵向（自身能力比较）了解幼儿运动能力发展。

4. 结语

数据是信息化发展的新阶段，随着数据分析处理技术的逐渐成熟与广泛应用，数字化生存逐渐成为普遍现实，数据赋能教育成为当下主要趋势。要想真正实现数据赋能教育、学校数字化转型，无疑需要科技创新企业的支持、地方教育局的政策助力以及学校本身的实践推进，只有这三个主体积极打好配合才能使当下的数据分析处理技术更好地与教育实践相融合。同时数据赋能教育的过程中，作为教育一线工作者要对数据赋能教育的内涵和外延、机遇和挑战、守正与创新有清晰的认知，既要与时俱进、主动求变，不断寻求教育与技术的契合点、突破点和创新点，又要坚守底线、遵循规律，明确教育的根本性质，切忌在教育中盲目数字化。

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Exploring the Relationship between University Students' Perception of Alternative and Authentic Assessment Implementation and their Involvement

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Abstract: The global pandemic prompted academic institutions to shift from traditional test-based assessments to alternative assessments, including methods such as self-assessments, peer evaluations, and digital technology-enhanced tasks. The effectiveness of alternative assessment hinges on students' perceptions, which may subsequently influence their degree of engagement. This study was thus designed to investigate the relationship between students' perceptions and their involvement in alternative assessment in a Hong Kong university. An online survey was administered to 177 students between November 2022 and February 2023, with the collected data undergoing quantitative analysis. The results show that students generally maintain moderate levels of positive perceptions and active involvement towards alternative assessments. Moreover, a statistically significant correlation was observed between their perceptions and involvement. Our findings not only provide evidence to support the relationship between students' perceptions and their involvement in alternative assessment practices, but also provide insights into the importance of understanding the real-life applicability of such assessments, the facilitating role of technological tools, and the practical implementation of these assessments into courses.

Keywords: alternative assessment, authentic assessment, perception, higher education, university students

1. Introduction

In response to the unprecedented challenges brought forth by the global pandemic, academic institutions around the world have initiated a significant shift from traditional test-based assessment to more innovative and pragmatic forms of alternative assessment, widely recognized as authentic assessment strategies (Brown & Sambell, 2020). This strategic transition reflects an evolving understanding of assessment as a multifaceted tool for measuring a broader spectrum of student competencies. The spectrum of alternative assessment is diverse, including methodologies such as self-assessments, peer reviews, project-based assignments, presentations, and the development of portfolios (Alokozaya, 2022). Furthermore, a trend within this domain is the increasing incorporation of digital technologies. This not only serves to enhance assessment design but also plays a crucial role in developing the digital skills of students (Nieminen et al., 2023).

It is acknowledged that the perceptions of students regarding these alternative forms of assessment are pivotal, as the effectiveness of these methodologies is intrinsically linked to the students' engagement with the learning process and the resultant learning outcomes (Ajjawi et al., 2020). Previous studies have yielded mixed results regarding student perceptions. While some research suggests that students maintain a positive attitude towards alternative assessment because of its potential to enhance their innovation, reflection and communication in real-world contexts, other studies highlight that students hold negative views on alternative assessment due to the tensions between teacher expectations and student preferences (Alokozaya, 2022). Presently, there is a gap in understanding how these perceptions impact students' active involvement in alternative assessment practices (Kong & Yuen, 2022).

Given this backdrop, there is a need to delve deeper into students' perceptions towards the implementation of alternative assessment and to examine how these perceptions shape their involvement. This study, therefore, seeks to investigate the relationship between students' perceptions and their involvement pertaining to alternative assessment within a university setting. The insights gleaned could equip educators and institutions with the knowledge to fine-tune their assessment strategies, aligning them more closely with student views to optimize overall engagement.

2. Method

2.1. Participants

Participants in this study comprised a total of 177 students from a university in Hong Kong. They voluntarily signed an online consent form to participate in this study. The participants represented a variety of programmes, years of study, and study modes. The demographic characteristics of the participants are presented in Table 1.

Table 1. Demographic characteristics of participants.

Characteristics	Frequency (N=177)	Percentage (%)
Gender		
Female	138	78.0
Male	39	22.0
Year of Study		
Year 1	96	54.2
Year 2	32	18.0
Year 3	28	15.8
Year 4	14	8.0
Year 5	7	4.0
Study Mode		
Full-time	142	80.2
Part-time	35	19.8
Programme Type		
Undergraduate Programme	104	58.8
Postgraduate Programme	73	41.2

Note. The proportion of the gender aligns with the overall gender distribution of the university.

2.2. Measure

Drawing on the key characteristics of alternative assessment identified by Berry (2008) and Wiggins (1998), a survey with two sections was developed to measure students' perceptions of alternative and authentic assessment implementation and their degree of involvement. This survey was previously piloted and validated in a study by Kong & Yuen (2022). The 'Perception' section included five items that assessed students' views on the diversity and content of the assessments, the choice of assessment tools, and the support provided by the teacher. The 'Involvement' section consisted of five items that probed into students' active participation, contributions, and overall learning experiences. The full survey is detailed in Table 2. Participants rated their agreement with each item using a five-point Likert scale, which ranged from 1 ('strongly disagree') to 5 ('strongly agree').

2.3. Procedure

The survey was administered online to all participants online through Qualtrics from November 2022 to February 2023. It aimed to gather their perceptions and level of involvement concerning the implementation of alternative assessments in courses they enrolled in during 2022. Descriptive statistics were generated, and a correlational analysis was conducted to examine the relationship between perception and involvement.

Table 2. The full survey.

Code	Description
Perception	
P1	A variety of alternative/authentic assessment methods have been adopted in my courses.
P2	Alternative/authentic assessments in my courses have enabled me to utilise what I have learned (e.g., knowledge, skills and attitudes) to undertake real-life and professional tasks.
P3	I think that the situations (e.g., cases, scenarios, issues and problems) in the alternative/authentic assessment methods in my courses have been similar to real-life and professional environments.
P4	The alternative/authentic assessments in my courses used various electronic tools or online platforms to help us complete the assignments.
P5	My course teachers gave me timely feedback after I completed the alternative/authentic assessments.
Involvement	
I1	My participation in alternative/authentic assessment has helped me to be active, constructive, interactive and reflective in the learning process.
I2	I am making good use of alternative/authentic assessment in my learning.
I3	I received a briefing about the alternative/authentic assessment, which helped me to achieve my intended purpose.
I4	I am making good use of the alternative/authentic assessment feedback for my learning.
I5	Alternative/authentic assessment motivates me to self-regulate my learning.

Note. A five-point Likert scale, where 1 = strongly disagree and 5 = strongly agree

3. Results and Discussion

Table 3 presents the descriptive statistics for the perception and involvement items based on a sample size of 177 participants. For the perception category, the mean scores ranged from 3.57 (for P1) to 3.85 (for P5), suggesting moderate levels of perception across the items. The results indicate that a considerable number of participants held positive views regarding the receipt of timely feedback from their instructors after undergoing alternative or authentic assessments. In contrast, there was a notably lower level of agreement among the participants concerning the diversity of alternative or authentic assessment methods employed in their courses.

For the involvement category, the mean scores were slightly higher than those for the perception category, with all items registering at or above 3.82. The highest mean score was observed for items I3 and I4 at 3.89, indicating that a significant portion of participants received the briefing about the alternative or authentic assessment and felt that they were appropriately guided towards achieving their academic objectives. Additionally, the results show a tendency among participants to engage with these assessments as a means of enhancing their learning.

Table 3. Descriptive statistics (N=177).

Item Code	Mean	S.D.
Perception		
P1	3.57	0.85
P2	3.74	0.85
P3	3.58	0.82
P4	3.69	0.88
P5	3.85	0.77
Involvement		
I1	3.83	0.81
I2	3.87	0.75
I3	3.89	0.83
I4	3.89	0.72
I5	3.82	0.76

Table 4 elucidates the correlation coefficients among survey items pertaining to perception and involvement. Overall, the results show a significant positive correlation between students' perception of alternative assessment implementation and their involvement. Specifically, the strongest positive correlation identified between P2 (applicability of assessments in real-life tasks) and I1 (r = .521, p < 0.001) suggests that when students recognize the real-life applicability of these assessments, it promotes active engagement in the learning process. Similarly, the relationship between P4 (use of electronic tools and platforms for assessments) and I5 (r = .497, p < 0.001) indicates that technological integration in assessments could motivate students to self-regulate their learning. However, it is noteworthy that a weak and insignificant correlation exists between P2 and I3 (r = .111), suggesting that students' understanding of the real-life applicability of assessments may be acquired more from the course's practical implementation than from specific briefings.

Table 4. Correlations among survey items pertaining to perception and involvement.

	P1	P2	P3	P4	P5
I1	.370**	.521**	.380**	.382**	.304**
I2	.449**	.513**	.407**	.428**	.386**
I3	.242**	.111	.230**	.294**	.238**
I4	.358**	.418**	.366**	.442**	.288**
I5	.390**	.464**	.355**	.497**	.361**

** *p < .001*

4. Conclusion and Future Work

The findings from this study shed light on the importance of students' perceptions regarding the implementation of alternative assessments in higher education. The results suggest that students maintain moderate to positive perceptions and active involvement towards alternative assessments. The correlation between their perceptions and involvement underscores the need for higher education institutions to be mindful of the ways in which assessments are designed and implemented. Understanding students' views can aid in optimizing their engagement and enhancing the overall learning experience. Future studies could benefit from collecting data from more participants and conducting a detailed analysis as categorized by the students' programmes and years of study. Focus groups and in-depth interviews could be conducted

to triangulate the quantitative data analysis. This could help to discern potential variations in perceptions and involvement levels among different student groups concerning alternative assessment practices. There is also an opportunity for future research to involve teachers as participants in order to gain insight into their perspectives.

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Exploring Chinese University Students' Enjoyment, Engagement and Willingness to Communicate (WTC) in EFL Speaking Classes

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Abstract: The present study examines the impact of Foreign Language Enjoyment (FLE) and engagement on Willingness to Communicate (WTC) within the context of language learning, drawing upon the theoretical underpinnings of Broaden and Build theory. In light of the increased interest in exploring the function of positive emotions in second language acquisition (SLA), numerous studies highlight the potential of positive emotions especially enjoyment to enhance various aspects of human behavior and cognition. The Broaden and Build theory posits that these positive emotions, such as enjoyment, foster the expansion of an individual's thought-action repertoire, thus facilitating personal growth and development. Despite the prevalence of positive emotions in theories of learning and motivation, foreign language learning research has largely focused on anxiety and motivation. While willingness to communicate (WTC) has been a key construct in explaining learners' communicative behaviors in a foreign language, little research has explored how positive emotions such as Foreign Language Enjoyment (FLE) and engagement impact WTC. The findings of this research are expected to provide important implications for both educators and policymakers, highlighting the necessity of integrating FLE with WTC in language learning strategies. Moreover, this research contributes to the understanding of the pivotal role that emotions play in language learning and the potential benefits of leveraging FLE in the development of communicative competence. This study highlights the need to embrace a more balanced view of learning that incorporates both cognitive and affective factors.

Keywords: Willingness to Communicate, Foreign Language Enjoyment, Positive Psychology, Chinese EFL learners

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An Empirical Research on Major Reconstruction of China's Vocational Undergraduate Education in Global Context

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Abstract: Vocational education is one trigger of the social and economic development, and in turn, the social and economic changes contribute to the development of vocational education. Over the few decades, the greatest and unfolding reform in the education field in China took place in the vocational education sector. With the increased demands aroused by the social and economic development in China, the higher vocational education has been developed to an undergraduate level. And a new type of higher vocational education, namely vocational university is generated. This research will be conducted on the methods and approaches to implement a major reconstruction for a vocational undergraduate programme by partial introduction of the framework curriculum from Germany or other developed countries with modern and well-developed vocational education system. An empirical research method will be applied on a major reconstruction project for a potential vocational undergraduate university through data collection and analysis, interview, case study, etc. in order to build up a best-practice model with the discussion on its further application for other regions in China such as Hong Kong as well as the "one belt one road" countries in the development of their vocational education system.

Keywords: Major Reconstruction, Vocational Education at the Undergraduate Level, Comparative Analysis, One Belt One Road, Best-Practice

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The Changing Landscape of Extra-Curricular Activities in Hong Kong: Threat or Opportunity?

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Abstract: Extra-curricular activities (ECAs) have demonstrated positive effects on students' academic achievement, school experiences, motivation, and self-esteem across all grade levels, from K-12. Students who participate in ECAs can develop different types of skills depending on the activities in which they engage. However, due to the COVID-19 pandemic, many ECAs offered by schools were either cancelled or limited to students with a vaccine pass. The availability of ECAs has become more dependent on parents' resources, raising concerns about equity and access. Many parents have expressed worry that their children may be lagging behind and have turned to ECAs for support in rebounding from the negative effects created by the pandemic on students' development and academic achievement. This presentation examines the changing landscape of ECAs in Hong Kong, analysing both the positive and negative forces contributing to this transformation. It considers factors such as changing demographics, research informing ECAs and global trends and concerns in the field. There is a growing awareness of the diverse backgrounds of students attending local schools, encompassing economic, cultural and linguistic differences. Understanding how these students experience and engage in ECAs is crucial for providing inclusive and equitable opportunities. By discussing examples and research findings to illustrate positive and negative trends, this presentation serves as a meaningful resource for all stakeholders to reconsider the role of ECAs in the post-pandemic era.

Keywords: extra-curricular activities, after school programs, Hong Kong, changing landscape, academic achievement

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Test for People-Pleasing: Psychometric Properties and Latent Profile Analysis

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Abstract: Test of people-pleasing (TPP) questionnaire was administered to a sample of 2203 Chinese university students to assess their tendency to please others in daily life. This study successfully confirmed the three-factor model (thought, behavior, and feeling) of TPP through Confirmatory Factor Analysis. The results of the goodness of fit indices indicated a satisfactory model fit (CFI=0.95, TLI=0.95, RMSEA=0.07 with 90% CI ranged from 0.064 to 0.080, SRMR=0.076). All items exhibited standardized factor loading ranging from 0.49 to 0.86. The Cronbach's alpha coefficients were found to be 0.94 for the overall TPP scale and 0.84, 0.92, and 0.86 for the three subscales of TPP respectively. The composite reliability was evaluated using McDonald's (1970) ω, with all ωs values exceeded 0.85 for both the entire scale and its three sub-scales, demonstrating strong internal consistency. The intra-class correlation coefficients were found to be 0.81 for the overall scale and 0.73, 0.77, and 0.76 for thought, behavior, and feeling of TPP respectively. Overall reliability was deemed good except for moderate reliability observed in TPP thought. Moreover, TPP score demonstrated good construct validity. Measurement invariance analysis revealed consistent results across gender, academic disciplines, birthplace, as well as strong longitudinal invariance. In summary, these findings support the validity and reliability of the TPP as an assessment tool in the context of Chinese culture. Furthermore, based on this tool, the study build a cutoff point for students' who had the tendency of being people-pleasing by using latent profile analysis that might be useful for future clinic use.

Keywords: university students, people-pleasing, construct validity, measurement invariance, latent profile analysis

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Relooking Singapore's "Multicultural Education": Practices and Policy Considerations for Future Curriculum

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Abstract: Singapore's multiculturalism policy has focused on the maintenance of harmony between races (particularly between the Chinese, Malays, Indians and 'Others' – or 'CMIO') since its independence. This has led to a particular version of "multicultural education" to be used as a tool in Singapore's wider multiculturalism and nation-building efforts. While the term "multicultural education" is not officially recognised in Singapore's educational vernacular, it can be observed as part of Singapore's values and citizenship education. It is situated primarily within the Social Studies (SS) and Citizenship & Character Education (CCE) curriculums – subjects which students within Singapore's education system are required to take. Present concerns in the intended and enacted curriculums signal a necessity to relook at how "multicultural education" is being conceived of, taught and learnt in the education system. As such, careful deliberation on current practices and policies should be taken, in reconsidering the direction of Singapore's future "multicultural education" curriculum. This considers, for example, (i) a changing demography and an understanding of "identity" that has evolved beyond just CMIO; (ii) the role of teachers as curriculum-instructional gatekeepers; (iii) curating a curriculum that prioritises students' needs and experiences; and (iv) access to resources across schools' curriculums for "multicultural education". This abstract is based on a larger doctoral study investigating racial identity formation through Singapore's "multicultural education", focusing on the upper secondary SS and CCE curriculums in mainstream schools.

Keywords: multicultural education, multiculturalism, citizenship education, future curriculum, Singapore

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繪本教學應用在全球和平教育之個案研究

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摘要：國際社會紛爭不斷，嚴重時更會出現軍事衝突，可見實施全球和平教育之重要性。本研究運用個案研究法，以中學二年級共 32 位學生為研究對象，探究他們透過繪本教學活動培養和平精神的成效。其中，教師運用繪本引發學生對和平的思考，並透過多元教學活動（如師生分享、閱讀繪本、戲劇、寫作、演講、欣賞電影、聆聽歌曲、繪畫心智圖），深化學生對和平精神之理解及反思。其中，本次教學融入中華文化的和平精神教育，讓學生思考中華文化精神如何有助建構和平世界。本研究蒐集學生之寫作、學習單、反思日記、半結構式訪談文字稿，以及教師省思日誌等質性資料，並輔設問卷調查，回答以下研究問題：1. 繪本教學活動能否建構學生對和平教育的學習興趣？ 2. 繪本教學活動如何影響學生建構和平精神？研究結果發現，學生能建構和平精神（蘊含中華文化意涵），包括：尊重、關愛、理解、溝通、易地而處、以德服人、想想他人。同時，他們也能提升對和平教育的學習興趣及重視。

關鍵字：和平教育；繪本教學；生命教育；價值觀教育；個案研究

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A Case Study on Integrating the Teaching of Picture Books into Peace Education of Hong Kong Junior High School Students

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Abstract: Disputes in the international community continue, and military conflicts may occur in severe cases. It shows the importance of implementing global peace education. This study used the case study method to take a total of 32 secondary two students as the research objects to explore the effectiveness of the picture book teaching activities in cultivating the spirit of peace. Among them, teachers used picture books to trigger students' thinking about peace and deepen their understanding of the spirit of peace through multiple teaching activities (such as teacher-student sharing, reading picture books, drama, writing, speeches, appreciating movies, listening to songs, and drawing mental maps). The teaching content integrated the peaceful spirit of Chinese culture, allowing students to think about how the spirit of Chinese culture can help build a peaceful world. This study collected qualitative data such as students' writing, worksheets, reflective diaries, semi-structured interview transcripts, and teachers' reflective diaries and conducted a questionnaire survey to answer the following research questions: 1. Can picture book teaching activities build students' learning interest in peace education? 2. How do picture book teaching activities influence students to build a spirit of peace? The research results found that students could construct a spirit of peace (containing the meaning of Chinese culture), including respect, care, understanding, communication, getting along in different places, persuading others with virtue, and thinking about others. At the same time, they could also increase their learning interest and care for peace education.

Keywords: peace education, picture book teaching, life education, values education, case study

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Analyzing University Students' Perception of Study Programmes and Development of Generic Intended Learning Outcomes with Machine Learning

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Abstract: Analyzing survey responses from university students offers a quantitative and objective way to explore how students' study programmes nurtured their development of various generic intended learning outcomes during the COVID-19 period, which can in turn provide further directions for the post-COVID higher education sector. This study analyzed more than 2,500 responses per year collected from students at a university in Hong Kong in 2019/20, 2020/2021, and 2021/22. The survey respondents were asked to evaluate how their tertiary studies helped them to develop various generic attributes (such as problem-solving skills and creative thinking skills) and their perception of their study programmes (such as organization of curriculum and the use of different teaching methods). The use of a number of machine learning algorithms such as Random Forest, Multi-layer Perceptron, Light Gradient-boosting Machine and XGBoost (eXtreme Gradient Boosting) showed robust results regarding how students' opinions of their study programmes are related to how they perceived the programmes had assisted their development of generic attributes. The feature importance analysis revealed that "teaching and learning activities" is the most important feature, while workload is less important in determining how study programmes nurtured the development of generic skills. Furthermore, the weak correlation with students' demographic information (such as year of study and full-time/part-time study mode) showed that the analysis results can be applicable to various student groups.

Keywords: generic intended learning outcomes, feature importance analysis, machine learning, student perception of study programmes, quantitative analysis

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The Effectiveness of Educational Art-based Intergenerational Reminiscence Program (AIR) for Secondary Students Aged 16-18

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Abstract: In response to Hong Kong's rapid population aging, this study aims to try out and evaluate the effectiveness of an art – based intergenerational reminiscence program (AIR) for high school students aged 16-18 in enhancing understanding and respect for the older generation. This study has unique contribution since no studies is found on the effect of intergenerational programmes on secondary students in Asia. A total of 210 participants joined this Study, including 140 arts – experience high school students aged 16-18 and 70 elderly people aged 65 and above without prior arts experience. The participants were randomly allocated into AIR educational intervention groups and general intergenerational control groups, each individual group consisted of 70 students and 35 older people. A 6-session AIR educational program was conducted in the intervention groups, while general intergenerational program was conducted in the control groups. Factor analysis and stepwise regression analysis were employed to examine the effectiveness of the AIR educational program, with a special focus on the construct of "Positive accommodation" defined as convergence and active engagement. Significant improvement in 2 outcome measures (namely positive accommodation and perception of older people) was found in the experimental groups compared with the control groups. This Study finds the educational AIR programme influenced positively students' communication accommodation and their perception of the older people. It is therefore recommended to organize more AIR programs to high school students with a focus on positive accommodation.

Keywords: Communication Accommodation Theory, positive perception of olds for teenagers, Visual – Art, Reminiscence approach, Hong Kong

Strand

Metaverse, AI and STEAM Education

元宇宙、人工智能及 STEAM 教育

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Exploring the Moderating Role of Learner Belief on the Interplay Between Motivation and Willingness to Communicate in AI-enhanced Formative Assessment English Classrooms: A Study among Hong Kong University Students

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Abstract: This research delves into the interrelation between the motivation to learn English and the willingness to communicate (WTC) in English within an Artificial Intelligence (AI)-assisted formative assessment (FA) setting, specifically among university students in Hong Kong. It spotlights the moderating influence of learner beliefs in this context. Prior research has established a connection between WTC, motivation, and learner beliefs in traditional classroom settings. This study used the pretest-posttest design to scrutinise the interplay between English learning motivation, WTC in English, and the moderating effect of learner beliefs before and after participating in an AI-assisted FA spoken English class. This AI-assisted FA setting features individualised teacher feedback and mobile-assisted Automated Speech Recognition (ASR) feedback that concentrates on students' speech accuracy and fluency. The study included a total of 110 first-year university students from Hong Kong. Data were collected via questionnaires before and after the program. Hierarchical regression analysis revealed that learning motivation could predict WTC in both the pre-test and post-test stages, whereas learner belief emerged as a predictor of WTC in the post-test stage only. Further moderation analysis demonstrated that learner belief impacts the correlation between motivation and WTC. The study's findings illustrate that within AI-assisted FA language classrooms, when learners hold positive beliefs about classroom communication and language learning, their motivation has an even stronger positive influence on their WTC. These findings provide valuable insights into the influencing factors of WTC in the context of AI-assisted second-language classrooms.

Keywords: AI-assisted language learning, formative assessment, willingness to communicate, motivation, learner belief

1. Introduction

The application of technology, particularly Artificial Intelligence (AI), in formative assessment (FA) can revolutionise the domain of language learning and education by fostering learner-centric environments, boosting learner engagement, and rendering unique learning experiences (Gikandi et al., 2011). Some recent research substantiates that mobile-based FA can enhance language proficiency and learner motivation (Bacca-Acosta & Avila-Garzon, 2021; Yassin & Abdulgalil Abugohar, 2022). Although AI's impact across various sectors has been well-acknowledged, an evident gap exists in understanding its role and implications in language education, specifically, the assessment process (Chen et al., 2021; Mohamadi, 2018). As motivational, cognitive, and affective factors are fundamental for successful language acquisition (MacLntyre, 2020), this study is designed to explore the interrelationships between motivation to learn English, willingness to communicate (WTC) in English, and learner belief within the context of an AI-enabled FA setting among university students in Hong Kong.

2. Literature Review

2.1. AI-assisted Formative Assessment

Unlike summative assessment, which summarises or grades a student's achievement at the end of the course, FA provides scaffolding, knowledge, and skills to help students develop their learning strategies throughout the course to impact the learning process (Berlanga et al., 2011). In this study, AI-assisted FA refers to the use of AI, such as automated scoring, natural language process, and virtual simulations, to provide real-time feedback and support to students during the learning process based on Lee's (2023) definition.

Most FA research studies writing skills, but only a few studies have evaluated speaking performance (Vassiliou & Papadima-Sophocleous, 2019). FA Studies on speaking showed that technology-enhanced FA could alleviate English public speaking anxiety, provide instant feedback, and improve speaking performance (Forsyth et al., 2019; Zheng et al., 2023). Therefore, viewing the importance of technology-enhanced FA and the lack of exploration of the speaking aspect, this study aims to contribute to understanding WTC in an AI-assisted FA environment.

2.2. Willingness to Communicate, Motivation to Learn English, and Learner Belief

Willingness to communicate (WTC) can be conceptualised as a personality trait indicating a consistent inclination to communicate and a state influenced by specific circumstance (Macintyre et al., 1998). Second language willingness to communicate (L2WTC) is multidimensional, influenced by language competency, culture, policy, emotion, pedagogy, and other issues (Macintyre, 2020). A comprehensive model is proposed by Macintyre et al. (1998), identifying important factors, including personality, intergroup climate, motivation, confidence, communication competence etc.

Motivation can be divided into intrinsic and extrinsic (Noels, 2001). Intrinsic motivation refers to motivations for acquiring new knowledge, reaching goals, and for enjoyment and satisfactory feeling stimulated by the task. In contrast, extrinsic motivation is characterised by being outside of one's control and involves engaging in a task to obtain a reward or meet external expectations. This study follows Peng and Woodrow's (2010) adaptation of intrinsic and extrinsic motivation in the L2 learning context.

Learner beliefs could be examined regarding the nature of language learning and the efficacy of pedagogy (Yashima et al., 2017). The first type explored metacognitive knowledge, such as language learning aptitude or talent. The second type studied beliefs about distinctive cultural dynamics within an English for foreign language (EFL) classroom, influencing learning behaviours, approaches, and teaching instructions. Learner belief in this study refers to the perception of English learning and classroom communication as conceptualised in Peng and Woodrow (2010).

Studies have examined different variables contributing to WTC based on MacIntyre's (1998) model in various learning contexts. In China EFL classroom, Peng and Woodrow (2010) focused on classroom environment, motivation, communication confidence, and learner belief. Lin (2019) examined motivation, confidence, personality, and affect. A more recent study examined the moderating role of shyness (Nikitina, 2022). In the internationalisation at home context, Chen et al. (2021) studied English varieties and motivation in relation to WTC. Although these studies have examined the positive relation between motivation and WTC in different contexts, the context of AI-assisted FA speaking classrooms lacks exploration. As for the role of learner belief, Peng and Woodrow (2010) showed that learner belief directly affects motivation. Yashima et al. (2017) found that learner belief influences learners' motivating power of ideal selves. Zadorozhnyy and Lee (2023) found that self-efficacy beliefs can mediate the relation between informal digital learning of English and WTC. Viewing the significant role learner belief plays in motivation and WTC; this study used learner belief as a moderator to provide insights into the interplay between motivational and cognitive factors in WTC.

Given the above literature review, the current study aimed to address the following two research questions:

RQ1: What kind of relationship exists between a student's motivation to learn English and their WTC in English within an AI-assisted formative assessment spoken English class?

RQ2: Does a learner's belief function as a moderating variable in the relationship between his motivation to learn English and his WTC in English within an AI-assisted formative assessment spoken English class? If so, how does this moderation manifest?

3. Methodology

This study used the pretest-posttest design to explore the relation between motivation, WTC, and learner belief before and after the AI-assisted FA speaking class. Regression and moderation analysis were used to analyse the data.

3.1. Participants and Settings

Convenience sampling was adopted in this study. Students were recruited from one of the author's EFL classes from a Hong Kong university. 110 year-one students from different majors, including psychology, science, and primary education, consented to answer the questionnaire before and after the AI-assisted formative assessment speaking class. The project involves three weeks of face-to-face speaking workshops, self-learning on an AI-assisted speaking application, and one-on-one consultation with ASR-assisted teacher feedback.

3.2. Research Instrument

This study adopted three scales of high validity and reliability from previous studies. The scales are bilingual. The researcher translated the scales from English into Chinese, and another authorised senior lecturer validated the translation. Each scale is described below.

3.2.1. WTC in English

Nine items from Peng and Woodrow's (2010) scale on Chinese students' WTC in speaking were measured on a 5-point Likert scale from "(1 completely disagree)" to "5 (completely agree)".

3.2.2. Motivation to learn English

Ten items from Noel (2001) and Peng and Woodrow (2010) were formatted as a 5-point scale from "(1 completely disagree)" to "5 (completely agree)", measuring extrinsic and intrinsic motivation.

3.2.3. Learner belief

Nine items from Peng and Woodrow (2010) were formatted as a 5-point scale from "(1 completely disagree)" to "5 (completely agree)", measuring learner beliefs about classroom communication and English learning.

4. Results

Results of the correlations revealed that motivation was related positively to WTC (see Table 1). The hierarchical regression analysis results (see Table 2) show that in the pre-test, while motivation alone significantly influences WTC (F (1, 108) =38.99, p<.001), there is no interaction between motivation and belief in WTC when controlling the effect of motivation (ΔR^2 =. 003, *Fchange* (1, 106) = 13.42, p=.50). In the post-test, hierarchical regression analysis showed that motivation alone significantly influences WTC (F (1, 93) =30.36, p<.001). While considering motivation and the interaction between motivation and belief altogether, they could significantly predict WTC (F (3, 91) = 13.82, p<.001). The two predictors could explain 28.3% of the total variance of WTC. Both learner belief (b = -1,26, t =-2.55, p =.01, β = -1.16) and the interaction between motivation and belief (b = .31, t =2.21, p =.03, β = 1.27) are significant predators when considering the unique contribution (see Figure 1for graphical representation of the interaction).

Table 1. Correlations among WTC, motivation, and learner belief in the pretest and posttest.

	Pretest			Posttest		
	1	2	3	1	2	3
WTC	-	-	-	-	-	-
Motivation	.52**	-	-	.50**	-	-
Learner belief	0.12	0.06	-	-0.17	0.01	-
Mean (SD)	3.27(.71)	3.34(.60)	2.63 (.61)	3.34 (.61)	3.44(.57)	2.73 (.56)

*N = 110. *P < .05; **P < .01; ***P < .001. Internal consistency reliabilities are on the diagonal.*

Table 2. Regression on WTC in the pretest and posttest.

	Pretest			Posttest		
	β	R^2	ΔR^2	β	R^2	ΔR^2
Block 1		.27***	.27***		.25***	.25***
Motivation	0.52			0.5		
Block 2		0.27	0.007		0.28	0.03
Motivation	0.51			0.5		
Leaner belief	0.08			-0.17		
Block 3		0.28	0.003		.31***	.04*
Motivation	0.25			-0.26		
Learner belief	-0.29			-1.16		

**p < .05; **p < .01; ***p < .001.*

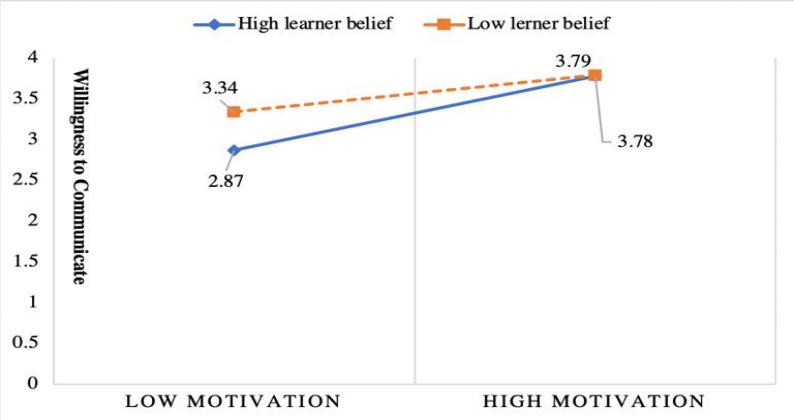

Figure 1. Interactive effects of motivation and learner belief on WTC.

5. Discussion

5.1. The Relationship between Motivation and WTC

The relationship between motivation and WTC was analysed before examining the possible moderating effect of learner belief. The regression analyses showed a positive relation between motivation and WTC before and after the AI-assisted formative assessment. This suggests that as learners are more motivated to learn English, their willingness to communicate in English increases, regardless of whether they received AI-assisted formative assessment. This result

aligns with previous studies (Chen et al., 2021; Lin, 2019; Nikitina, 2022; Peng & Woodrow, 2010), which have shown that motivation is positively associated with WTC in traditional L2 classrooms.

5.2. The Relationship between Motivation and WTC: Learner Belief as a Moderator

Hierarchical regression analyses confirmed the positive moderating effect of learner belief on the relationship between motivation and WTC in the post-test. In addition, motivation has a stronger impact on WTC in the group of students with stronger beliefs than lower beliefs. The results suggest that the impact of learner belief on the relation between motivation and WTC was significantly stronger after the AI-assisted formative assessment. In other words, AI-assisted FA may have strengthened the relationship. The reason may be that AI-assisted FA helped reinforce learner beliefs about classroom communication and their capacity to learn English. Previous research has shown the direct effect of learner belief on motivation (Peng & Woodrow, 2010; Yashima et al., 2017) and the mediating effect of self-efficacy beliefs on the relation between informal digital learning of English and L2WTC (Zadorozhnyy & Lee, 2023). Verifying the moderating effect of learner beliefs on the relation between motivation and WTC in an AI-assisted FA speaking environment could help set a new research focus that learners with positive beliefs about classroom communication and English learning may exhibit a greater willingness to communicate when motivated.

6. Conclusion

This study examined the moderating effect of learner belief on the relationship between motivation and WTC in an AI-assisted FA speaking classroom. The results show that in AI-assisted FA speaking classrooms, when learners have strong beliefs in their ability to communicate effectively, their motivation has an even stronger positive effect on their willingness to communicate. However, this study is limited in two aspects. Firstly, the sample size was relatively small and was restricted to university students in Hong Kong, which may limit the generalisation of the findings; Secondly, this study only examined learner belief as the moderator and motivation as the predictor. Future studies could use a larger and more diverse sample size to explore other variables in WTC, such as communication confidence, classroom environment, language proficiency, etc., in an AI-assisted language learning environment.

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A Case Study on Mentoring of Mathematics Pre-Service Teachers with Mesaverse and Metaverse

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Abstract: This study focuses on the implementation of a mentorship program in higher education for pre-service teachers, with a specific emphasis on mathematics education. The main objective of the study is to facilitate the personal and professional development of pre-service teachers through the integration of immersive virtual learning environments, specifically the use of Metaverse. The study adopts a case study approach, focusing on The Scholars Development Programme 2022/23 Mentorship Scheme at The Education University of Hong Kong. The participant in the study is a second-year student enrolled in the Mathematics Education program, while the mentor is an experienced mathematics teacher serving as the department head in a local primary school. The research investigates how the use of Metaverse and Mesaverse can enhance the integration of theory and practice in mathematics education and how it contributes to the balance between information technology usage and personal growth. Data collection for the study involves various methods such as observations, interviews, and analysis of program materials. These methods provide valuable insights into the benefits and challenges associated with incorporating Metaverse and Mesaverse into the mentorship program. The findings highlight the potential of Metaverse in facilitating professional development by offering immersive and interactive learning experiences, including simulations and virtual observations. Furthermore, the study emphasizes the significance of Mesaverse in fostering personal growth, self-awareness, and mindfulness among pre-service teachers. Overall, the study contributes to the ongoing development of immersive virtual learning environments and underscores the importance of cultivating mindfulness and interpersonal interaction in teacher education.

Keywords: Metaverse, Mesaverse, Mentorship, Immersive virtual learning environment, pre-service teachers progrmme

1. Introduction

Mentorship is a method commonly adopted in professional education and training to prepare new employees. Mentorship programs for teachers can be beneficial for both new and experienced educators. However, in Hong Kong, there has been a lack of mentorship programs for teachers, possibly due to the high demand for teachers and a lack of formal structures for such programs. The Education Bureau has established guidelines and provided resources to support the implementation of mentorship programs in schools. Some schools have developed mentorship programs that pair new teachers with experienced teachers to provide guidance and support. Early implementation of mentorship programs for pre-service teachers is necessary. Pre-service teacher training refers to the education and training individuals receive before becoming certified teachers. Mentorship programs can be particularly beneficial for pre-service teachers, as they are just starting their careers and often have limited classroom experience. These programs can provide support and guidance in areas such as classroom management, lesson planning, professional development, and networking.

With the rapid advancement of information and communication technology, 21st-century education has undergone a revolution. To cope with the changes, globalization, and development of technology in this century, integration of knowledge and problem-solving skills are very important. Therefore, the integration of teaching information literacy and information technology skills into the regular curriculum is the new focus for educators. As information technology

continues to develop and become more accessible, using metaverse to create engaging and immersive learning experiences for students is expected to be an innovative teaching approach. Metaverse is a term used to describe a virtual world where people can interact with each other (Justin A. & Gunilla A., 2017). Pre-service teachers could face several challenges in incorporating metaverse technology into their teaching practices. They may lack the technical skills needed to navigate and use metaverse platforms effectively. They also need to understand how to integrate metaverse technology into their teaching practice in a meaningful and effective way.

On the other hand, inner development is an important aspect for pre-service teachers to focus on, as it can help them develop the emotional intelligence, resilience, and self-awareness needed to navigate the challenges of the teaching profession. Pre-service teachers may face a variety of challenges when trying to develop their inner selves. They may find it challenging to balance the demands of their coursework, teaching practice, and personal life, leaving limited time for inner development activities. They may not have access to the resources, guidance, or support they need to develop their inner selves. This can include a lack of mentorship, access to personal development workshops, or opportunities for self-reflection. Pre-service teachers may experience emotional exhaustion due to the demands of teaching, making it difficult to engage in inner development activities. Lack of self-awareness and self-doubt may be caused due to difficulties in identifying areas for improvement or engaging in reflective practice. Pre-service teachers may face a range of challenges when trying to develop their inner selves. Pre-service teachers need to recognize these challenges and work towards developing strategies to overcome them to support their personal and professional growth. Mentorship becomes essential not just for newly employed teachers in schools but also for pre-service teachers. Previous research has shown that there is limited experience of mentorship in higher education programmes that are not programmes in professional education and training. The purposes of this study are to contribute knowledge on: (1) how pre-service teachers' professional development could be enhanced with Metaverse embedded in the mentorship program; and (2) how pre-service teachers' personal development could be enhanced in the mentorship programme.

The context of this study is a mentor programme, called The Scholars Development Programme 2022/23 Mentorship Scheme, which was carried out at The Education University of Hong Kong. The participant in the study was a second-year student from the Programme in Mathematics Education. The mentor of the scheme was the department head of mathematics in a local direct-subsidy primary school with 17 years of teaching mathematics experience.

2. Literature review

Definitions of immersive virtual environment

There are various virtual reality technologies are actively being applied to education and teaching in various application domains. The potential of emerging technologies in virtual learning environments has been examined in the past two decades (Radianti et al, 2020). According to Biocca (1995), "Immersive is a term that refers to the degree to which a virtual environment submerges the perceptual system of the user in computer-generated stimuli. The more the system captivates the senses and blocks out stimuli from the physical world, the more the system is considered immersive." Slater & Wilbur (1997) suggest an additional perspective of immersion. Immersion refers to the extent to which computer shows are capable of delivering an inclusive, extensive, surrounding, and vivid illusion of reality. Despite the objective perspective of immersion, psychological experience and individual belief might influent the degree of perception of immersion, which means immersive experience is a personal subjective belief (Witmer & Singer, 1998; Mutterlein, 2018).

Metaverse and mathematics education

The term "Metaverse" has a broad definition. A meta world is a world that is about the real world. That is what meta means from the Greek meaning above, about, or beyond. In general, it refers to digital applications for building virtual environments. Immersion engages students with different levels of sensory experience in virtual reality. This learning experience can improve students' understanding of complex abstract concepts with a lower degree of misunderstanding

of the concepts. Virtual reality technology is an innovative way to teach students mathematical concepts, especially geometry-related knowledge (Su et al, 2022). Students can role-play as virtual characters, operate the position, and manipulate geometric objects in a virtual environment that helps students to learn geometric math (Guerrero et al, 2016; Hannes, 2011; Lai et al, 2016). Both students' motivation in learning mathematics and the effectiveness of learning will be enhanced with immersive technologies included in classroom learning (Osypova et al, 2020).

Mentorship for pre-service teachers

A mentorship programme for pre-service teachers can be an effective way to support their development and help them become effective educators. The programmes can provide pre-service teachers with practical support and guidance. Mentors can assist pre-service teachers with lesson planning, classroom management, and other practical aspects of teaching that are not always covered in teacher education programmes. Mentorship programmes can help pre-service teachers develop a sense of professional identity. Through interactions with their mentors, pre-service teachers can gain insight into the roles and responsibilities of teachers, as well as the expectations and norms of the profession. Effective mentorship programmes are characterized by positive relationships between mentors and pre-service teachers. A supportive and collaborative relationship between mentors and pre-service teachers is essential for the success of the programme. Mentorship programmes can benefit both mentors and pre-service teachers. Mentors can gain a sense of fulfillment from helping to shape the future of the profession, while pre-service teachers can benefit from the guidance and expertise of experienced educators. Mentorship programmes can help pre-service teachers navigate the challenges of the first year of teaching. The transition from pre-service teacher to experienced educator can be difficult, and mentorship programmes can help pre-service teachers navigate this transition more smoothly.

Mentorship programme and Metaverse

The concept of a mentorship programme in a metaverse is to combine traditional mentorship with the potential for immersive and interactive experiences in a virtual world. A mentorship programme in a metaverse may have the advantage of being more accessible to pre-service teachers who are geographically dispersed. This could potentially allow for a wider pool of mentors and more diverse opportunities for pre-service teachers. Immersive learning experiences in the metaverse can provide opportunities that may not be possible in traditional mentorship programmes. Pre-service teachers could participate in simulations of classroom scenarios and observe and learn from experienced educators in a virtual environment. Metaverse in mentorship programmes could also facilitate collaboration among pre-service teachers and mentors from different locations. This could allow for a more diverse and dynamic learning experience, as pre-service teachers could learn from a range of perspectives.

Mesaverse and Mentorship

According to Tim (2021): "A meta world is a world that is about the real world. That is what meta means from the Greek meaning above, about, or beyond. The opposite of above, about, or beyond, is inside and within. The Greek word for this is mesa. A mesaverse is a world that is within the world. Rather than entering a reflection or simulacrum of reality, one enters a deeper reality. We have only our minds and consciousness to get at the mesaverse directly. Our minds, however, are more subtle and able to pierce the veil shielding that deeper existence."

On top of the professional theory and practice, personal growth is more important to shape future educators. Personal growth is a continuous process, and it takes time and effort. By being mindful of one's experiences, seeking feedback, setting goals, learning from others, and practicing self-care, one can foster personal growth as a pre-service teacher. Seeking feedback regularly is important for one's growth and development as a pre-service teacher. The feedback should be specific, actionable, and constructive for mentees. Mentorship can be a powerful tool for personal growth and understanding of life. A mentor with more experience and knowledge can provide guidance, support, and advice to help

mentees navigate challenges and achieve their goals. Different from Metaverse, seeking upward and extended experience in the virtual world, Mesaverse is a concept about seeking a deeper understanding of life. A mentor can provide a broader perspective on life and help see things from different points of view. A mentor has likely faced similar challenges to the ones that mentees face and can share their own experiences and lessons learned. When approaching potential mentors, clear goals and expectations should be set up. Mentorship is a two-way relationship, and both mentors and mentees have to contribute. As education is about the process of learning and acquiring knowledge and skills that enable individuals to understand and navigate the world around them, it is highly demanding for teachers to have a deep understanding of subject knowledge, subject pedagogical knowledge, and, more importantly, the meaning of life. From a human perspective, education is essential for personal growth and development and plays a critical role in shaping individuals' beliefs, values, and behaviors. It also provides opportunities for socialization and fosters a sense of community and belonging, which is not replaceable by the virtual world. Mentorship helps pre-service teachers to seek for deeper understanding of the meaning of life and sharpen their minds and consciousness inside and within their own Mesaverse.

3. Methodology

Qualitative case study

The study is a qualitative case study on contributing knowledge of how mentorship can be used as a personal and professional development tool to integrate theory and practice in higher education of pre-service teachers. The context of this study is a mentor programme, called The Scholars Development Programme 2022/23 Mentorship Scheme, which was carried out at The Education University of Hong Kong. The study takes an empirically based approach to the mentorship programme. The approach included setting up research objectives, observation, data collection, and analysis of the data. The study included a participant in the study was second-year, 21-year old, student from the Programme in Mathematics Education at The Education University of Hong Kong (EdUHK) as the mentee. The mentor of the scheme was a department head of mathematics, 42 years old, in a local direct-subsidy primary school with 17 years of teaching mathematics experience. It included eight meetings including the introductory briefing session held by the officer of the Student Affairs Office of the university. The study was implemented in the following three stages: (1) Initial stage: Welcome and warm up, (2) Experiential and practical stage, and (3) Consolidation stage.

The initial stage of mentorship is a critical time for establishing a strong foundation for mentor-mentee relationships. Clear expectations had been established and clarified. Specific outcomes that the university, the mentee, and the mentor had were addressed. The time commitment involved and the frequency and format of meetings were also discussed. A strong foundation for a productive mentorship relationship had been started to develop. In each meeting, follow-up and debriefing session was included in the meetings. The experiential and practical stage: To achieve personal and professional development, a range of meetings and activities in different forms and means were held. Informal meetings about personal sharing in café, formal meetings with school administrators in school opening events, musical performances, and lesson study and trial practice on specific mathematics topics were held in this stage. The consolidation stage: To strengthen the deeper understanding of both subject pedagogical knowledge with Metaverse and the deeper mindfulness and consciousness within the participants' mesaverse, informal discussions about the learning and reflection of the mentorship programme through the Internet were held frequently.

Data collection: Questionnaire (Linear scale point from 1 to 5, 1 represent the least, 5 represent the most)

(1) I feel confident in my ability to teach; (2) I am excited to participate in this mentorship programme; (3) The mentorship programme is beneficial to my personal growth and seeks a deeper understanding of the inside Mesaverse; (4) The mentorship programme is beneficial to my professional development in using Metaverse; (5) Overall speaking, I find the mentorship programme useful.

4. Results

The mentorship programme in EdUHK was newly established in the academic year 2022/23. Mentorship become more important in higher education for forming quality reinforcement and supplementing the integration of theory and practice professionally. Personal quality growth in the programme was also enhanced. The results included the outcome and reflection of the lesson design with Metaverse, data analysis of the questionnaires, and face-to-face interviews of both the mentee and mentor.

Lesson design with Metaverse

The lesson was designed for the learning of the concept of area in primary four mathematics. Google Classroom, Kahoot!, Padlet, Edpuzzle, and Geogebra were adopted in pre-lesson and post-lesson learning and teaching. The lesson could be conducted with the main activity and an extended activity along with the instruction given following the problem-solving processes as proposed by Pólya (1945).

Reflection on the lesson design with the integration of selected information technology-supported learning environments

The use of appropriate IT-supported learning environments in the learning and teaching process of mathematics enables teachers to deliver mathematical concepts effectively and keep learning and assessment in an organized and systematic manner. In the professional sharing sessions, the participants found was difficult for both teachers and students to adopt a wide range of IT-supported learning environments—the lesson was designed and implemented successfully. However, the participants found that there may be room for improvement with the help of Metaverse, as a one-stop immersive virtual learning environment, to the avoid use of many e-platforms in learning. Using metaverse technology in teaching mathematics has potential benefits for students. It provides a more immersive and interactive learning experience. Students can engage with mathematics concepts in a more hands-on way, which can help them better understand abstract concepts—the 3-D visualizations of concepts that make students easier to understand complex mathematical relationships. Metaverse enables students to personalized learning experiences that cater to each student's individual needs and learning style. Students might use the avatar to navigate in the Metaverse throughout their learning journey. Other forms of Metaverse can be applied as a one-stop learning environment to arouse students' interest.

Data analysis Questionnaire

Referring to the five questions in the questionnaire, the response (Linear scale point from 1 to 5, 1 represents the least, 5 represents the most). The result showed that the mentee felt more confident in applying educational theories into practice. Both personal and professional development had been enhanced.

Table 1. Mentee's response result on the questionnaire

	Question 1	Question 2	Question 3	Question 4	Question 5
Response	4	5	4	4	4

5. Conclusion

A pre-service teacher mentorship programme is designed to provide guidance and support to aspiring teachers as they prepare to enter the teaching profession. The programme in the study includes both personal and professional development through the use of Metaverse in teaching practice and seeking the inside Mesaverse in interactions. The results show that mentorship programmes should be implemented in higher education to prepare pre-service teachers to acquire the skills and attitudes of being teachers.

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Interactive Learning in a Virtual World: The Metaverse Classroom Approach

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Abstract: Using a metaverse classroom to offer students an immersive and interactive learning experience is an innovative approach to education. Using the web-based platform Spatial.io to create a virtual exhibition hall allowed students to study content in a more engaging and dynamic way than merely viewing PowerPoint slides on a screen. The students toured the virtual exhibition hall at their own pace, using their avatars, and interacted with the content more dynamically than just scrolling through a set of slides. An online quiz within the virtual exhibition hall was also set up for real-time assessment of student learning, providing quick feedback and modifications to the learning experience based on their progress. Two self-directed learning STEAM activities, Coding Kid (JavaScript coding using Blockly Games) and Atom Ant (Science learning using PheT interactive Simulations), were embedded in the metaverse classroom using portals, allowing students to learn more cooperatively and interactively by exchanging ideas and working together to complete tasks. The students finished their tasks and submitted their final work via the portal in the assessment section. The metaverse classroom offers a unique and new approach to implementing self-directed learning, allowing students to study topics more engagingly and interactively while implementing the Gamification element.

Keywords: STEAM, AI, Metaverse, Immersive learning, Interactive learning

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Can Automated Writing Evaluation (AWE) System Improve English Major Students' Grammatical Knowledge: Evidence from Eye-Tracking Technology

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Abstract: Much research has been conducted on applying the Automated Writing Evaluation (AWE) system to English writing instruction. Although we can attempt to infer the effects of feedback from the AWE system based on students' subsequent written work, how students internalize feedback and use it to process grammatical knowledge is a challenging task, primarily because it is usually a personal and private process. Hence, this study extends research from the perspective of eye-tracking technology, focusing on English major students and investigating the effectiveness of the AWE system-Pigai.org, in improving students' grammatical knowledge. A total of 118 higher vocational college English major students in China participated in this eight-week study. The participants were divided into experimental and control groups. The experimental group studied with and received feedback from both the AWE system-Pigai.org and the teacher, whereas the control group studied without the AWE system and only received teacher feedback. Ten onscreen grammaticality judgment tests (GJTs) questions covering grammatical knowledge of capitalization, spelling, singular and plural nouns, subject-verb agreement, adjective usage, compound sentences, punctuation, past tense, and Chinglish were conducted separately before and after the writing instruction. Data collection included participants' answers to GJTs questions, first-person eye movement video data, and corresponding gaze data. Various data analysis methods were employed, including neural network algorithms, heatmap analyses, and Mann-Whitney U tests. The results revealed a difference in grammatical knowledge between the two groups, favoring the experimental group. The pedagogical implications were fully discussed.

Keywords: Automated Writing Evaluation (AWE) system, eye-tracking technology, EFL grammatical knowledge, grammaticality judgment tests (GJTs)

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Influence of STEM Value Perceptions on STEM Career Preferences among Agricultural and Forestry Undergraduates: With STEM Learning Interest and STEM Self-Efficacy as Mediators

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Abstract: Among all STEM (Science, Technology, Engineering and Mathematics) fields, students graduating with majors in agriculture and forestry exhibit the lowest engagement with profession-related roles. This trend is perpetuated by the prevailing perception among parents and students that agriculture and forestry disciplines offer limited employment opportunities and diminished career prospects. Consequently, investigating the influence of this group's perception of STEM values on their preferences for STEM careers holds significant implications for educators, institutions, and policymakers. This study focuses on a sample of 1604 undergraduates majoring in agriculture and forestry. By surveying their STEM value perception, STEM learning interest, STEM self-efficacy, and STEM career preference, the study aims to uncover the intricate relationships among these variables using SEM (Structural Equation Model) and mediation effect modeling. The findings revealed that students' STEM value perception directly and positively predicts their preference for STEM careers. Additionally, STEM value perception exerts an influence on students' STEM career preference through the pathways of STEM learning interest and STEM self-efficacy. Moreover, the study identified a chain mediating effect of STEM value perception in propelling STEM learning interest, STEM self-efficacy, and STEM career preference. By adopting these measures, institutions can foster a more balanced development of students' STEM career preferences, thereby contributing to a more prosperous and diversified future for the agricultural and forestry science and technology sectors.

Keywords: Agriculture and forestry undergraduates, STEM career preference, STEM learning interest, STEM self-efficacy, STEM value perceiving

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Investigate the Efficiency of Using Metaverse in School English Speaking Lesson: An Experimental Comparison with Traditional Method

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Abstract: This experimental study aims to explore the efficacy of integrating the metaverse into school English speaking lessons compared to the traditional method. The metaverse refers to a virtual reality environment where individuals can interact with digital representations of themselves and others. This research randomly divides students into two groups: one undergoing English-speaking sessions in the metaverse and the other in a conventional classroom setting. Moreover, students' speaking skills are evaluated through pre and post-tests using standardized assessment criteria and scoring rubrics. These assessments encompass multiple facets of oral proficiency, encompassing pronunciation, fluency, rhythm, and intonation, aimed at gauging overall speaking proficiency and detecting any enhancements or alterations in their communication abilities throughout the study. Preliminary results indicate a significantly more pronounced enhancement in participants' speaking abilities when employing the metaverse within English-speaking sessions, surpassing the gains observed in the traditional approach. The metaverse provided a more immersive and dynamic learning experience, enabling students to engage in realistic and interactive speaking practice. Therefore, these findings highlight the potential of incorporating the metaverse into English language education as a means to enhance speaking proficiency and optimize overall learning outcomes.

Keywords: Metaverse, School, English speaking, Lesson, Experimental study, Efficacy, Virtual reality

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Empowering Scenario-Based Online Learning Tasks through Generative AI: The Write-Curate-Verify Approach

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Abstract: The aim of this study was to understand how generative artificial intelligence (GenAI), and particularly ChatGPT, can be used to develop online scenario-based learning (SBL) tasks. SBL uses scenarios as a medium to let students apply learning to real-world experiences. We addressed the following three questions: (a) How can educators use GenAI to develop SBL tasks efficiently? (b) What is the test performance of GenAI-supported SBL tasks? and (c) How do students perceive GenAI-supported SBL tasks? We conducted an exploratory case study to address our research questions. This method enabled us to conduct an in-depth investigation, as few relevant studies on this subject are available. The study included a teacher, the GenAI platform, and 37 student participants. A 3-step prompting engineering process (Write the prompts, Curate the output, and Verify the output, WCV) was established during the teacher interaction with GenAI in the scenario writing. The results indicated that through the WCV prompting process, ChatGPT can help teachers create quality SBL tasks within a relatively short time. In addition, most of our student participants reported enhanced levels of intrinsic motivation and positive attitudes toward the GenAI-supported SBL tasks. The most common themes in the students' feedback were (a) that learning tasks were delivered in well-written and realistic scenarios, (b) it helped them review learning content and identify knowledge gaps, and (c) it helped them put themselves in the shoes of the fictitious character Tom (student role) in the story. We also suggest guidelines for using the WCV prompt engineering process.

Keywords: Scenario-based learning, Generative AI, Prompt engineering process

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What Could the Metaverse Add to Primary Students' Collaborative Inquiry-based Coding Activities in the Physical Classroom: An Empirical Study on Group Cohesion and Immersion

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Abstract: This empirical study aims to enhance group cohesion, a critical factor for collaborative learning success and immersion in inquiry-based coding activities in a metaverse platform – Learningverse. The study involved two classes of Grade 5 students engaging in a two-hour coding activity, which required them to assemble robotics using VEXcode GO and a Code Base in groups. An inquiry-based learning consisting of 'engage, explore, create, explain, evaluate' was adopted in the instructional design. Class A (23 students) as the control group conducted the activity in a traditional classroom setting; while, Class B (28 students) conducted the activity across the metaverse platform and physical classroom settings in an immersive, seamless learning environment. Data collection involved log data in the metaverse, questionnaire on immersion, pre-and post-domain and interviews. The findings show that students in the experimental group showed a higher degree of group cohesion and immersion than those in the control group; and students in the experimental group outperformed those in the control group in conceptual understanding. The study sheds light on the potential of the metaverse in enhancing group cohesion and immersion which, in turn, helps improve group learning performance in an immersive seamless learning environment.

Keywords: metaverse in education, group cohesion, inquiry-based learning, immersive seamless learning environment, coding activities

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人工智慧藝術在馬來西亞華文獨中文言文教學中的應用研究

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摘要: 文言文在馬來西亞華文獨立中學的教學體系中佔有重要的地位。然而，由於時間和空間的巨大差距，馬來西亞華文獨中的學生在文言文學習上面臨了巨大的障礙，尤其是難以理解和欣賞與中國地理風貌相關的意象和意境。如何改善這一狀況，同時也發掘學生的創意和想像力，人工智慧藝術（AI 繪圖）提供了一種新的可能。本研究以馬來西亞某華文獨立中學的初三學生作為研究對象。控製組採用傳統教學法，由美術老師指導完成繪畫作品。實驗組學生參與結合了 AI 繪圖技術的任務式教學，學生根據自選文言篇章的大意構思畫面，再通過提示詞由 AI 生成圖景。最後，學生將完成一份創作展示，詳細記錄和闡述其設計理念和使用到的提示詞。為瞭解 AI 繪圖在文言文教學中的應用效果，本文採用教學觀察、創意自我效能感和自主學習的前後測和作業分析等方法加以分析，在此基礎上探討提升馬來西亞華裔學生文言文教學成效的策略和 AI 輔助教學面臨的挑戰，期望可以為海外華文古典文學教學提供新思路。

關鍵字: 馬來西亞華文獨立中學；文言文；人工智能藝術；海外華文教育；AI 繪圖

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Application of Artificial Intelligence Art in Classical Chinese Literature Teaching in Malaysian Chinese Independent Schools

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Abstract: Classical Chinese holds a pivotal role in the instructional framework of Chinese independent schools in Malaysia. However, due to significant temporal and spatial disparities, students in Malaysian Chinese independent schools encounter substantial challenges in mastering Classical Chinese, especially in comprehending and appreciating imagery and artistic concepts related to China's geographical features. Addressing this obstacle and simultaneously unlocking students' creativity and imagination, artificial intelligence art (AI drawing) introduces a novel approach. This research focuses on lower secondary students from a Chinese independent school in Kuala Lumpur, Malaysia. The control group follows traditional teaching methods, guided by an art instructor to complete drawing tasks. In contrast, the experimental group adopts a task-based approach that integrates AI drawing technology. Students in this group design drafts based on their understanding of selected Classical Chinese passages and generate scenes through AI using their individual prompts. Subsequently, students are required to finalize a creative presentation, providing detailed explanations of their design concepts and the prompts employed. The study incorporates classroom observation, pre- and post-assessments on creative self-efficacy and self-learning, as well as assignment analysis to evaluate the efficacy of AI drawing in Classical Chinese instruction. Drawing insights from these findings, the study explores strategies to enhance the effectiveness of teaching Classical Chinese for Malaysian Chinese students and delves into challenges encountered in AI-assisted instruction. The goal is to contribute fresh perspectives to the teaching of classical Chinese literature in overseas Chinese communities.

Keywords: Chinese independent schools in Malaysia, classical Chinese literature, artificial intelligence art, Overseas Chinese education, AI drawing

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Teaching AI & Machine Learning to 10-12 Years Pupils Can Help Them Improve Their Own Learning Strategies

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Abstract: There is growing evidence in the field of Education Science that students' self-awareness about their own learning processes, also named metacognition, can help them improve their learning strategies and performance, which is of primary importance in a new era of constant learning, both of traditional and new technology-related knowledge. We previously led interviews with elementary school pupils and identified two specific pain points that they need to improve: not be afraid of making mistakes while learning and persevere even when having the impression of not making progress. We will present two studies where we investigated whether teaching how an AI-based robot learns can help students understand better their own learnings and address these pain points. In the first study (Martin et al., 2023) we developed an AI literacy curriculum and tested it in 9-11 years classes: pupils observed and manipulated concrete "learning robots", and discovered some similarities between human learning and AI learning, in particular the "trial and error" approach implemented in AI algorithms of Reinforcement Learning. We prove that these AI literacy activities let the pupils increase their knowledge not only on AI, but also on learning and metacognition. The second study in currently undergoing: we have developed for it a new sequence of class activities that focus in greater detail on the aforementioned pain points, showing that even an AI-robot needs to make mistakes and to persevere for effective learning. We will present these new activities, as well as our preliminary experimentation results regarding the reactions of teachers and their 10-12 years old students.

Keywords: Artificial Intelligence, AI literacy, Metacognition, making mistakes, perseverance

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Proposed backbone for an AI & Machine Learning literacy curriculum in secondary school: four successive levels of autonomy of a machine

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Abstract: There is a consensus that AI should be taught from secondary school, because of its strong impact on society. However, teaching the base principles of AI at this level is a challenging task due to the complexity and abstraction behind AI algorithms, and it remains to be determined what exactly can and should be taught. We have developed an AI literacy curriculum that relies on the manipulation of "learning robots" to make machine learning concrete to students. Here we would like to present and discuss the backbone of this curriculum, which is to successively present four increasing levels of autonomy of a program or machine, namely (i) remote-controlled machines, (ii) instruction-based programs, (iii) data-based programs (trained using Supervised Learning), and (iv) more advanced self-learning programs, in particular based on Reinforcement Learning. We will present several advantages of this backbone and advocate that it can be re-used in many different AI literacy programs. For instance, it addresses the issue of integrating Machine Learning teaching into a more general teaching about digital literacy, digitalized data, computing, robotics. Also, by focusing the discussion on the "autonomy" of programs and machines, this proposed progression will foster students' critical thinking on what it means for a machine to be autonomous, how do humans keep control on it, what are the advantages and limitations of each autonomy level. We will also present a number of teachings which we have given following this backbone, from elementary school to university level.

Keywords: Artificial Intelligence, AI literacy, digital literacy, critical thinking

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AI-SCORE: AI-Assisted Authentic Language Learning with Automated Feedback

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Abstract: Describing real-life scenes is an effective way for young students to foster their language learning in authentic situations, ultimately improving their language skills. In this work, we developed an AI model that automatically evaluates students' responses to scene description tasks by using cross-modal matching features generated from advanced deep learning algorithms. Building upon the automated evaluation, our system further provides students with automated feedback and suggestions, encouraging them to continuously improve their English language production and strive for better descriptions through iterative revision. Our approach was evaluated using survey data collected from 161 K-12 students, both qualitative and quantitative analyses demonstrate the accuracy of our method in scoring student descriptions, as well as its effectiveness in facilitating language learning through timely feedback. Furthermore, our approach yields a positive and engaging learning experience for students, further affirming its efficacy in language learning. Limitation and future directions of the system will be discussed.

Keywords: real-life scene description, AI-scoring model, automated feedback, self-directed language learning

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基於多元科幻教育的中小學生科學素養發展研究

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摘要：本研究旨在探討科幻教育如何促進中小學生科學素養的發展，採用深度訪談、文獻分析、參與觀察和調查問卷等多元化研究方法，深入分析了科幻教育在激發學生科學興趣、創新思維方面的積極作用以及在知識獲取、實踐能力提升方面的局限性。研究結果表明，科幻教育顯著提升了學生的創造力和想像力，但在加強學生科學知識和實踐技能方面效果有限。同時，教育主體的配合不足和資訊技術應用的局限也是制約科幻教育發展的關鍵因素。基於此，本研究提出了幾點建議：一是加強教師對科幻教育價值的認識和教學能力的培訓；二是整合教育資源與資訊技術，創新科幻教育模式和內容；三是鼓勵家庭、學校和社會多方參與，形成支持科幻教育的良好生態。通過這些措施，旨在為中小學生提供一個更加全面、深入的科學素養培養環境，以適應未來社會的發展需求。

關鍵字：科幻教育；中小學生；科學素養

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A Study on the Development of Scientific Literacy among Elementary and Middle School Students through Diverse Science Fiction Education

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Abstract: This study aims to explore how science fiction education facilitates the development of scientific literacy among elementary and middle school students. Utilizing a diversified research methodology, including in-depth interviews, literature analysis, participant observation, and surveys, this research deeply examines the positive effects of science fiction education in stimulating students' interest in science and innovative thinking, as well as its limitations in enhancing knowledge acquisition and practical skills. The findings indicate that science fiction education significantly improves students' creativity and imagination but has limited effectiveness in strengthening students' scientific knowledge and practical abilities. Additionally, insufficient collaboration among educational stakeholders and the limitations of information technology applications are identified as key factors constraining the development of science fiction education. Based on these findings, the study suggests several recommendations: firstly, enhancing teachers' understanding of the value of science fiction education and their teaching capabilities; secondly, integrating educational resources with information technology to innovate science fiction education models and content; thirdly, encouraging participation from families, schools, and society to create a supportive ecosystem for science fiction education. These measures aim to provide a more comprehensive and in-depth environment for cultivating scientific literacy among elementary and middle school students, meeting the developmental needs of future societies.

Keywords: Science Fiction Education, Elementary and Middle School Students, Scientific Literacy

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What Do We Know about Research Advances in Technology-Enhanced Feedback in Mathematics Education? A Scoping Review via the Lens of Feedback Orientation

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Abstract: In our exploration of technology-enhanced feedback (TEF) in mathematics education, we systematically reviewed 341 records from the Web of Science and Scopus databases, ultimately selecting 33 studies. These studies consistently revealed three critical findings: 1) Personalized and adaptive TEF significantly enhance student learning outcomes (e.g., cooperative activity designs and addressing individual learning needs); 2) TEF, such as interactive e-books and video feedback, boosts intrinsic motivation and engagement in learning; 3) Technology may help diminish gender disparities in mathematics education. Further screening, which considered students' feedback perceptions encompassing utility, self-efficacy, and accountability, led to the inclusion of twelve publications. With this further analysis, we found a significant gap exists in understanding students' perceptions of TEF. Eight studies indirectly examined how students view TEF in mathematics education. Only two of the twelve studies explicitly explored feedback utility, self-efficacy, and responsibility within the feedback orientation framework. This scarcity of research on students' feedback orientation within TEF studies emphasizes the need for further empirical investigations and research exploration. Recognizing the role of students' feedback orientation is crucial for optimizing the impact of TEF on mathematics achievement. This review underscores the importance of future research inquiries and the exploration of research directions in this domain.

Keywords: Technology-enhanced feedback, mathematics education, feedback orientation in education, scoping review

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The Guidelines Pertaining to the Use of Generative AI Tools of Hong Kong Universities: A Review

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Abstract: Since November 2022, with the release of ChatGPT, generative AI tools ("GenAI") have swept the globe and created upheaval in higher education (HE). Given that GenAI tools can perform many human like tasks, they are destined to reshape learning and teaching. The role of GenAI in HE remains controversial. There are legitimate concerns that students use these tools to complete assessments, e.g., plagiarism; students may also become reliant, restricting creativity and critical thinking development. Positively, scholars argue that GenAI could provide personalised student support in an adaptive manner with revolutionary potential. This study aims to review the guidelines on the use of GenAI formulated by eight self-accrediting universities in Hong Kong which are publicly available. Grounded theory approach was adopted to analyse the meaning of the data; data was coded into their pertaining category – a group of data sharing commonality and coding ended until no new category generated. All eight universities develop positive and facilitating principles towards the use of GenAI use. Though acknowledging that GenAI has transformative potential, the guidelines acknowledge the risks posed to academic integrity. Therefore, they recommend harnessing GenAI in a critical, ethical and responsible way without undermining students' creativity and originality. Detailed guidelines were also developed about incorporation of GenAI in academic governance, pedagogical approach, assessment and feedback, ethical use, AI literacy. The results provide insights into how universities handle GenAI to maximise its educational values and minimise the risks for other institutions to take reference.

Keywords: Generative AI, university guidelines, Hong Kong

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Using Interactive Shiny Applications to Facilitate Teaching and Student Learning in Mathematics

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Abstract: This work deals with the effect of using Shiny interactive applets to improve students' conceptual and procedural knowledge of general mathematics, linear algebra and probability. To help students learn and increase personal and computer interaction, two tools are embedded in the platform: (a) control widgets with real-time responses to engage students in learning and data simulations and (b) annotation tools to strengthen problem-solving skills with contextualised "text and context" problems. Various R Shiny examples based on buttons and selection windows are used to offer students a personalised experience of transitioning from a mathematical context to a fictional context to a realistic one. The proposed problem settings and designs are based on the theory of constructivism, Polya's heuristic strategy and the 5E learning cycle. This learning model indicates the potential of applets and dynamically virtual Shiny for scaffolding support in learning mathematics. The platform allows teachers and students to apply concepts related to data description, visualisation, computational calculations, and adjustment of function parameters and selections. To facilitate an e-learning assessment, Markov Chain learning models were used to analyse a sequence of learning outcomes and activities. The proposed Shiny model can be an alternative way to motivate student learning.

Keywords: Shiny, Contextualised Problems, Polya's strategy, 5E learning cycle, Markov Chain

Strand

New Humanities Education

新人文教育

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A College Teacher Comments on Intercultural Perspectives in German Higher Education

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Abstract: This short article aims to highlight unseen but significant aspects of academic education that foster equality and reciprocity in social relationships. By recognizing the vital link between intercultural dealings and academic motivation, higher education institutions can challenge the dominant discourse on what constitutes »foreignness«. The goal is to explore intercultural perspectives in professional practice for both teaching and administrative staff as well as students in their professional and academic development. While recognizing one's own cultural or origin differences can be beneficial in professional practice, it is also crucial to ensure that this does not single out individuals. Everyone deserves dignity and equal treatment, especially in a university setting that values the pursuit of knowledge.

Keywords: intercultural, Germany, higher education

1. Status Quo

Intercultural perspectives have become an increasingly important aspect of higher education, especially in the German context, where globalization and immigration have brought people from different cultural backgrounds closer together. The integration of intercultural perspectives in the German higher education system is essential for promoting cultural awareness, understanding and respect as well as for preparing both local and international students for the increasingly globalized world in which they will work and live.

The German higher education system has a long history of promoting diversity and intercultural exchange. For example, the Humboldtian model of higher education, developed in the 19th century by Wilhelm von Humboldt, emphasized the importance of cultural exchange and interdisciplinary study. This model has been influential in shaping the German higher education system and continues to promote intercultural perspectives in higher education today. In recent years, the German government has promoted intercultural perspectives in higher education, including developing intercultural competency standards for teachers and creating intercultural centers at universities and universities of applied sciences. These centers provide resources and support for students and faculty, and offer opportunities for intercultural exchange and collaboration. For example, The University of Bonn is one of many German higher education institutes which values and supports engagement in intercultural understanding, offering the Certificate of Intercultural Competence as a proof of ability for those active in the area. The Nuremburg Institute of Technology's Center of Languages and Intercultural Competence, where the author is an adjunct lecturer, offers regular courses focusing on intercultural competence, which usually comprise of 24 lecture hours, provide students with knowledge about communicating and behaving in an international working environment. Similarly, at the Munich University of Applied Sciences' International Club, both local and international students are provided with a meeting point for intercultural exchange.

The global interconnectivity is reflected above all in the increasing numbers of international students. The most recent data from the German Academic Exchange Service (DAAD) highlights that the internationalization of the German higher education and research has increased the number of international students in Germany (Wissenschaft weltoffen 2020). In 2020 German universities registered around 320,000 international students, accounting for a considerable amount of the

total student population. The shifts in the students' countries of origin are particularly noteworthy. While the majority of international students come from Europe, there has been a consistent rise in the percentage of students from Asia. Specifically, there has been a significant upswing in the number of students from India. With approximately 9,000 students, India is currently the third largest contributor to the international student body in Germany, following China and Russia. It is worth noting that many of the international students, upon completing their academic studies, choose to stay in Germany, where the employment market is more robust than in their home countries, a topic discussed later in the article (ICEF 2023).

2. Future Outlook

As the diversity of students' nationalities in higher education increases, so do the challenges of cultural plurality for both administrators and educators. Current studies and research indicate that numerous cultural differences bring unique challenges. For international students, communicating and interacting with staff members at German universities is also a complex endeavor. This is supported by a social survey conducted by the Deutsches Studentenwerk (DSW 2017), which asked international students about their experiences and challenges. The findings indicate that the most significant intercultural issues, points of friction, and conflict for international students in Germany can be summarized as follows: contact with the general population, communication with professors, learning/teaching styles, communication with authorities, language barriers, and apartment-related issues. In response to these problems, higher education institutions have begun to offer more intercultural qualification programs for all stakeholders; at the time of writing, the author has personally delivered several such intercultural seminars to international students at the Nuremburg Institute of Technology as part of the on-boarding process for incoming students. There has also been a particular surge in the development of training programs for administrative staff as well. These intercultural trainings are designed to enhance intercultural competence, make participants more sensitive to cultural differences, and equip them to manage these differences constructively in their interactions and dealings with international students.

The integration of intercultural perspectives into the German higher education system is essential for preparing students for the challenges and opportunities of the globalized world. In a world where people from diverse cultural backgrounds are increasingly work and live together, students need to develop intercultural competence, including the ability to understand, communicate, and work effectively with people from different cultural backgrounds. The integration of intercultural perspectives in higher education is essential for promoting cultural awareness, understanding, and respect. This is particularly important in the German context, where the country has a long history of immigration and cultural diversity. By exposing students to diverse perspectives and cultural experiences, higher education can help to break down stereotypes and promote mutual understanding and respect.

Over time, German universities have sought to increase the enrollment of international students, recognizing their role in enhancing global educational standards. These students are expected to contribute to their home countries after their studies. However, in a competitive economy, there is also an emerging need for these highly skilled graduates to continue living and working in Germany. Universities have adapted their systems and curricula to achieve international academic parity, while student and faculty exchange programs, funded by the European Commission, have bolstered academic interactions. There is also a shift in the social composition of the student population, with a significant number of students being either children of immigrants or students who have come from abroad. This is partly due to Germany's citizenship laws, which until recently granted citizenship based on lineage, leading to situations where individuals born in Germany may be considered »foreign«.

The presence of international students at German universities creates a novel scenario with implications for teaching, research practices, and potentially social theory. The intercultural issues that arise from the students' time at German universities often extend into their lives after graduation. As mentioned earlier in the article, many graduates choose to stay in Germany for economic and professional reasons, putting down roots and having children who will become first-

generation Germans. Consequently, discussions around migration and diverse backgrounds are becoming more commonplace and less stigmatized, fostering a more open, relational dialogue about family and social history.

However, there remains a socio-political tension towards the idea of Germany as a nation of immigrants. Many believe immigration brings societal problems and barriers to integration, often overlooking how societies evolve due to immigration. The educational performance of immigrant children is often blamed for low educational scores, rather than systemic issues affecting low-income families. Despite the prevailing discourse on immigration and integration, the academic achievements of high school and university students from immigrant backgrounds remain under-recognized (Volante et al. 2019). Universities provide a more open environment than schools, which often focus on deficiencies and »cultural differences«. Universities offer an opportunity for transformative learning experiences that transcend fixed notions of identity.

3. Final Thoughts

Notwithstanding current and ongoing efforts, in order to further integrate intercultural perspectives into the German higher education system, it is essential to create ongoing opportunities for intercultural exchange and collaboration. This can be achieved through a variety of means, including:

- Intercultural courses allow students to explore different cultures, learn about cultural diversity, and develop intercultural competence.

- Study abroad programs: Students can live and study in another country, where they can experience different cultures firsthand and develop intercultural skills.

- Exchange programs: Exchange programs allow students to spend a semester or year at a foreign university to engage in intercultural exchange and collaboration.

- International research projects: International research projects provide opportunities for students and faculty from different countries to collaborate on research projects, promoting intercultural exchange and understanding.

- Intercultural events: Intercultural events, such as cultural festivals and workshops, provide opportunities for students and faculty to experience different cultures and develop intercultural skills.

In conclusion, by integrating intercultural perspectives into the higher education system, universities can promote cultural awareness, understanding, and respect and prepare students, both incoming international students and German students who wish to go abroad, for the globalized world. Through the aforementioned intercultural courses, study abroad programs, exchange programs, international research projects, and intercultural events, German higher education institutions can provide students with the intercultural competence and skills necessary for success in an increasingly diverse and interconnected world, and most importantly, to afford the international students who wish to study in Germany with the skills necessary to be integrated members of a society that is undoubtedly shifting from being homogeneous to heterogeneous.

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How Adolescents Assess Misinformation Regarding Credibility: A Mixed-method Study

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Abstract: With the widespread of misinformation in the cyberspace, the ability to identify credible information resources has become an increasingly crucial skill for citizens. In the present era, education should assume the role in providing the young generation with the requisite skills to confront the complexities of an evolving information-driven society. This study employs a mixed-method research approach to explore students' information evaluation behaviors under the context of social media. This study finds that adolescents have a limited ability to accurately discern social media misinformation based on a sample from a public school located in Shenzhen, China. Students' previous experience related to the textual content exerts a more pronounced influence on information trust compared with headlines and sensational visualizations of social media information. This challenges the common belief that visual components provide a roadblock to critical and reflective thinking. By investigating the cognitive information evaluation processes of adolescents, this study provides insights for future research into the media and information literacy education for the young generation.

Keywords: misinformation, information credibility, information evaluation, adolescent, media and information literacy

1. Introduction

In today's digital environment, social media has become the predominant medium through which people access and consume information (Liedke & Gottfried, 2022). However, it also becomes more difficult to identify trustworthy sources. With numerous fragmented elements such as sensational headlines and visual stimuli, netizens tend to quickly skim headlines and images, without time to pause and critically analyze (Costera Meijer & Groot Kormelink, 2014). Many scholars confirmed that people with diverse cognitive capabilities and information intentions may all experience overwhelming challenges when faced with the large online information flow (Shafi, Gul, & Shah, 2013; Sokoloff, 2013). This issue is not limited to only a small group, as students ranged from middle school to college and universities, who are often labeled as "digital natives (Prensky, 2001)", still struggle with evaluating online information (Wineburg & McGrew, 2017; Breakstone et al., 2018).

Since information knowledge impacts subsequent behavior, the ability to sift the wheat from the chaff in the vast ocean of information is an essential skill. Before addressing how to develop such skill, it is important to construct a comprehensive understanding of the factors that contribute to individuals' perceived credibility of information. This study employs a mixed-methods approach to obtain an in-depth comprehension of the intricacies of students' information evaluation behavior.

2. Literature Review

2.1. Thinking Ways and Information Behavior

The Western literary tradition has explored the tension between reason and feeling since the time of Plato and Aristotle. Similarly, in our routine interactions with information, we may come across two predominant thinking styles.

On one hand, individuals may engage in thoughtful reflection before reaching a conclusion. Conversely, there are also occurrences in which we engage in rapid and intuitive assessments. This dichotomy is echoed in investigations into credibility. When asked to deliberately assess the credibility of news articles, some participants give answers that instantly come to mind, while others may stop and consider the rationale to judge (Moravec et al., 2022).

Having noticed this cognitive duality, many social psychologists employed dual-process theoretical frames to unravel the human cognitive mechanism, such as Chaiken's Elaboration Likelihood Model (1987), Petty and Cacioppo's Heuristic and Systematic Model (1986), Strack and Deutsch's Reflection and Impulsion Model (2004), etc. Despite addressing different aspects in psychological cognition and human behavior, these models share fundamental commonality in terms of the overall structure, namely two information processing modes. One mode involves laborious, reflective, "cold" cognitive system while the other is associated with an intuitive, impulsive, "hot" cognitive system which costs less cognitive effort. Based on these dual-processing theories, this study posits that the evaluation of information credibility may also involve two cognitive styles, which can further result in different evaluation decisions.

2.2. Strategies of Information Assessment

According to Moravec et al. (2022), prompting people to assess what they read could be effective in helping them think more critically about what they read on social media. Hence fostering evidence-based evaluation could be beneficial in promoting critical reflection. People are more likely to scrutinize sources, seek evidence, distinguish between credible and unreliable information, thus develop strategies for analytically assessing information.

2.2.1. Source credibility

One strategy for such evidence-based information assessment is via source credibility. Source credibility is a multidimensional construct in the core of information flow. According to Hovland and Weiss' source credibility model (1952), people are more likely to be persuaded when the information endorser is perceived as reliable. Kelman (1961) further proposed that the persuasive power of an effective communicator is influenced by their beauty and credibility.

Individual's information evaluation process could be influenced by many facets of the source, such as information provider's expertise, qualification, reliability, goodwill, safety, likability, and so on (Giffin, 1967; Berlo et al., 1970). Among these facets of source, motivation and cognitive capability regulate the specific choices based on the perception of credibility. For example, when individuals lack the desire or knowledge to analyze information in depth, they may just evaluate the trustworthiness of the author. Therefore, depending on a reliable communicator can mitigate the cognitive burden associated with information evaluation in many circumstances.

2.2.2. Argument quality

In addition to a trustworthy information source, various inherent aspects of information also influence its perceived credibility. One important aspect is argument quality, which is determined by information's content and context. According to Chaiken's elaboration-likelihood model (ELM), argument quality refers to the audience's perception of the embedded arguments in the persuasive message content. Petty et al. (1981) described strong arguments as "logically sound, defensible and compelling". As such, this construct emphasizes the "logical" part inherent in the content, and is considered essential in facilitating objective judgement regarding information credibility (Cheung et al., 2012; Yin & Zhang, 2020). Additionally, analyzing arguments can activate the central route in the human mind, which demands greater cognitive efforts. Despite the additional cognitive load, previous research has shown a positive relationship between argument quality and perceived credibility (Liao & Fu, 2014; Li & Suh, 2015). Various information traits, such as completeness, accuracy, and comprehensiveness, are frequently regarded as components of argument quality, having access to the original information source can help enhance participants' awareness of these aspects.

2.2.3. Lateral reading

Lateral reading, in contrast to vertical reading, is a commonly adopted strategy by fact-checkers to assess digital information based on additional internet searching for external sources (Wineburg & McGrew, 2017). A series of

experimental studies have provided more evidence to support this positive association between lateral reading and accurate information evaluation. For example, during the "infodemic" period of COVID-19 pandemic, Brodsky et al. (2021) discovered that after learning a lateral reading curriculum of "SIFT" strategies (Caulfield, 2019), students' ability to distinguish trustworthy information from the proliferation of online misinformation improved significantly. Wineburg et al. (2022) also claimed that students who received curriculum intervention of online lateral evaluation strategies were better at judging the credibility of digital content. Overall, lateral reading could be a useful method to teach students to accurately evaluate information, especially digital news information, and to cultivate critical attitudes toward information.

3. Research Question

This study aims to contribute to a deeper understanding of adolescent students' cognitive mechanisms involved in assessing misinformation. Based on this objective, the research question is proposed as below:

RQ1. Are there differences in cognitive thinking styles associated with students' performance in evaluating misinformation in social media context?

RQ2. What factors can influence students' performance in evaluating misinformation in social media context?

Exploration into the two questions may further inspire educators, policymakers, and society to better promote media and information literacy (MIL) education to equip adolescents with necessary competence facing the complex social media landscape.

4. Methods

4.1. Materials and Procedures

A mixed-methods design is employed. Firstly, an experimental survey was conducted to examine teenagers' ability in evaluating misinformation posts. Subsequently, qualitative semi-structured interviews and follow-up think-aloud interviews were conducted. Through the combination of quantitative and qualitative approaches, the study aims to gain comprehensive insights into how adolescents evaluate misinformation in the era of social media.

This study was conducted in a public school located in Shenzhen, mainland China, involving students from three grade levels: primary five, secondary one and three. All data was collected in June, 2023. Informed school consent, parental consent, and student consent were obtained.

Table 1. Sample description across grades

Grade	Primary 5		Secondary 1		Secondary 3		Total
Group	Reflective	Impulsive	Reflective	Impulsive	Reflective	Impulsive	
Phase 1: Online experimental survey							
N	88	61	88	91	46	41	415
Phase 2: Follow-up Interview							
N	4	2	3	3	2	2	16
Phase 3: Think-aloud Interview							
N	/	4	/	2	/	/	6

The whole experimental survey were conducted in a computer room, under the supervision of students' class teacher and the author. The survey consists of three sessions, which took about 20 to 30 minutes to finish. In the first session, students were divided into two groups. One group evaluated 16 misinformation posts impulsively, while the other group reflectively assessed a single set of misinformation post with additional verification choices. These verification choices

include checking the author's information, reading the complete text of the post, and cross-reading an article on a similar topic laterally. In the second and third sessions of the survey, students took a digital literacy test and reported some demographic information such as grade, gender and their socioeconomic status (SES).

Semi-structured interviews were conducted after students completed the survey. In addition, a consecutive think-aloud interview was added specifically for students who impulsively evaluated the 16 misinformation posts. The purpose of this additional think-aloud interview was to gain deeper insights into their thinking and reasoning processes behind their evaluations, particularly in relation to different types of misinformation posts.

4.2. Measurement

Credibility evaluation. Participants were required to rate their perceived credibility level of each misinformation post on a Likert scale from 1= strongly disagree that the information is credible to 5= strongly agree that the information is credible.

Personal involvement. The ten items measuring personal involvement were translated from Zaichkowsky (1994). For example, "How do you feel about the information you just saw? The information of the page is": (1) Important - Unimportant, (2) Boring - Interesting, (3) Relevant - Irrelevant, etc,.

Self-efficacy. Students' self-efficacy of their evaluation was measured by a 5-point Likert-based question of "Do you believe that you can make a accurate evaluation of this information's credibility" (from 1 = totally disagree to 5 = totally agree).

Digital literacy. Students' digital literacy level was measured by the short-form digital literacy assessment developed by Law et al,. (2022), which had been examined among primary and secondary school students in Hong Kong. Some components were adjusted to ensure its compatibility with the online environment in mainland China.

5. Analytical Approach

Quantitative data were analyzed through both descriptive statistical analysis and a hierarchical linear regression. All potential predictors (digital literacy, personal involvement, self-efficacy of credibility evaluation tasks, and familiarity of relevant topic) were tested while controlling students' demographic variables (grade, gender, and SES). This analysis allows examination of these variables' individual contributions to the overall model in predicting students' credibility evaluation performance regarding the misinformation. Qualitative data were analyzed through the inductive coding method. The aim is to help identify whether there exist alternative factors that influence students' evaluation process, and it can also guide us to students' analytical process of evaluating the testing misinformation materials. Hence it allows us to take other potential factors of students' evaluation process into consideration.

6. Results and Findings

6.1. Credibility evaluation performance regarding misinformation

The boxplots in Figure 1 show that for students in Primary 5 and Secondary 3, the overall average credibility evaluation performance within the reflective group was better than the impulsive group, while the condition for the cohort of students in Secondary 1 was different. However, it shows that young teenagers lack the necessary competence to accurately discern misinformation under social media context. Therefore, education needs to bear some responsibility to equip them with necessary literacy to address this issue.

Further T-test across the two experimental group shows that, in the initial evaluation performance regarding the shortpost misinformation, initial evaluation performance score (without any further checking behavior) in the reflective group (M=3.113, SD=1.047) were significantly lower than students in the impulsive group (M=3.284, SD=0.556, $t(413)=2.042$, $p<0.001$). However, students' final credibility evaluation performance (after performing further checking)

in the reflective group (M=3.324, SD=1.143), were significantly better than students in the impulsive group (M=3.28, SD=0.556, t(413)=-0.443, p<0.001). Therefore, to some extent, the further-checking tactics provide support for students' accurate evaluation.

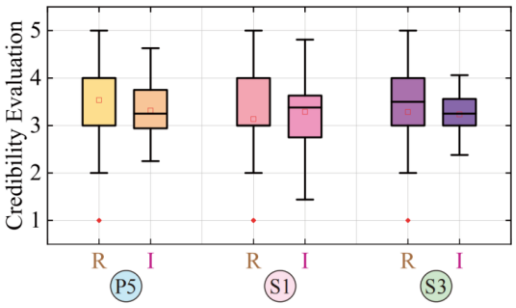

Figure 1. Boxplots of students' credibility evaluation performance by grades.

6.2. Predictors of credibility evaluation performance

For exploratory purposes, hierarchical regression analysis was utilized to identify the predictors of credibility evaluation performance (see Table 2). Students' grades, gender, and social-economic status (measured as family learning-related affluence and the number of books at home in this study) were processed as demo-graphics variables controlled in the potential regression model. After controlling for variables of demographics, the majority of the explained variance came from Model 4. This model explained 22.3 % of variance, with the change in R^2 being significant (R^2 change = 0.017, F change = 4.771, p < 0.05).

Table 2. Hierarchical regression analysis predicting credibility evaluation performance.

	Credibility Evaluation of Misinformation			
Variable	Model 1	Model 2	Model 3	Model 4
Gender_Boys (reference group = Girls)	-0.072	-0.047	-0.069	-0.056
Grade (reference group = Secondary 1)				
Primary 5	0.097	0.126	0.113	0.100
Secondary 9	0.001	-0.06	-0.052	-0.057
SES	-0.011	-0.04	-0.035	-0.027
Personal Involvement	0.344 **	0.373 **	0.359 **	0.325 **
Digital Literacy		0.206 *	0.183 *	0.174 *
Self-efficacy of Credibility Evaluation			0.159 *	0.145 *
Familiarity of Relevant Topic				0.139 *
R^2_{change}		0.035 **	0.024	0.017 **
Total R^2	0.146 **	0.181 **	0.206 **	0.223 **

Note: * P<0.05, ** P<0.001

Additionally, although the relationship between credibility evaluation performance and grade may not be significantly different, it does not mean that there is no need for further educational efforts. On the contrary, it indicates that the skills adolescents acquired from existing grade-based education may not greatly assist their information evaluation. This highlights the importance of MIL education targeting at adolescents in basic educational context.

Consecutive thematic analysis of the interview transcripts reveals that among these adolescents, they possessed some general concepts concerning strategies for evaluating information credibility. For example, checking the author's

qualification, verifying information laterally by searching engine, evaluating the logic behind opinion and related evidence, assessing the comments to follow major opinion, and so on. This indicates that many teenagers have the basic idea of what they can do to assess information's credibility. Therefore, more instructional guidance to help promote the relevant evaluation skills will deepen students' knowledge of information evaluation.

When participants were prompted to recall their evaluating experience or share they analytical reasoning during consecutive think-aloud interviews, various factors may interrupt their decision on credibility assessment. The most predominant factor which was mentioned frequently was individual's personal experience. When students have been exposed to similar information, or when they felt familiar with the relevant topic, they tended to exhibit greater confidence in trusting such information. This pints to a potential risk: students who consume an unbalanced media diet are likely to be misinformed due to their prior exposure to biased media. Therefore, it is essential for us to help teenagers form a multiple media diet through more media and information education.

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數字時代圖像符號與語文閱讀能力發展關系研究

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摘要：數字時代打破了以往信息傳播依靠紙質媒介文字來灌輸和引導的形式，轉而強調註重情景化和場景化，語文閱讀教學也應順應「讀圖時代」的需求，深入挖掘圖像語言與文字語言之間的關聯，借助圖像提升學生的閱讀能力。本研究從跨學科的角度，以符號學作為理論支撐，依托人的視覺工作記憶理論，對圖像符號做本體研究，進而闡釋了多元課堂環境中圖像符號與語文閱讀能力發展的關系，並以詩歌教學為研究本體，通過創設圖像符號的語文閱讀課堂環境來開展相關的實踐研究。通過實踐論證表明，圖像符號對於語文閱讀的概括能力的提升影響力有限，但是在有關於人物形象的鑒賞、詩句的思想感情賞析等方面，測試成績有較為明顯的提升。本研究為語文閱讀教學中的圖像運用提供一定的理論基礎及實操原則。

關鍵字：圖像符號；閱讀能力；閱讀測試；教學實踐

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Research on the Relationship between Image Symbols and the Development of Language Reading Ability in The Digital Age

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Abstract: In the digital age, the previous form of information dissemination relying on paper media and text to instill and guide has been emphasized, and instead, an emphasis on contextualization and conization, language reading teaching should also comply with the needs of the "picture reading era", deeply explore the relationship between image language and text language, and improve students' reading ability with the help of images. From an interdisciplinary perspective, this study takes semiotics as the theoretical support and relies on the theory of human visual working memory to conduct ontological research on image symbols, and then explains the relationship between image symbols and the development of language reading ability in a multi-classroom environment, and takes poetry teaching as the research ontology to carry out relevant practical research by creating a language reading classroom environment of image symbols. Through practical demonstration, it is shown that image symbols have limited influence on the improvement of the generalization ability of Chinese reading, but the test scores have been significantly improved in terms of appreciation of character images and appreciation of thoughts and feelings of poetry. This study provides a theoretical basis and practical principles for the use of images in Chinese reading teaching.

Keyword: image symbols, reading ability, reading test, teaching practice.

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海外大學中文項目文化教學的發展與反思

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摘要：本研究將海外大學的中文項目置於我國“國際中文教育”事業發展的背景之下，對海外中文項目文化教學的發展作一整體性的介紹並加以反思。本研究主要的分析材料是我國國際中文教育的政策、基於國際中文教育的學術文獻以及海外大學中文項目的文化教學的實踐案例，分析的焦點是海外中文項目應該“教什麼中國文化”。研究發現，國內學術界與政策認可將文化因素滲入語言教學之中，對文化教學有語言課中的文化教學和專門的文化課教學之分，並對中國文化劃分類型，出版文化教學大綱。這些進展對海外大學中文項目的文化教學也起到重要的參考作用。海外大學同樣從廣義上理解文化，和我國政策與學術界一樣都注重中國的現行文化，且對文化有更為靈活動態的理解；從另一個角度而言，教學內容過於注重表面文化而較為碎片化，對歷史和哲學的關注度還不夠，以至於對學生文化視野的培養較不充分。因此，本研究建議加強文化教學的「文化性」以提高教學的質量。

關鍵字：中國文化教育；中文項目；中國文化教學；海外中文教育

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The Development of and Reflection on Cultural Education in Overseas Chinese Language Programs

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Abstract: This study places Chinese language programs in overseas universities in the context of the development of "international Chinese language education" in China, and provides a general introduction to and reflection on the development of cultural teaching in overseas Chinese language programs. The main materials used in this study are the policies of international Chinese education in China, academic literature about international Chinese education, and the practice of cultural teaching in Chinese language programs in overseas universities. The focus of this study is placed on "what Chinese culture should be taught" in overseas universities. The study found that domestic policies and academics have increasingly recognized the need to integrate cultural elements into language classes. They have also noted a distinction between cultural teaching within language courses and specialized cultural classes. Their classification of Chinese culture and publication of teaching syllabi have provided valuable references for cultural education in overseas Chinese programs. Similarly, overseas universities adopt a broad understanding of culture and a flexible, dynamic view when teaching traditional culture from contemporary perspectives. However, such teaching content excessively focuses on surface-level aspects, lacking sufficient attention to history and philosophy to fully cultivate cultural perspectives. Thus, the study recommends strengthening the common recognition of teaching Chinese as culture to enhance quality in overseas programs.

Keywords: Chinese Culture Education, Chinese Programs, Teaching Chinese Culture, Overseas Chinese Education

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A Qualitative Study of Xiangxi Miao Ethnic Group: Reflections on Chinese Intangible Cultural Heritage Education from the Perspective of Pre-service Teachers

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Abstract: This qualitative study explores the attitudes and perceptions of the Miao ethnic group towards intangible cultural heritage (ICH) education, the advantages and difficulties of integrating ICH education into Chinese culture teaching and learning, and how exposure to ICH can shape the professional growth of pre-service teachers. The study employed qualitative interviews with ICH inheritors, folk artisans, local Miao people, and pre-service teachers from Hong Kong, as well as direct and participant observation of several ICH handicraft projects. The results indicate that the attitudes and perceptions of the Miao ethnic group towards ICH education are influenced by the difficulty of handicrafts, policies, and market demand, resulting in optimistic or pessimistic views. Local students and tourists in Xiangxi widely welcome ICH projects presented through experiential learning methods. These projects, nevertheless, require team-based and commercialized operations and have yet to be included in the formal education system. The study suggests that teachers should integrate background knowledge of Chinese culture into experiential learning to cultivate higher-order thinking qualities of students and develop a complete curriculum system that includes cross-cultural and interdisciplinary experiences to adapt to the development of a multicultural society and globalization in the 21st century. In conclusion, the study highlights the significance of integrating ICH education into formal education systems through experiential learning experiences and interdisciplinary courses. The study recommends conducting ICH education in junior secondary schools and collecting feedback from students and in-service teachers to improve further ICH education integration into Chinese culture teaching and learning.

Keywords: Intangible culture heritage education, Chinese culture education, experiential learning, multiculturalism, interdisciplinary curriculum development

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The Impact of L2 Grit on Intercultural Competence of Chinese EFL Students: L2 Willingness to Communicate as a Mediator

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Abstract: The significance of intercultural competence has witnessed a notable surge across various scholarly and discursive domains, encompassing English education, owing to the irreversible development of globalization. This research aims to explore potential associations between L2 grit (consistency of interest and perseverance of effort in learning a second language), L2 willingness to communicate, and intercultural competence (ICC) through a mixed-method approach. Semi-structured interviews were conducted on 15 students and were undertaken as a follow-up to supplement the quantitative data from the questionnaire, which was completed by about 300 Chinese college students learning English as a Foreign Language (EFL). The questionnaire results revealed a significant correlation between L2 grit and L2 willingness to communicate, which subsequently exerted a substantial influence on their intercultural competence. Furthermore, employing structural equation modeling (SEM), it was ascertained that L2 willingness to communicate functioned as a mediating factor linking L2 grit to intercultural competence within the Chinese college student population. The findings from qualitative analysis suggested that students with elevated levels of L2 grit were more inclined to engage in learning and communication in English, thereby enhancing their understanding of their own and foreign cultures, their attitude toward people from different cultures, and their intercultural communicative competence. These outcomes offer valuable insights to Chinese EFL educators and propose strategies to enhance L2 grit, L2 WTC, and ultimately enhance the intercultural competence of Chinese EFL students.

Keywords: L2 grit, intercultural competence, L2 willingness to communicate

Strand

Values Education, Teacher Conduct and Well-being

價值觀教育、教師操守與福祉

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探討近年香港教師專業操守發展的轉變

Explore the Changes in Professional Conduct Development among Hong Kong Teachers in Recent Years

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摘要: 本論文探討香港教師專業操守規範和權益在近年的改變，以及教師專業該如何自處。教師作為教育工作的最前線，局方對教師的規範力度與容許自主空間的任何改變都會對教學產生重大影響。2019 年反修例事件引發社會對香港教育問題的批評，包括通識科缺乏課程框架和教材，以及部分教師在網上發表政治言論。教育局於此後更新了《教師專業操守指引》並增加了新規範，維護教師專業形象。本研究介紹了香港教師專業操守的演變過程和基本內容，分析了教師專業操守規範和權益的變化，包括限制教師在網上發表政治言論、加強對教師專業操守的監管等，並討論教師專業發展中出現的問題和挑戰。教師專業操守和權益的變革需要教師和教育局共同努力，以促進教育事業的發展，為學生和社會創造更好的未來。

關鍵字: 教師專業；專業操守；教師權益；教學自主；教學互信

Abstract: This paper examines the recent changes in the professional conduct standards and rights of Hong Kong teachers, as well as how teachers should handle themselves professionally. As frontline workers in education, any changes to the regulations and the degree of autonomy allowed by the authorities would have a significant impact on teaching and learning in schools. The 2019 anti-extradition law amendment bill Movement led to criticism of Hong Kong's education system, including the lack of a framework and teaching materials for liberal studies, and some teachers expressing political views on online social medias. In response, the Education Bureau updated its "Guidelines on Teachers' Professional Conduct" and introduced new standards to maintain the professional image of teachers. This study introduces the evolution and basic content of the professional conduct standards for Hong Kong teachers, analyzes the changes in the standards and rights, including restrictions on teachers expressing political views online and strengthened monitoring of teachers' professional conduct, and discusses the issues and challenges arising from the professional development of teachers. The changes in professional conduct standards and rights require joint efforts by teachers and the Education Bureau to promote the development of education and create a better future for students and society.

Keywords: Teacher professionalism; professional conduct; teacher rights; teaching autonomy; mutual trust in teaching.

1. 引言

2019 年反修例事件觸發大批青年上街，社會各界批評本港教育出現問題，例如時任特首林鄭月娥抨擊通識教育科「第一天已出現問題」[1]，指出該科「既無課程框架，亦無經審批的教科書，全由教師教授，並不穩妥」，反映對教師教學自主專業的質疑，遂推行公民與社會發展科取而代之；加上部分教師於反修例事件期間在網上發表政治言論，亦引發社會各界對教師專業操守的質疑，使教育界掀起軒然大波，改變了教師專業發展的生態。

[1] 明報。《林鄭月娥：通識科改革非政治凌駕專業 科目「第一日已出問題」爭議 10 年》。2020 年 11 月 28 日。

在這個背景下，教育局發佈了更新的《教師專業操守指引》，並增加各種新規範，以維護教師的專業形象。本文將探討香港教師專業操守規範和權益在近年的改變，反思教師專業未來該如何自處。

2. 教師專業操守

教師是學生的楷模，教師的言行、操守、價值觀對學生影響深遠，以達「立德樹人」的宗旨（教育局，2022）。教師的行為規範有別於其他行業，包含相對較高的道德標準，其專業資格受法規保護及賦權，例如根據香港法例第 279 章《教育條例》，教師必須註冊為「檢定教員」或「准用教員」。教育局是教師註冊的機構，負責監管教師的專業資格和專業操守（教育局，2022）。過去不同學者從不同角度探討教師專業操守對教學的影響，例如教師專業操守與教育品質之間存在著正向的關係，且教師專業操守中的「尊重學生」和「誠信教學」對教育品質的貢獻最為顯著（冷學寶，2010）；教師專業操守與學生學習成就之間存在著正向的關係（尹玉英，2011），反映教師的言行舉止都隨時成為學生模仿的楷模，故此社會各界對教師抱有較高的專業操守期望。但是，賴柏生提出，香港政府對教師專業發展的取態，較側重教師個人學識及專業資格的提升，惟未有給予社會賦權，「外行領導內行」，「官僚指導專業」的風氣仍然熾熱，教師在教育體制中的議價能力偏低（賴柏生，2004），以致儘管社會對教師專業操守的期望和規範提高，但他們的權益未獲相應的保障和提高。

表 1 2016-2020 年教育局處理失德或專業失當行為的個案總數

年份	個案總數 (註)	已完成審理及/或並已採取跟進行動個案數目
2020	163	98
2019	110	97
2018	47	47
2017	35	35
2016	60	60

註：不包括經調查證明指控不成立的個案

資料來源：教育局

表 2 2018-2022 年教育局處理失德或專業失當行為的跟進行動次數

年份	取消教師註冊	譴責信	書面警告	書面勸喻	口頭提示及紀錄在案
2022	21	12	43	11	17
2021	7	36	70	22	16
2020	7	17	28	18	28
2019	7	16	32	22	20
2018	2	1	17	7	20
2017	3	0	19	4	9
2016	8	1	28	10	13

資料來源：教育局

自從 2019 年起，有關投訴教師的個案大幅增加，教育局處理失德或專業失當行為的個案總數出現明顯增幅（表 1），各種跟進行動的數字均遠高於 2018 年或之前的數字（表 2），反映社會事件為學界帶來前所未見的衝擊和挑戰，包括部分教師做出違法和違反專業操守的行為，及社會大眾對教師專業操守和規範出現期望落差，對現有的專業操守規範存在質疑。

3. 香港教師的專業操守規範

早於 1995 年，教育人員專業操守議會制訂了《香港教育專業守則》（下稱「守則」），議會成員包括由教師直接選舉產生、由教育團體互選代表出任及由教育署署長委任的代表，該守則由諮詢至落實制訂共歷時三年。2009 年起，該會着手編寫《守則》實務指引，至 2016 進行初稿諮詢及 2018 年修訂諮詢，原訂 2019 年 11 月公佈修訂後的守則，但最終鑑於當時的社會狀況擱置公佈。2022 年 12 月，教育局公布《教師專業操守指引》（下稱「指引」），說明教師應有的專業操守及行為規範，當中列出八項教師專業操守準則，並就各項準則列舉例子說明教師「應該」和「不應」做的行為，並載列處理教師涉嫌違反專業操守的機制及一些個案舉隅。如有教師涉及專業失當或違法行為，學校和教育局可參考指引跟進處理（教育局，2022）。新的指引較舊的守則更詳盡地羅列對教師的專業操守規範，並因應時代發展與時並進，例如以往較少談及性騷擾及網上言論的處理方式（鄒秉恩，2022）。

此外，由 2023/24 學年起，所有公營學校、直接資助計劃學校及參加幼稚園教育計劃的幼稚園的新聘教師，必須在《基本法及香港國安法》測試取得及格成績，方可獲考慮聘用（教育局，2023）；官校教師亦須簽署宣誓聲明才能獲繼續聘用，反映香港教師需滿足更多條件規範才能維持其專業資格。除此以外，近年社會其他界別人士對教師專業操守的意見，對教師構成擔憂和壓力。立法會議員張宇人、葛珮帆及容海恩於立法會小組委員會提出教室應安裝閉路電視錄影，以監察老師教學[2]，這正正反映「外行領導內行」的風氣，議員一方面要求透過監控加強教師專業操守規範，使教師變得更「專業」，但另一方面表露對教師專業的質疑，漠視師生互動的教學性質，剝奪教師的教學自主，以教師專業凌駕教學效能，試圖從根本上標準化和同質化所有教師。過多的規範，除了損害局方與教師之間的互信關係，家長和學生亦可視投訴為利劍，導致家長與教師、學生與教師之間的關係變質，嚴重影響教師的教學自主，影響教學效能。

4. 教師權益保障的削弱

以往教育人員專業操守議會在香港教師專業操守發展上擔當重要的角色，其職權包括：向政府建議有關提高教育專業人員操守的意見、擬訂一套應用準則，以界定教育工作者應有的操守、就涉及教育工作者的糾紛或指稱行為失當個案，向教育局常任秘書長提供意見[3]。但是，政府以議會擔當有關維持教師專業操守和促進教師持續專業發展的職能與成立之初已經不可同日而語為由，於 2022 年結束該議會[4]。政府在公報中指出：

> *「在過去，任何人士發現有教師涉嫌專業失德，可向教育局投訴，亦可向議會投訴。議會完成個案後，會將報告和建議提交教育局。由二〇一九年六月中至二〇二〇年年底，教育局共接獲 269 宗有關社會動亂的教師專業失德投訴，除了個別涉及司法程序的個案，教育局已完成所有個案，至二〇二一年十二月底，已按《教育條例》取消四名教師的註冊，以及向 176 名教師發出譴責信、警告信、勸喻信或口頭提示。與此同時，議會共接獲六宗相關投訴，涉及四名教師，惟至今仍未有將個案提交教育局處理。發言人表示，公眾對教師的專業操守十分關注，處理教師失德個案實在刻不容緩，就議會未完成的個案，教育局會聯絡有關人士作出跟進，並會繼續做好把關的工作，確保所有獲准在學校任教的教員均為適合及適當的人選。」（香港特別行政區新聞公報，2022 年 1 月 19 日）*

政府當局對議會未能有效履行其職權作為將其結束的主因，並將處理教師投訴的權力收歸局方管轄。按照最新的《教師專業操守指引》，當中指出「教育局設有由首長級人員組成的內部專責小組，負責就每宗教師涉及違反專業操守個案詳細審視，並按個案的性質和嚴重性，對有關教師作出不同程度的跟進行動。」（教育局，2022）可見做法有別於以往，教育人員專業操守議會由不同界別人士組成，成員名單公開透明；但內部專責小組則是由當局首長級人員組成，名單並未有公開，這些人員亦未必具備前線教學經驗，體現「官僚指導專業」的情況，使教師處於被動劣勢。

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[2] 明報。《建制倡課室裝 CCTV 教局：損師生互動》。2021 年 3 月 20 日。
[3] https://cpc.edb.org.hk/tc/terms_reference.htm 《教育人員專業操守議會—職權範圍》
[4] 香港特別行政區新聞公報。《教育人員專業操守議會將正式結束》。2022 年 1 月 19 日。

針對有關對機制的質疑，根據 2021 年 5 月 7 日立法會教育事務委員會會議討論文件，教育局代表表示「由教育統籌委員會成立的『促進及維護教師專業操守工作小組』在 2015 年發表的檢討報告中，確認現行的機制運作良好，對教育局負責監管的機制表示滿意。[5]」但是，2015 年發表的檢討報告已未必適用於近年的新常態發展，加上局方代表在討論文件中提出「工作小組不建議讓外間教師參與內部專責小組就行為不當投訴進行的調查工作」，但未有解釋原因，使教師的疑慮難以被釋除。

以往香港教育專業人員協會（簡稱「教協」）作為香港最大的教師工會，設有權益及投訴部專責為教師提供法律意見和支援，平均每年處理超過 3000 宗教師求助個案，保障教師的合法權益。但是，隨著 2021 年教協解散，面對投訴的教師頓失了專業支援，另一工會香港教育工作者聯會會長黃均瑜表示，以它們的規模，難以在短期內取代教協角色[6]。儘管在教協正式通過解散的翌日，教聯會宣布成立「香港教育工作者工會」，提出為教育工作者解答各類權益問題，或協助處理各類求助及投訴，但新工會的會員人數尚不多[7]，它能否完全取代以往教協的職能成疑。另外，工聯會屬會「教育工作人員總工會」亦有接收處理教師求助個案，但每年處理個案不足百宗[8]。但是，教聯會和工聯會親建制立場鮮明，與教育局關係亦密切，當遇上爭議性個案時，新工會是否站在被投訴教師一方，盡力為他們捍衛合法權益，亦存在疑問[9]。故此，隨著近年社會發展的新形勢下，教師在教育體制中的議價能力和權益保障反而出現降低的跡象。

5. 結語

經過一連串社會政治事件後，教育局對教師專業操守制定更多規範，以符合社會各界對教師專業操守的期望。然而，隨著教協和教育人員專業操守議會解散後，其他教師專業團體似乎尚未能填補其過往職能，導致教師權益的保障卻未能跟上規範增加的步伐，教師需較以往更謹言慎行，以免招到投訴，無形間增加了教師與學生、同工、家長和局方之間的隔膜。雖然教師作為最前線的教育工作者，但偏偏他們在教育體制中缺乏議價能力，削弱了教師的凝聚力和專業自主性，無疑對教師教學和未來發展造成衝擊。

雖然教師專業操守的變革和新標準可能引致部分教師流失，但新標準卻有助釐清教師專業操守的界線和規範，仍然選擇留守崗位的教師理應理解和掌握相關要求，樹立更高的道德操守規範標準，未來出現違規的個案只會越來越少。每逢變革必然引發震盪和適應期，但當教育界適應變革後，隨著違規個案減少，未來有助修補和改善局方與教師的互信關係，教師仍有望從體制中爭取更多權益和保障。

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Novice EFL Teachers' Identity Development and Emotions Fluctuations in Teacher Collaboration Activities: a Multiple-case Study

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Abstract: Teacher collaboration activities are crucial to teacher professional development. From an integrative perspective, this paper examines the evolution and interaction of five novice EFL teachers' identities, emotions, and actions when participating the collaborative lesson preparation activities in their early career years. Semi-structured interviews were conducted with five EFL teachers working in three K12 schools in China. Using the Dynamic System Model of Role Identity as the theoretical framework, we analyzed the interview data to reveal teachers' experiences, emotional changes, and role identity development. The finding demonstrated that five novice EFL teachers' actions, emotions, and identities are complicatedly interacted. EFL novice teachers experienced a dynamic development of identities while participating in collaborative lesson preparation. Three main roles identities were identified: teacher as learner, teacher as partaker, and teacher as an expert. The study also identified three themes related to these roles identities: exploration, adaption and innovation, and perish or thrive. These themes highlight the different patterns in which teachers navigated through their learning journey in collaborative lesson preparation. Throughout this process, a variety of emotions emerged, reflecting the complexity of the teachers' experiences. To further understand the development and interplay among teachers' actions, emotions, and identities, silent intrapersonal and contextual factors including personal belief in teacher collaboration, school cultures and high-stakes testing, are discussed. This study enriched our understanding of novice EFL teachers' perceptions of teacher collaboration activities by contextualizing the study in the China educational context. Results can provide empirical evidence for school leaders and teacher trainers to make informed decisions when designing and evaluating teacher collaboration activities for novice EFL teachers.

Keywords: EFL teachers, teacher emotion, teacher identity, teacher collaboration activities

1. Introduction

To enhance the quality of learning opportunities provided to students, teachers need to make a significant effort in creating lesson plans. In China, the Ministry of Education supports the establishment of Teaching Research Groups, where teachers collaboratively design lesson plans and prepare teaching materials using their collective knowledge and efforts (Yuan & Zhang, 2016). Within these groups, teachers collaboratively prepare their course plan that may lead to positive learning outcomes.

Taking a sociocultural view of learning (Wenger, 1999), collaborative lesson preparation (CLP) promotes continuous learning among teachers within a community of practice, enabling them to develop pedagogical skills and new identities and roles. Previous research has shown that collaborative lesson preparation (CLP) allows teachers to exchange pedagogical experiences and reflect on their teaching methods and assessment tools (Gutierez 2015, 2019; Xu 2015). CLP also plays a significant role in the professional development of novice teachers, as they can benefit from the expertise and experience of more seasoned teachers in terms of content knowledge and pedagogy (Yuan & Zhang, 2016). Though past studies have highlighted the impact of CLP on teaching quality in different cultural and institutional contexts, individual teachers' practices within CLP, as well as its interaction with teacher identity and emotions are less explored.

To address these points, novice EFL teachers' experience and perception of CLP were documented and served as the data of this study. The Dynamic System Model of Role Identity as the theoretical framework, was used to analyze the data to reveal the interaction between novice EFL teachers' action, emotional changes, and role identity development regarding their CLP. The study was guided by the following research questions:

What role identities do Chinese novice English teachers in K12 develop when participating in CLP ?

How do the components of teachers' role identities change and interact during CLP?

How do control parameters shape the trajectory of novice English teachers' role identity development during CLP?

2. Literature review

The literature consistently argues that collaboration is an effective form of teacher professional development. From a sociocultural perspective, teacher collaboration plays a crucial role in creating a community of practice (Wenger, 1998), in which teachers can share ideas and resources, develop and learn new rules and norms, and refashion their identities. CLP is one form of teacher collaboration (Yuan & Zhang, 2016). Previous research on CLP has provided insights into its structures, influencing factors, and its impact on teaching (e.g., Badawi, 2017; Collet, 2019; Fok, 2016; Mendoza, Cheng & Yan, 2022; Xu, 2015). For example, studies have shown how CLP can enhance teacher knowledge and teaching skills (e.g., Collet, 2019). Influencing factors for CLP include supportive structures, evaluation systems, school culture and leadership, and the broader social and political context (Fok, 2016; Mendoza, Cheng & Yan, 2022; Xu, 2015;Yuan & Zhang, 2016). While previous studies have mainly focused on the relationship between CLP and teaching quality in different cultural and institutional contexts, the impact of these activities on teachers' professional development in the school context, particularly for novice teachers, remains unclear (Yuan & Zhang, 2016). This study aims to address this gap by exploring the impact of CLP on novice EFL teachers' professional development through the lens of teacher identity. It will also consider the affective impact of CLP on teachers, as both teacher identity and emotions are significant for professional development and can directly influence teachers' cognition, mentality, and behaviors (Fernet, Guay, Senecal & Austin, 2012).

Teachers' identity development does not occur in isolation. Trent (2015) proposes a comprehensive framework for examining the construction of identity-in-discourse and identity-in-practice. For novice teachers, their identity development is influenced by the quality and availability of discourse and practice. Through participating in CLP, teachers can learning in communities of practice (Wenger, 1998), which serve as crucial spaces for accessing discourse and practice and developing their identities.

Despite the significance of teacher collaboration activities in identity construction, research explicitly focusing on teacher collaboration and identity construction remains limited, particularly in China. Although there has been a growing interest in professional learning communities research, including CLP in China, a review conducted by Qiao et al. (2018) revealed that teacher identity needs to be explicitly addressed when designing and evaluating professional learning programs or communities. Therefore, when discussing CLP for professional development, a lens from teacher identity is needed.

3. Theoretical framework

The DSMRI framework, developed by Kaplan and Garner (2017), offers a conceptual model that allows us to incorporate both teachers' actions and their identity into a formal framework of development. According to this framework, a person's self-perception as a teacher forms their teacher identity, encompassing their beliefs, aspirations, and actions that they consider essential to their role as a teacher. The primary focus of analysis in the DSMRI framework is the specific roles a person occupies in certain contexts. The framework represents each role identity as a complex dynamic system composed of four interconnected components.

There are numerous variables inside each of the four role identity components, and the salience of these components can fluctuate nonlinearly in response to intrapersonal and contextual factors. Additionally, within the same component, between components, and even across role identities, these components can be in concord or in conflict with one another. DSMRI helps us comprehend the role identity system's internal dynamics, whether seen from the perspective of coherence or the opposite. Teachers are driven to employ a variety of strategies to resolve conflicts between their perceptions, beliefs, and actions as well as to develop a consistent sense of who they are in their work.

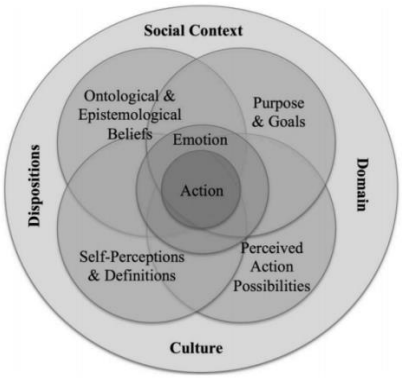

Figure 1. The Dynamic Systems Model of Role Identity (Kaplan & Garner, 2017)

4. Methodology

The present study employed a qualitative methodology to address the research question. Specifically, a multiple-case study approach, as outlined by Stake (2013), was utilized. This approach involved focusing on each of the five participant teachers individually and subsequently comparing their similarities and differences in order to generate thematic discussions. This multiple-case study design allowed for a thorough analysis of the raw data, enabling the researcher to identify and generalize meaningful themes, which aligned well with the study's objectives. Regarding data collection, the study primarily relied on semi-structured interviews conducted with each of the participants. These interviews allowed for in-depth exploration of the participants' experiences and perspectives related to CLP. For data analysis, an inductive-deductive content analysis approach(Zhang & Wildemuth, 2017), was employed. This involved initially immersing oneself in the data to identify emerging themes and patterns (inductive analysis) and applying pre-existing theories and concepts to further analyze and interpret the data (deductive analysis). By employing this qualitative methodology and utilizing a multiple-case study design, the study aimed to provide a rich and nuanced understanding of the experiences and identity development of novice English teachers in CLP within the specific context of Chinese K12 education.

5. Findings

In this study, it was found that EFL novice teachers experienced a dynamic development of identities while participating in collaborative lesson preparation. Three main roles identities were identified: teacher as learner, teacher as partaker, and teacher as an expert. The study also identified three themes related to these roles identities: exploration, adaption or innovation, and perish or thrive. These themes highlight the different patterns in which teachers navigated through their learning journey in CLP. Throughout this process, a variety of emotions emerged, reflecting the complexity of the teachers' experiences. This section of the study aims to unravel the interplay between the teachers' actions, emotional trajectories, and the development of their identities.

5.1 Exploration:

Participant 1 sensed an explicit change in identity from a postgraduate to a novice teacher. Participant 1, as a novice teacher, faced emotional challenges during the collaborative lesson preparation activities. She experienced a conflicting emotional system consisting of nervousness, worries, and desires. Similar to her experiences as a student, Participant 1 desired to impress the other experienced teachers during the collaborative lesson preparation. This desire stemmed from the belief that leaving a better impression on the experienced teachers could potentially impact her later career development and relationships within the school. At this phase, Participant 1's role identity included the possibility of proposing innovative teaching methods, as she saw herself as a fresh graduate with new ideas. However, the outcome of her actions did not align with her goal of winning the praise of experienced teachers. This outcome further intensified her nervousness and added to her emotional challenges.

The exploration period in CLP for participant 2 and 3 are also full of ups and downs. Participant 2, as a novice teacher in a private school without any teacher collaboration, experienced a strong emotion of nervousness. This emotion was triggered by the lack of support and guidance from experienced teachers in school context. As a result, Participant 2 felt compelled to undertake the lesson preparation by herself. Participant 2's ontological beliefs about English learning, not solely for test purposes but also for practical use, influenced her action possibilities during the lesson preparation. She wanted to incorporate language-in-use contexts into her teaching. However, the school's course requirements forced her to give up her own choices and conform to a specific curriculum. This restriction triggered a sense of powerlessness in Participant 2, as she felt unable to fully express her teaching beliefs in her teaching practice.

Participant 3 initially identified as a novice teacher and enthusiastic learner. His possible action was to learn from experienced teachers. However, the reality was different, and he had to learn by himself. This discrepancy between his expectations and the actual situation led to frustration. Furthermore, Participant 3 had to spend time preparing something that he did not need, which added to his frustration. Thus, this action was in tension with her goal to give good classes, which elicited an emotion of frustration.

5.2 Adaption or innovation

As time passed, Participant 1 gradually adapted to the rules of the collaborative lesson preparation activities and became a partaker in it. Participant 1's goal in participating in the collaborative lesson preparation activities shifted. It was no longer solely about winning others' praise, but rather about improving her own teaching craft. Her role identity as a partaker included the action possibility of learning from others' comments and being critical of others' courses. The alignment between her goal and action possibility of her role identity contributed to her feeling of satisfaction.

In the interview, participant 2 expressed the negative emotion of depression, which indicates a misalignment of the structure of identity. Participant 2's fixed pattern of teaching, coupled with the overwhelming workload and high-stakes testing environment, creates a sense of tiredness and hinders their ability to improve their teaching practices. This misalignment between their desired role as a team leader for collaborative lesson preparation and the constraints of their current situation can lead to feelings of frustration, disappointment, and ultimately, depression. Participant 2's goal of improving teaching through collaborative learning with colleagues is hindered by the contextual factors they face. This misalignment between their goals and the action possibilities available to them can lead to a sense of helplessness.

Participant 4's perception that participating in the (CLP) is useless and a waste of time suggests a strong sense of dissatisfaction with the current system. Her disengagement in the CLP was due to her belief that CLP are merely a formality and is useless and that novice teachers are left to fend for themselves.

5.3 Perish or thrive

Participant 1's future-imagined positive role identity as an expert teacher reflected her self-regulated goals to succeed and achieve self-value. Her ontological belief and personal goals of becoming an expert teacher in the lesson collaboration reflect the process of integration of the role of being a teacher and a leaner. Yet, a tension between her perceived

insufficiency in professional knowledge and her goal of becoming an expert teacher. This tension leads to feelings of dissatisfaction, as she recognizes the gap between her desired future identity and her current role identity. By actively pursuing opportunities for growth and development, she aims to bridge the gap between her current role and her desired future identity as an expert teacher.

Participant 5's perception of meeting the needs of students in teaching has led them to realize the benefits of not following a rigid lesson plan. This recognition gives teachers agency and autonomy in exploring teaching methods, which in turn leads to positive emotional values such as happiness and fulfillment. Participant 5 finds satisfaction in being able to adapt their teaching to better suit their students' needs. However, a negative aspect of Participant 5's role identity is their inability to be a learner in the community of practice with colleagues. They believe that learning with colleagues could accelerate their growth as a teacher. This belief is influenced by the discourse of teaching as a practice-oriented profession, where learning from and with colleagues is valued. To address this negative role identity, Participant 5 takes action by seeking alternative learning opportunities, such as learning from the internet. By exploring online resources, they can access a variety of teaching materials, strategies, and perspectives that can enhance their professional growth and development.

6. Conclusion

The study utilized the DSMRI to investigate the development of novice EFL teacher identity in relation to their participation in CLP. The findings revealed three teachers' identity development follows the pattern of exploration-adaption or innovation-perish or thrive, with their emotions interacting with actions in the CLP. This highlights the potential of the DSMRI as an integrative perspective to understand the complex interplay of teacher identity, emotion, and action. The study also found that novice EFL teachers' engagement or disengagement with CLP can have implications for their identity development and emotional experiences. As novice teachers progress from a learner role to becoming active participants and potentially expert teachers or team leaders, their emotions can fluctuate throughout this developmental process. This developmental lens provides insight into the experiences and challenges faced by novice EFL teachers in CLP. Furthermore, the study identified that the marginalized status of novice teachers in CLP and contextual constraints, such as school cultures and high-stakes testing, can mediate the interplay between teachers' actions, emotions, and identity development. These contextual factors shape and influence the actions and experiences of novice teachers in CLP, impacting their identity formation and emotional well-being.

The article not only contributes to our theoretical understanding of novice EFL teachers' practice in CLP from a teacher identity perspective but also has significant implications for professional development program design and evaluation in schools. The study identifies a development pattern in which novice teachers go through an exploration period, experiencing ups and downs, and eventually adapting or even innovating within the CLP in their school context. Based on these trajectories, the study emphasizes the importance of support from school leaders and institutional structures in facilitating novice teachers' engagement in CLP. School leaders can play a crucial role by designing CLP based on teachers' needs and preferences, rather than imposing a top-down policy. This approach allows teachers to have a sense of autonomy and agency in their participation, which can contribute to their professional growth and development. Furthermore, the study highlights the importance of considering not only teachers' knowledge of pedagogical concepts but also their prior emotional experiences regarding CLP, and personal dispositions, which can influence teachers' engagement and commitment to CLP and should be taken into account in the design of EFL teacher education programs. These implications can inform the design and implementation of effective CLP initiatives and contribute to the professional growth and development of novice EFL teachers.

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Reading Battle - A Gamified Platform That Can Change Reluctant Readers into Book Lovers!

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Abstract: For decades or centuries, librarians and language teachers have been concerned about students' reading abilities, as it is one of the key indicators regarding the primary student's future academic success (Cooper et al., 2014). Developed in 2014 by Chu (the last author of this article) and his team, Reading Battle (RB) is a reading platform targeted at primary schools which gamifies children's reading experience so that children can be stimulated to play, read and learn. This paper will specifically introduce what RB is, from self-determination theory (SDT) and flow theory, to examine how RB can help students develop their interests, habits, and abilities in reading. The study will also describe how RB works in urban and rural schools, its social impact, and its implications.

Keywords: Reading Battle, e-learning platform, self-determination theory, flow theory, primary education

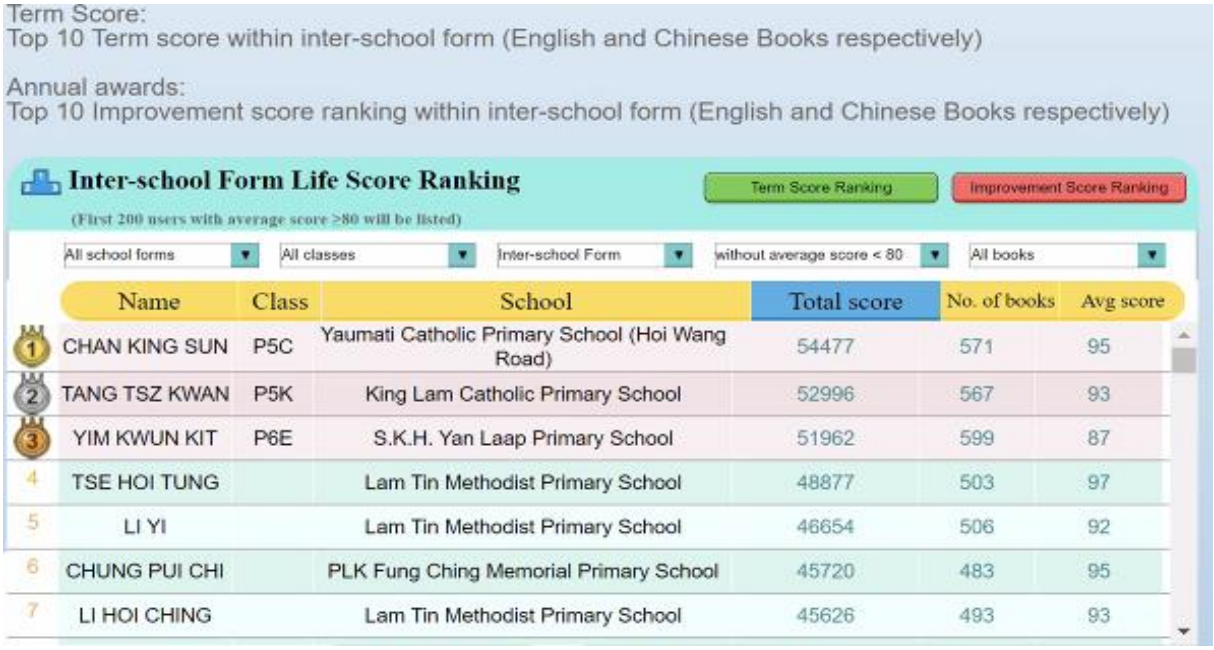
1. Introduction

RB started with 9 schools in 2014, and it has grown to have around 90 primary schools - 20% of primary schools in Hong Kong (HK). It has also been used by schools and libraries in other countries/economies. Students in a class-based unit are given user accounts and shown how to use RB, and then they start using it mainly voluntarily through guidance from teachers (e.g., library and language teachers). RB covers 700+ children's literature. Around 500+ books are print books, and about 200+ are eBooks. For print books listed on RB, students will borrow them from the school/public libraries or purchase the books from bookstores. For eBooks, over 100+ are freely accessible over the Internet, and the other 100+ eBooks require a school or individual subscription from a publisher.

Figure 1. The homepage of Reading Battle.

Through the home page, a student can start a book-battle, which means answering a set of 10 questions (drawn from a pool of around 30 questions) for a book covered in RB (see Fig. 1). Each RB's book can be "battled"/attempted up to 3 times. Student participants need to read a book seriously before taking part in its corresponding book-battles. Otherwise, the participants can be lost when trying to tackle the questions/challenges, especially when dealing with higher-order thinking questions, including inferences, integrating ideas, interpretation and evaluation. RB's questions were carefully crafted following the framework of PIRLS 2011 (Li & Chu, 2021).

When a battle has been completed, a student can check his/her achievement by selecting the "Results" tab, which displays his/her scores from each battle, whether he/she obtained an e-badge for the battle, and his/her performance when compared to other students in his/her school and in the world. Through clicking on the "Ranking" tab, a student can access 3 kinds of leaderboards: Inter-school Form Life Score Ranking, Term Score Ranking, and Improvement Score Ranking. RB has been successful in motivating many students who are willing to pour in hundreds of hours in book-battle - the top 7 students in RB have read (and answered an average of about 15 questions a book) 483-599 books mostly on a voluntary basis and they achieved 87-97 / 100 (see Fig. 2). This is extraordinary compared to the general phenomenon around the world that many students don't like to read. The following section(s) will discuss the "secrets of success" for RB.



	Name	Class	School	Total score	No. of books	Avg score
1	CHAN KING SUN	P5C	Yaumati Catholic Primary School (Hoi Wang Road)	54477	571	95
2	TANG TSZ KWAN	P5K	King Lam Catholic Primary School	52996	567	93
3	YIM KWUN KIT	P6E	S.K.H. Yan Laap Primary School	51962	599	87
4	TSE HOI TUNG		Lam Tin Methodist Primary School	48877	503	97
5	LI YI		Lam Tin Methodist Primary School	46654	506	92
6	CHUNG PUI CHI		PLK Fung Ching Memorial Primary School	45720	483	95
7	LI HOI CHING		Lam Tin Methodist Primary School	45626	493	93

Figure 2. The leaderboard page of Reading Battle.

2. Research Review

2.1. Self-determination theory (SDT)

Why can Reading Battle work well in motivating many students, including reluctant readers to engage actively in reading and in answering questions about the books (doing book battles) seriously? It's because it fulfills human's 3 essential psychological needs: autonomy, competence, and relatedness (Deci & Ryan, 2012). Autonomy refers to a feeling of being in control of activities. Competence implies a need to enhance abilities or to develop a feeling of mastery. Pink (2009) described "mastery" as a desire for "getting better at something (e.g., performance, competence, skills, time)". Relatedness is defined as a social need to connect with others and a sense of belongingness (Li & Chu, 2021).

2.1.1 Autonomy

Some active users' responses showed that they enjoyed the many different choices of book-battles and a feeling of freedom that RB offers. Control and choice are two key components of "autonomy" in human intrinsic motivation according to SDT (Deci & Ryan, 2012). More than 27% of the active users said that they liked various choices of books on RB. Nine active users stated that they could decide when and where they do book-battles and the kind of books they chose in RB was not a required assignment for them (Li & Chu, 2021).

2.1.2 Competence

Students knew that they could gain high scores in RB if they read more books and answer the questions carefully, leading to a sense of gaining "mastery" in this gamified platform. As Child Tom stated, "I can answer most questions of one battle correctly if I read a book carefully. On the contrary, I would make many mistakes if I read a book distractingly." Student participants believe that they are more capable of controlling their performance in RB's gamified tasks when compared to their usual non-gamified learning activities in class.

2.1.3. Relatedness

It is found that social interaction plays an important role in motivating students to use RB. Fifteen students (41%) said that they liked to compete with classmates and friends, and 27% of the students had other social reasons for using RB, such as gaining praise from parents, talking with classmates and sharing books with friends (Li et al., 2020; Li & Chu, 2021). All these comments indicate that students' social need to connect with others can be met when they engage in RB.

2.2. Extrinsic and Intrinsic Motivation

Deci and Ryan (2012) separated motivation into intrinsic and extrinsic. Intrinsic motivation refers to completing something because of personal inner interest/enjoyment, whereas extrinsic motivation refers to finishing tasks due to extrinsic stimulations (Deci et al., 2001). Li and Chu (2021) introduced SDT as one of the motivation theory frameworks to help analyze the results of their study 2, which aimed to determine how RB might impact students' motivation and learning, as perceived by students, parents, and teachers.

The study identified 12 themes that describe the motivation of users of the RB reading platform, ranging from extrinsic to intrinsic factors. Of the 29 active users surveyed, the great majority (74%) were motivated by extrinsic factors, such as completing book-battles, achieving higher rankings on leaderboards, and earning badges and rewards. Leaderboards were found to be the most effective extrinsic element in motivating students to use RB, as reported by 62% of active users, 50% of parents, and all teachers. Besides, there are other extrinsic factors, such as e-badges, rewards, and points, which were also found to motivate RB users. RB doesn't just motivate students to read by extrinsic elements, it can also motivate students intrinsically. Among the active users surveyed, around half (51%) reported intrinsic reasons for participating in RB. Nearly half of these active users (49%) felt a sense of self-achievement, which led to deep engagement with RB. Teachers (86%) and some parents (25%) recognized the impact of self-achievement on students' intrinsic motivation to read. Curiosity was identified as the second strongest incentive for active users to read and complete book-battles, as reported by 35% of active users and 25% of parents. In addition to curiosity, 22% of active users were interested in the content of the books on the gamified platform. The detailed results are described in the following, and the distributions of the dimensions are shown in Fig. 3.

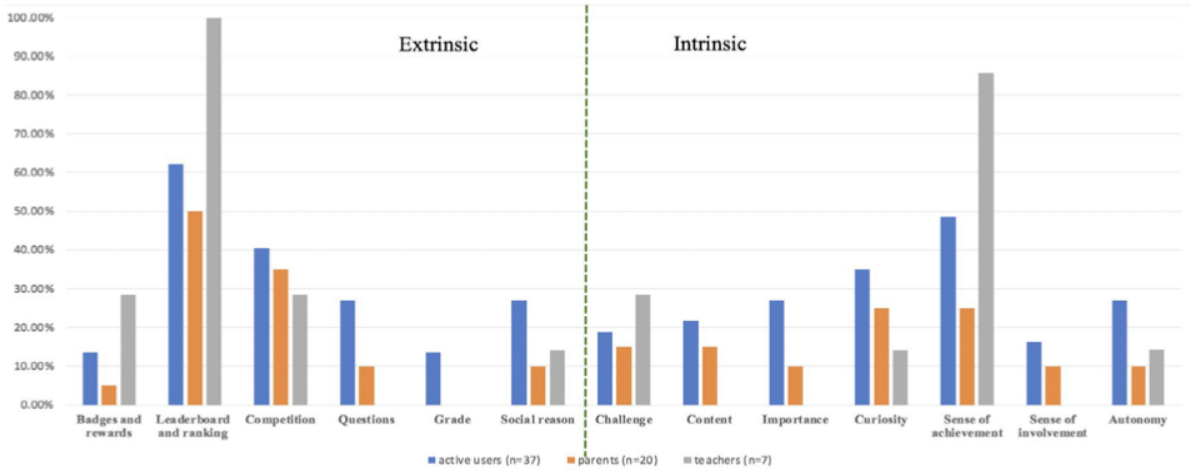


Figure 3. Coding results of students' motivation (adopted from Li & Chu, 2021).

Study 3 of this research examines the sustainability of the positive effects of RB on students. Seven active participants (18%) mentioned that they originally "played" RB for getting high on the ranking and rewards, but later on they enjoyed reading books for pleasure. Before using RB, they regarded reading as homework; however, now they found RB helpful as it provided knowledge and pleasure. They also recognized the importance of reading, even though they did not use RB anymore (Li & Chu, 2021).

2.3. Flow theory

The study by Mak et al. (2019) used a mixed research study with a case study approach to select 9 "heavy users", i.e., students who completed more than 60 books on the RB challenge in 5 months, and 9 "light users", i.e., students who completed only one book on the RB in the same time frame, from four different elementary school in HK to explore how the gamification elements in RB affected students' flow experiences. Also, the study discussed the extent to which students experienced the 9 dimensions of flow experience. Flow theory describes the state of mind in which individuals are fully immersed and highly focused in an activity, experiencing a sense of enjoyment and fulfillment (Nakamura & Csikszentmihalyi, 2009). For example, when art students forget about time and discomfort in the process of creating with full concentration. Meanwhile, Nakamura and Csikszentmihalyi (2009) summarized 9 characteristics describing the flow experience, also referred to as the flow dimensions, including goal clarity, sense of control, immersion, knowledge improvement, feedback, social interaction, autotelic, challenge-skill balance, and concentration. In the field of education, flow theory has been found in many areas, such as word-shoulder processes in elementary school students, foreign language classrooms in secondary schools, and gamified learning (Abbott, 2000; Judge, 2011; Inal & Cagiltay, 2007).

The quantitative results of the study showed that RB significantly helped the students in the heavy user group to achieve mobility in all dimensions of leisure reading except for "sense of control" ($p=0.057$). In contrast, students in the light user group improved only in four dimensions: sense of control, autotelic, knowledge improvement, and concentration. The results of qualitative research show that the RB game based learning platform has brought better flow experience to students in all nine dimensions, and students show higher internal learning motivation after using the platform. This study shows how RB can have a huge impact on cultivating students' reading interests and abilities. Unlike traditional boring and boring reading methods, gamified reading increases students' reading time, allowing them to discover the joy of reading and truly enjoy the reading process.

2.4. RB works in rural schools as well as in city schools

The above 2 studies were carried out in city schools, the study here by Meng et al. (2021) reported how RB has also been used successfully in helping students to learn English in a rural school. The study explored the possibility of

introducing RB to primary students in a school with little knowledge of using a computer. To achieve this, a questionnaire and interview questions were designed based on the Self Determination Theory. The study recruited 17 students between the ages of 10 and 12, 2 parents, and 1 teacher to participate. The results indicated that incorporating a gamified e-learning platform significantly increased rural students' motivation to learn English. This was achieved by appealing to their curiosity and interests, strengthening the parent-child bond, and fostering parent-child co-playing. After a four-week reading intervention, 95% of the interviewed students (16 in total) reported that their English interests and habits had been strengthened. The students demonstrated higher levels of reading confidence and interest, as well as greater engagement in the reading challenges on the gamified platform. They also reported increased knowledge of learning English through technology, higher reading frequency, and a wider selection of English books. According to over 88% of the interviewed students (15 or more), the gamified platform significantly aided their English learning. The platform had a substantial impact on their reading motivation, with enjoyment, usefulness, competence, curiosity, and challenge in English learning increasing by nearly double or more compared to before using the platform. Conversely, their feelings of pressure and boredom in English learning had notably diminished. This study indicates that teachers can use RB to enhance students' learning and motivation when teaching English in EFL class even for rural students.

3. Discussion

3.1. Reading interests, habits and abilities

Policymakers, educators, and parents worldwide have been concerned about how we may motivate students to read. Although billions of dollars have been poured into various schemes to help students enhance their reading abilities, their interests and abilities are not improving even in highly developed societies such as Sweden (Tegmark et al., 2022). The good news is that we have tools like RB, proven by much solid research that can successfully develop students' reading interests, habits, and abilities. It has also been proven that it works in HK (where it was created) and worldwide in the US, Cambodia, mainland China, and Taiwan.

3.2. Digital divide

RB has been around for free to any school and individual for more than 9 years. It can be used as an extremely low-cost solution to help solve the digital divide problem. As explained by the 3rd research above, students in a small village school with minimal computer knowledge can also self-learn English with RB (and with limited guidance and support from a voluntary teacher) offered to the students during the summer. This approach can be adopted by many regular and voluntary teachers to benefit millions of children struggling to learn to read in their language and English as a foreign language.

3.3. Happy schools

Learning should be fun, and schools should be happy places for students. That's why UNESCO has been promoting the idea of "Happy schools" since June 2014 (UNESCO, May 2017). However, schools worldwide (especially some in the East) have become "hell" for students. Some students, as young as grade 1, would cry on Sunday night because of the pressure (the amount of homework at school and home) they will face when going to school on Monday. Some parents and students would hold a demonstration on the street to voice their concerns/frustrations about having their children go through many boring TSA exercises that aim to enhance their reading/writing abilities (Hong Kong Free Press, Mar 2020).

Understandably, governments and schools want their youngsters/students to be competent to survive and thrive in this world. Nevertheless, a wrong approach (meaningless drilling with boring exercises and homework) has been taken in many societies. The content of RB, in fact, also contains similar multiple-choice questions and answers as in those TSA exercises mentioned above. However, RB gamified reading comprehension activities very smartly so that many

students don't feel pressure when working on it. Instead, many students find pleasure and excitement when engaging in RB. It builds on small successes by encouraging students to read and try on their own or with friends or family members. Whereas TSA is only a test, it puts a lot of pressure on students. It's boring because it's not gamified. RB can help turn unhappy schools and students into happy schools with exciting students.

4. Conclusion

This paper introduces Reading Battle, a gamified reading platform that has transformed the reading experience for many students in Hong Kong and beyond. It has made a significant impact on society in terms of helping students to develop reading interests, habits, and abilities, which are core to students' academic success. It helps solve the issue of the digital divide as it requires little resources and manpower to introduce it to students and in monitoring their progress. It can also turn unhappy schools (that load students with boring exercise and homework) into happy schools (using RB that contains challenging book battles with questions for students to gain continuous success and motivation).

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A Case Study on Junior Middle School EFL Teachers' Professional Identity Construction in the Context of the Double Reduction Policy

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Abstract: The double reduction policy(reducing the workload and off-campus training burden of students and parents in compulsory education stage) was implemented in China since 2021 that have a crucial impact on students and parents' schoolwork load. However, few studies explored teachers' perceptions and reactions regarding the policy. Starting from this research gap, this study explores how three middle school EFL teachers constructed their professional identities under the context of the double reduction policy in Mainland China. A series of in-depth interviews with language teachers during the initial period of the double reduction policy provided teachers' perceptions of the policy, influencing factors of their identity construction, as well as their transformations of identities and thematic analysis approach was adopted. The findings of the study indicate that language teachers enrich their identities through layering students' homework, enhancing teachers' comprehension skills, promoting teachers' theoretical knowledge, improving cross-discipline knowledge, and promoting English proficiency. Teachers transformed their teaching philosophy from teacher-centered class to students-centered class, and generated new identities as class activities designers and students' mindset cultivators through their engaging in activities and practice in school settings. However, they also came across some intrapersonal, interpersonal and institutional barriers, such as inadequate language proficiency, lack of support from school leaders, students' parents and colleagues, pointless formalities from the educational bureau and increasing students' exam difficulty. Implications for teacher teaching, teacher education, and policy makers are also discussed in this study to assist teachers in having an in-depth understanding of the policy and form a robust and powerful professional identity under the implementation of the double reduction policy.

Keywords: teachers' professional identity, EFL teachers, the double reduction policy

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Does a Growth Mindset Guarantee Growth Mindset Feedback in Teaching?

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Abstract: Highlighting the complex relationship between a teacher's growth mindset and their teaching practices, this study explores the moderating role of the school-level environment. Data was collected from 20 middle school teachers in Shanghai through a mixed-method approach involving questionnaires and classroom observations. The questionnaires assessed teachers' mindset belief and perceived school-level environment, while the classroom observations tracked the frequency of their teaching practices. Our findings suggest that the possession of a growth mindset does not directly equate to the implementation of growth mindset teaching practices, given the significant moderating role of the school-level environment. Rich school resources and advanced instructional innovation enhance the positive impact of a growth mindset on teaching practices. Conversely, contexts with fewer resources, limited teacher decision-making, and less instructional innovation hinder this translation. Instead, our findings underscore the necessity of observing actual teaching practices and considering the context in which they occur. Furthermore, these results illuminate the potential for improving teaching effectiveness through strategic alignment of school resources and fostering autonomy in decision-making processes. This study contributes to a more nuanced understanding of the growth mindset and its practical implementation in classroom teaching. It underscores the importance of considering the broader school-level environment in research and practice, opening new avenues for further research and interventions aimed at promoting growth mindset practices in education.

Keywords: growth mindset, school climate, teaching practice

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Students' Learning Motivation Matters: A Role in Promoting Psychological Well-Being

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Abstract: Students' motivation is crucial for mental health except for personality development and behavioral regulation. Compared to other student populations, doctoral students experienced a greater frequency of well-being issues. This quantitative study aims to explore whether and how learning motivation affects the psychological well-being of doctoral students and verify the mediation role of depression. Self-determination theory was utilized as the theoretical framework in this study. A total of 601 doctoral students from the eight Hong Kong government funded university were recruited to complete the online survey. Confirmatory factor analysis (CFA) was conducted at first, followed by the structural equation model (SEM) to test the theoretical linkages among the variables. The goodness-of-fit for the model showed sufficient ($\chi 2$ = 876.512, df = 270, $p < .001$; TLI = .905; CFI = .914; SRMR = .062, RMSEA = .061), and all the paths were significant. In response to the research question, the direct effect from students' motivation to psychological well-being was statistically significant after controlling depression ($\beta = .319$, $p < .001$). The indirect effort from motivation to psychological well-being via depression was also significant ($\beta = .261$, $p < .001$, 95% BPCI = [.287, .492]). The result indicated doctoral students who have a higher learning motivation intend to perceive a higher level of psychological well-being. Their depression plays a mediation role between these two focus factors. The study provides implications for schools to create more conditions that foster students' learning motivation, reduce ill-being issues, and better support their doctoral journey.

Keywords: Doctoral student, Motivation, Depression, Psychological Well-being

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The State-of-Art of Student's Mathematical Well-being: A Literature Review

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Abstract: Research has consistently shown that students' negative experiences with mathematics can lead to unfavorable attitudes toward learning the subject and a decline in mathematics performance. Mathematical well-being, which encompasses a person's positive emotions and effective functioning in mathematics learning, is closely linked to both students' personal lives and academic success. Thus, in our quest to strike a balance between meaningful and value-based mathematics education and students' mathematical achievement, focusing on mathematical well-being becomes a pivotal factor. Despite the abundance of research on student well-being in general, the field of mathematical well-being still presents several research gaps and opportunities for development since its inception. The aim of this study is to provide a systematic understanding of mathematical well-being by exploring concepts, theoretical models, and measurements, as well as strategies and challenges for improvement. For this purpose, the study summarises and analyses relevant research, and the findings advocate for student-centered teaching approaches in mathematics education, emphasizing that enhancing students' mathematical well-being largely depends on nurturing positive relationships between students, teachers, and peers. Furthermore, future research should explore various cultural contexts, develop precise measurement tools, investigate pathways to achieve mathematical well-being, and implement training programs to help teachers recognize and support students' mathematical well-being.

Keywords: Mathematical Well-being, Mathematics Education, Student Well-being, Literature Review

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The Effect of Teaching Environment on Teachers' Well-Being in Chinese Universities: A Serial Multiple Mediation Model of Teaching Self-Efficacy and Teaching Engagement

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Abstract: The well-being of university teachers in the workplace has become a subject of increasing research attention. As China's higher education system continues to expand, university teachers face escalating workloads and pressures. While individual efforts are essential, external support also plays a crucial role in influencing their well-being. Despite previous studies examining the relationship between the teaching environment and teachers' well-being, the underlying mechanisms remain relatively unexplored. In this study, we applied the Social Cognitive Career Theory to investigate the mediating role of teaching self-efficacy and teaching engagement in a serial multiple mediation model. Data were collected from Mainland China using the online platform Sojump (N = 7721). Structural equation modeling revealed three key findings: (1) a positive correlation between the teaching environment and university teachers' well-being, (2) the mediating effect of teaching self-efficacy and teaching engagement partially explaining the relationship between the teaching environment and well-being, and (3) sequential mediation, with teaching self-efficacy and teaching engagement acting as mediators in the relationship between the teaching environment and well-being. These findings contribute to a deeper understanding of how university teachers' work-related well-being develops. Furthermore, they underscore the importance of higher education institutions' administration in proactively creating a teaching-focused work environment. Such an environment fosters teachers' confidence in their careers, enhances their engagement in their work, promotes a sense of achievement, and enables them to realize their self-worth.

Keywords: Well-being, Teaching Self-efficacy, Teaching Engagement, University Teachers, The Social Cognitive Career Theory

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Evaluating a Concise Teacher Feedback Literacy Scale from the Perspective of Knowing, Being, and Acting: A Pilot Study in Chinese Teachers

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Abstract: Teacher feedback is crucial for student achievement, yet there is limited research on how to measure teachers' knowledge and capabilities in providing feedback. To address this gap, a concise scale (nine items) was developed by Yang (2016) based on Sutton's (2012) feedback literacy framework, encompassing knowing, being, and acting aspects. The scale includes four items to assess the knowing aspect (FK) related to evaluating feedback values for enhancing students' learning and five items to evaluate the combined being and acting aspect (FBA), measuring teachers' abilities to tailor and provide feedback to cater to diverse student needs. To establish the scale's validity, teachers' feedback practices were examined using the Person Process Feedback Scale by Jonsson and Beach (2012), which gauges preferences for providing person praise (focused on students' abilities) and process praise (focused on students' strategies and efforts). The study involved 50 Chinese teachers. Results showed that FBA had a stronger positive association with feedback practices related to students' abilities (r = .314, p = .026), while FK was significantly associated with feedback practices related to students' strategies and efforts in the learning process (r = .364, p = .009). These findings showed related but distinct associations of FK and FBA with feedback practice preferences. Overall, the short FL scale was more positively associated with teachers' feedback practices to the learning process than person praise. The study provides preliminary psychometric properties supporting this succinct FL scale.

Keywords: Teacher feedback literacy, feedback practice preferences, piloting, Chinese teachers

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A Narrative Inquiry into an English Private Tutor's Professional Development Experience: A Sociocultural Perspective

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Abstract: In many EFL contexts, English private tutoring typically has high enrolment mainly because of English as one core school subject and their exam-oriented education system. The growth of EPT entails quality tutoring services and a good understanding of the work of English private tutors. Considering little research on their pedagogical practices and professional development (PD), this study, underpinned by sociocultural theory, makes a narrative inquiry into the dynamic PD experience of an English private tutor, Candy, in Mainland China. Data were collected through three rounds of in-depth narrative interviews, supplemented by her institutional snapshots. The narrative captures a complexity of her PD experience in various aspects. For PD pathway, Candy constantly built knowledge on exam-oriented curriculum and instruction, upgraded pedagogical practices from template-based instruction to later contextualized instruction, and changed professional attitude from feeling easeful to a coexistence of achievement and pressure in later career. Referring to PD impact, Candy highlighted its positive influence on students' language learning, specifically in raising their test performance. Regarding factors influencing her PD, while pre-service training, constructive interactions with students, and overseas learning were perceived to have facilitated her PD, heavy tutorial workload, family distraction, as well as the 'Double Reduction' policy and the Covid-19 pandemic restrained her PD. Despite focusing on a single case, this in-depth inquiry enlarges tutors' voices in 'shadow education', informs policymakers to further regulate and institutions to provide PD support for tutors' quality instruction, and enhances tutors' career understanding for informed decisions.

Keywords: narrative inquiry, English private tutors, professional development, sociocultural theory, double reduction policy

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The Capacity to Respond to Urgent Need: Philosophical Keys for Educating Youth in the Virtue of Compassion

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Abstract: Compassion is seen as a sign of our humanity (MacIntyre 1999); no moral education is complete without it. Two philosophers offer solid points of reference to educate compassion, targeting thought, emotion, and choice. Aristotle defines compassion as pain arising from three evaluations: that suffering is (1) grave, (2) undeserved, and (3) undergone by someone similar to us in some way (Aristotle 1995). Aquinas upgrades it to an important moral virtue which enables us to feel for the suffering of the other and to alleviate it if we can (Aquinas 1975). Compassion is essential to our relational moral excellence, making us more perceptive of need and directing our decision-making to intelligently assisting others. A robust framework for educating compassion emerges when insights from the classical accounts are used to inform character development strategies identified by Lamb et al. (2021): (1) habituation through practice, (2) reflection on personal experience and (3) dialogue that increases virtue literacy. This is in line with interdisciplinary research on Aristotelian character education (Jubilee Centre for Character and Virtues, 2022) and the Aristotelian-Thomist vision's potential contribution to modern psychology (Spalding et al., 2019). A viable program would be a repeating cycle of theory (building-block ideas shaping a compassionate worldview), practice (exposure to need and suffering and engagement in short-term and long-term projects that assist others) and processing (reflection and dialogue). Through these, young learners could acquire the cognitions needed to feel compassion, reaching a commitment to our shared humanity and to the conditions necessary for all to flourish.

Keywords: civic values and virtues, compassion, suffering and human flourishing, moral education, shared humanity

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The Promotion of Higher-Order Thinking Skills in Secondary Education: Are We Ready for the 21st Century?

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Abstract: Scholars (e.g., Heong et al., 2011; Munzenmaier & Rubin, 2013; Debopriyo, 2014; Stapa & Ibaharim, 2020) have emphasised the significance of higher-order thinking skills, which are said as keys to developing young people's creativity and problem-solving skills. However, rote memorisation and imitating knowledge might still seem to be emphasised by secondary school educators in Asia (Zhang, 2017; Tung & Chung, 2019). Therefore, investigating the understanding of secondary school teachers about these skills and how they might have done to develop their students these skills is beneficial to 21st-century education. The present study examined the perceptions of fourteen secondary English teachers, around two hundred and forty secondary school students and fifty-five parents about their perceptions of how these skills had been promoted and taught in the target school. Research instruments such as a questionnaire, a twelve-week experiment, pre-and post-tests and interviews were used for the data collection. The findings suggested that the teacher participants might have a limited understanding of the skills and how they could be taught, and that might affect the student participants' preparation for higher-order thinking acquisition. The experimental student group developed higher synthetical and evaluative skills through learner-centred pedagogy than the control group. Parents in the present study did not think higher-order thinking was essential compared to the lower-order ones. The results indicated potential discrepancies between the curriculum and the expectations among the stakeholder groups. Therefore, the study recommended educational stakeholders might need to provide support for teacher training in both teaching pedagogy and lesson design.

Keywords: higher-order thinking skills, secondary education, cognitive thinking

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Examining the Views of Pre-service and In-service Teachers on Teaching Profession and Conduct

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Abstract: Professionalism is essential to practices of educators. Proper value orientation and solid ethical foundation is expected for teaching profession in the society. Yet the views of pre-service and in-service teachers are understudie d. In the Hong Kong context, followed by the declining role of the Council on Professional Conduct in Education, since 2015 the Committee on Professional Development of Teachers and Principals (COTAP) has developed guiding principles about 'Professional Standards for Teachers' and for 'Professional Standards for Principals. Moreover, 'Guidelines on Teachers' Professional Conduct', which clarifies misconduct behavior of teachers, was firstly published by the Education Bureau in December 2022. It is significant to explore the views of teachers on teaching profession and conduct with these new introduced official documents. In this study, 400 pre-service and in-service teachers are invited for participating in a survey and interview. This study aims at examining views on teaching profession and ethical conduct after the issue of the official documents. Other issues including the attitude towards the Basic Law, and national security, etc. will also be explored. This study not only can explore the updated perspectives of young teachers on teaching profession, but also facilitate the improvement of learning and teaching environment.

Keywords: Teaching profession, ethical conduct, pre-service, in-service teachers

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Exploring How Parents' and Children's Feedback Orientations Influence Positive Emotions and Self-concept in Learning English as a Foreign Language

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Abstract: While the impact of teacher feedback on student achievement has been well-documented, little is known about the importance of younger learners' feedback orientation, namely their perceptions of teachers' feedback - its usefulness, their self-efficacy, and responsibility for using it - in enhancing their achievement in English as a Foreign Language (EFL). This qualitative study investigates how Chinese primary school EFL learners perceived and used feedback to improve English learning, as well as the role of their parents in their children's EFL. The aim is to inform language education practices. Through semi-structured interviews with 11 pairs of children and their parents, the findings of this study indicate that parents' feedback orientation may have indirect connections with learners' emotions and self-concept through parental active involvement in their children's EFL. Parents' feedback orientation helped children's English needs and improved their confidence through parent-children interactions, these interactions are beneficial to children's EFL emotions and self-concept. These findings highlight how Chinese parents helped their children benefit from teacher feedback on EFL, suggesting parents as key stakeholders in children's EFL. Importantly, this study also found that children's feedback orientation contributed to their positive emotions and self-concept in EFL. Theoretical and practical implications for language education include engaging parents more actively in the dialogue of feedback practices in schools, focusing feedback training on building children's high-level feedback orientation, and facilitating parent-teacher-student interactions to harness the benefits of feedback orientations of children and parents for boosting children's English learning.

Keywords: feedback orientation, Chinese EFL learners, parental involvement, primary education

1. Introduction

Feedback has been defined as information provided to students during their learning process to inform them of their current performance state and what they should achieve based on learning goals (e.g., Boud & Molloy, 2013; Hattie & Timperley, 2007). Feedback orientation (FO) in education refers to students' receptivity toward teachers' feedback (Yang et al., 2014). In language learning, FO has been found to correlate positively with children's second language acquisition (Waller & Papi, 2017). Researchers also found positive relationships between FO and learning-oriented goals (Yang et al., 2014) and learning engagement among Chinese students in mainstream and vocational education (Yang & Yang, 2018). Despite existing research examining FO between teachers and students, considerably little has been done to examine FO between parents and children.

Parents' guiding roles have been shown to facilitate children's academic achievement and engagement (Epstein, 2018). Teachers' feedback intervention has also been recognized to promote children's second language learning (Hyland & Hyland, 2006). Considering Chinese children have limited opportunities to use foreign languages in a limited social environment, it may be beneficial for parents to take on the role of feedback recipients to motivate their children's English learning. This study explored how Parents' and Children's Feedback Orientations influence children's positive emotions and self-concept in learning English as a foreign language.

2. Literature Review

Feedback is a powerful tool influencing learners' performance and achievement (Hattie & Timperley, 2007). To optimize its impact, feedback should be directive and facilitative, providing specific information and guiding learners' improvements (Shute, 2008). Feedback orientation (FO), as introduced by London and Smither (2002), plays a vital role in how individuals perceive and respond to feedback. The Feedback Orientation Scale (FOS) by Linderbaum and Levy (2010) assesses four dimensions: utility, accountability, social awareness, and feedback self-efficacy.

Educational research on FO has demonstrated its relevance to learners' feedback-seeking behavior, language learning outcomes, and engagement with formative feedback (Tran et al., 2022; Yang et al., 2014; Yang, 2021). While educational research on FO has primarily focused on students, its role in the home-school interaction (Epstein, 2018) and its impact on children's learning achievement and emotions have yet to be explored. Future investigations should address parents' FO (ParFO) and its influence on children's FO (CFO) in the educational context.

Existing research has explored parents' perceptions of feedback, focusing on primary education in Germany, Finland, and China. Notably, Sievert et al. (2018) found that informing parents about left-behind children's performance positively affected learning achievement in primary school. Kuusimäki et al. (2021) highlighted the need to explore parents' roles in parent-teacher communication, emphasizing that communication should build respect in both directions. As young children are motivated by parents' guidance (Epstein, 2018), ParFO may play a vital role in Chinese students' early language learning engagement and achievement. This study investigates parents' perceptions of teachers' feedback and explores how ParFO can promote and support CFO and Chinese EFL learners' learning performance, addressing the research gap in this area.

3. Research Design

This study investigates the role of ParFO and CFO in promoting children's engagement and achievement in learning English. Considering the significant impact of parents' feedback on primary school learning (Letzel et al., 2022; Kuusimäki et al., 2021), understanding ParFO may improve children's learning performance and motivation (Delcker & Ifenthaler, 2022; Kuusimäki et al., 2021). To address this, we adaptively used Yang's (2021) conceptual framework to guide this qualitative research design (see Figure 1). Semi-structured interviews were conducted with Chinese parents and their children to explore their FO in English learning. The interviews were conducted online to ensure consistent English learning and feedback experiences. Two research questions guide the study:

RQ1: How do Chinese parents and children understand the role of their FOs in helping EFL?

RQ2: How do Chinese parents and children apply ParFO and CFO to promote children's positive emotions and self-concept in EFL?

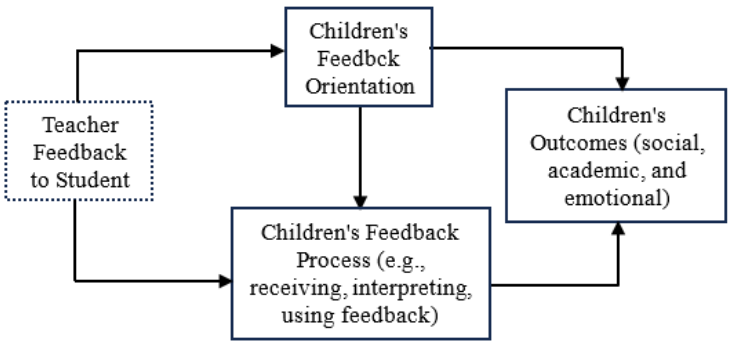

Figure 1. The simplified conceptual framework of teachers' feedback, students' feedback orientation, students' feedback process, and students' learning outcomes. (Adapted from Yang, 2021)

3.1. Participants

This study used a purposive sampling approach to understand our research objectives and ensure our research questions were appropriately answered. As previous publications acknowledged that primary students tend to receive more teacher feedback and interaction with their parents than secondary school students (Letzel et al., 2022), we recruited twenty parents who were randomly selected based on a personal willingness among the participants to finish the semi-structured interviews with their children as paired groups, supporting young children in producing information through their voices. Finally, we got 11 parents offering complete demographic information and successfully finishing interviews with their children. The participants, including parents and children, were all from Mainland China (n=11). All parents were mothers, with 72.3% aged 31 to 40, 27.3 % aged 41 to 50, and the average age was 40. Balanced numbers of matched boys (54.5%) and girls (45.6%) were found in the matching children with an average age of 10, and most of them were in Grades three and four (72.3%).

3.2. Ethical Consideration

The research methodology and ethical concerns were submitted for approval to the Human Research Ethics Committee of The Education University of Hong Kong. Data collection began in March 2023 after obtaining consent from the participants. Consent forms were signed online using Qualtrics.

3.3. Data Collection and Analysis

For data collection, 11 semi-structured interviews were conducted online using the VooV application, and the sessions were recorded for transcription and coding. The interviews involved open-ended questions to ensure diversity and generate a qualitative database with substantial data. To simplify questions for primary children, complex inquiries were broken down into related statements to facilitate their responses. All qualitative data were transcribed and coded using NVivo. A line-by-line strategy was employed to interpret each interviewee's answers accurately, with their exact words used as labels for sentences in the open coding stage.

4. Key Results to Answer RQ1 and RQ2

The qualitative results provide valuable insights into how both Chinese parents and children understand and apply FO in English learning, addressing the two research questions as follows:

RQ1: How do Chinese parents and children understand the role of their feedback orientations in helping EFL?

The findings indicate that Chinese children in primary schools shared a good understanding of the four aspects of FO formed in English learning. They recognized the importance of receiving specific and detailed feedback to help them improve their English skills. Additionally, they reflected a sense of responsibility in using feedback to further enhance their English performance. Furthermore, they actively practice feedback to achieve self-improvement and corrections in their English learning. Here are some representative quotes from participants:

Children Feedback Utility (cFBUT)→English learning: "When I read English picture books, my English teacher said I read coherently between words and words... I think the teacher's advice to me was beneficial... After I listened to it, I would try to read English sentences fluently." (Child 2)

Children Feedback Accountability (cFBAT) →English learning: "It (cFBAT) is a sense of responsibility. For example, my teacher asked me to be an English subject representative. It promotes me to feel responsible." (Child 6)

Children Feedback Social-awareness (cFBSO) →English learning: "The teacher asked me to correct or praise my English learning, which can make my relationship with the teacher closer." (Child 1)

Children Feedback Self-Efficacy (cFBSE) →English learning: "The teacher said I needed to review and told me to spend more time reviewing the English content. After hearing that, I could do this [task] well." (Child 5)

The results from parents' data reveal that Chinese parents actively participate in their children's English learning process by considering and applying ParFO and CFO. Additionally, parents consider their role in feedback interpretation and involvement to achieve responsibility and efficacy in using teacher feedback to enhance EFL. They use ParFO to guide and support their children's feedback practice, aiming to foster and indirectly promote children's positive emotions and self-concept in English learning. Here are some representative quotes from participants:

Parent Feedback Utility (parFBUT)→Children's English learning: "Suppose the teacher can correct my child's pronunciation, and it will be more accurate, then I think the teacher's feedback should be valuable." (Child 3's parent)

Parent Feedback Accountability (parFBAT) →Children's English learning: "The most important thing for me is the accountability to use feedback. My accountability guides the child to focus on learning, so I pay attention to the teacher's feedback." (Child 7's parent)

Parent Feedback Social Awareness (parFBSO) →Children's English learning: "My child's English learning needs more attention based on his performance. I judged according to the English teacher's feedback. I will take the initiative to communicate with the teacher." (Child 7's parent)

Parental Feedback Self-Efficacy (parFBSE) →Children's English learning: "After the teacher gives me the feedback, I will tell my child the original content. I will let my child take the initiative to communicate with the teacher because I think his growth path should let him go on his own [confidently]" (Child 4's parent)

RQ2: How do Chinese parents and children apply ParFO and CFO to promote children's positive English learning emotions (cEpemo) and self-concept in EFL (cESC)?

The results from participating children reveal that Chinese children in primary schools are likely to apply their cFBAT and cFBSE to evaluate their self-concept in EFL (cESC). In addition, they are likely to achieve positive emotions in EFL learning (cEpemo) when accomplishing cFBSE and receiving compliments, bringing out children's consistency and eagerness to learn English. A high-level cFBSO may provoke children's willingness to seek feedback and improve children's English learning preferences. Here are some representative quotes from participants:

Children Feedback Accountability (cFBAT) →cESC: "What makes English skills better should be the accountability of using feedback. Only when I have it will I think about and practice the feedback my teacher gave me."(Child 7)

Children Feedback Self-Efficacy (cFBSE) →cESC: "My self-efficacy in using feedback best shows that my English skills have improved. My English teacher gave feedback, and I memorized vocabulary every night." (Child 6)

Children Feedback Social-awareness (cFBSO) →cEpemo: "If I have a good relationship with the teacher, I will be delighted. I will raise my hand to answer questions actively in class and be happy." (Child 10)

Children Feedback Self-Efficacy (cFBSE) →cEpemo: " The self-efficacy of knowing how to use feedback is the most important. If I am good at using feedback, I can learn English quickly, which makes me happy." (Child 2)

Our data from parents and children indicate that Chinese children's cESC may be developed through parental involvement by activating parFBAT to interpret and apply teachers' feedback by supervising and guiding children's English learning. Secondly, Chinese parents may use their parFBSE to indirectly improve children's cESC through feedback discussion, educating the child to advocate their awareness to practice teachers' feedback. They also prefer using ParFO through parent-teacher-student interaction to indirectly improve children's cEpemo. Additionally, participating children pointed out that ParFO impacted them in accomplishing their CFO. Here are some representative quotes from participants:

Parent Feedback Accountability (parFBAT) →cESC: "The most important thing for me is the accountability to use feedback ... My accountability guides the child to focus on learning, so I keep the teacher's feedback and guide her to put feedback to good use. She should achieve progress in learning." (Child 7's parent)

Parental Feedback Self-Efficacy (parFBSE) →cESC: "I have good feedback self-efficacy because I use the teacher's feedback well. I encourage my child to communicate directly with the teacher. He has to grow up independently, so I must teach him how to communicate with the teacher to let him know his English learning self-concept." (Child 4's parent)

Parents' Feedback Orientation (ParFO) → cEpemo: "As a mother, using the teacher's feedback is influential. My child was lack of self-confidence, but now her self-confidence is relatively strong ... I play a communication role so that the combination of three parties (i.e., teachers, parents, and children) may be better for the promotion of my child's English learning." (Child 8's parent)

Parents' Feedback Orientation (ParFO) → CFO: "It (ParFO) has an impact on me. If my parents do not judge whether the teacher's feedback is valuable, I have to handle the feedback independently. I may not practice it in time." (Child 3)

5. Discussion

This study explored the roles of the ParFO and CFO in promoting Chinese EFL learners' learning performance. This initially filled the gap in exploring the effect of the ParFO's role in enhancing CFO from a Chinese educational context. The qualitative results shed light on the understanding and application of FO among Chinese parents and children in the context of English learning. Chinese children clearly grasp different FOs, while parents actively promote their children's English learning performance through ParFO. These findings contribute to a better understanding of the feedback dynamics within Chinese families and provide valuable insights for future research on effective feedback strategies to enhance children's language learning outcomes.

5.1. Implementations

The study enriches the understanding of FO in second language learning by involving parents in the feedback process. The conceptual framework (Yang, 2021) guides the investigation of ParFO's impact on CFO and its potential indirect influence on cEpemo and cESC.

From a practical perspective, teachers can enhance children's CFO by providing encouraging and specific feedback tailored to individual improvement needs. Assignments and in-class interactions can be utilized as sources of feedback to foster active feedback perception and practice. Involving parents in the feedback process is beneficial, as they can support ParFO intervention and provide valuable insights for teachers to meet Chinese families' EFL learning needs.

Chinese parents can play a proactive role in their children's English learning by engaging in feedback discussions and practices with teachers. By guiding children to apply feedback independently, parents can positively influence CFO development and children's perception of ParFO engagement. Parents must set an example and allow children to develop CFO independence, promoting effective English learning outcomes.

5.2. Limitations and Further Directions of Research

While this qualitative study contributed to advancing FO exploration in the Chinese educational context by involving parents' participation and pairing up their children, providing valuable data from primary children and their parents' perspectives. However, there are some limitations, including its small sample size, and all participants came from only one specific area of mainland China, limiting the diversity of our research. Some young participants also required assistance to answer interview questions, but their input was valuable.

Future research should consider increasing the sample size with a more diverse group of parents and children, involving both parents, exploring specific feedback strategies, incorporating teachers' perspectives, and conducting longitudinal studies to understand the long-term effects of FO on children's language learning outcomes in the Chinese educational context. A mixed-methods approach and cross-cultural perspectives can provide valuable insights for effective intervention strategies. To supplement qualitative research, future studies should incorporate quantitative analysis with a more extensive database using FO scales with good psychometric properties (e.g., Linderbaum & Levy, 2010; Yang et al., 2014). Doing this will help evaluate the impact of FO of children and their parents on Chinese EFL learners' outcomes more comprehensively.

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Understanding Minority Students' Challenges and Needs for College English Curriculum Development

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Abstract: Guide to College English Teaching (2020) advocated fostering students' intercultural competence in the College English curriculum. Ethnic students who came from minority areas to inland universities were faced with huge difficulties in English intercultural learning due to their insufficient English proficiencies and intercultural awareness. The reasons were related to the underdeveloped economy and language policies in their minority settlements. And yet, little research has probed into minority students' confronted challenges and needs for College English in the context of inland universities, where Han students account for the majority. To address this lacuna, this study interviewed 36 minority students from Xinjiang, Tibet and Mongolian Autonomous Regions and 6 experienced College English teachers in one inland University. Results revealed that most minority students showed ambition in English learning although they thought their current English abilities lagged behind Han students. They were also interested in intercultural knowledge and displayed a sense of ethnic pride while conveying their cultures. As for teachers, they paid attention to the cultivation of students' intercultural competence, but they never considered the unbalanced English levels and different needs of Han and minority students in the provision of knowledge. Suggestions are put forward in the way of differentiating teaching through an appropriate grouping of ethnic minority students, thus establishing a learning environment tailored for minority students. Implications for College English curriculum development in terms of minority students' perceived challenges and needs, as well as institutional support are also discussed.

Keywords: curriculum development, ethnic minority students, College English, challenges and needs, institutional support

1. Introduction

Language and culture are intertwined conceptions. Language carries meanings that are ingrained in the culture and cultural meanings are constructed in different discourses, speech acts, and interactions (Kramsch, 2014). If the language is regarded as finite codes, cultural knowledge is boundless for learners which is implicated in instances of language use and complicated to anticipate in communication, especially in intercultural situations (Corbett, 2022). The significance of intercultural learning under globalization is to equip language learners with communication skills as well as thinking and behaving methods with a sense of self (Kaikkonen, 2014). This case is also true in English language teaching when the aspiration of English language learners is to improve intercultural engagement for communicative adaptability and academic development (Vu, 2019).

Being conscious of the associations between cultural backgrounds with language endeavors, language minority students invest linguistic and cultural resources in their learning experiences to motivate culture-related tasks in classrooms (Flynn, 2013). To accommodate the acceleration of internalization, they not only expect to command both the national lingua franca and English as the world language but also anticipate the preservation of their ethnic languages and cultures. Teaching minority groups is a subject of multicultural education that emphasizes the role of languages (i.e., their

mother tongue, the national language, and English) and guarantees opportunities to preserve minority cultures (Sugimura, 2015). It is noteworthy to realize the nuance between multicultural education and intercultural education although they are related conceptions to indicate perceived cultures. The former stresses a situation when different cultures coexist, while the latter emphasizes the process of interaction in a culturally diverse setting (Holm & Zilliacus, 2009). Therefore, the intercultural approach to English teaching for minority students could be conceptualized as including a focus on the dynamic interplay of languages and cultures. As such, it generates understanding and respect for diverse cultures in order to establish a harmonious language and culture environment for academic and social equality (Cummins, 2015).

Learning from the successful minority language policies in other countries (e.g., the UK and Canada), minority language education should maintain the diversity of languages and cultures. Tao (2017) presented the significance of trilingual education for ethnic minority students in China. It was advisable to enhance Putonghua (the national language), protect minority languages, and formulate foreign language plans and policies for the sake of cultivating professionals with global consciousness. In terms of geographical positions, most minority residential areas in China are located in the range of the "Belt and Road Initiative" launched in 2013. It is a win-win international scheme aiming for economic development, cultural diversification and social informatization which covers vast regions of Asia and parts of Europe (Zhang, 2015). Foreign language programs (especially English language) conducted in minority areas in China could not only promote economic cooperation with countries along the "Belt and Road" but also develop minority students' intercultural competence in the course of internationalization (Zhao, 2015). The distinctive cultures of ethnic minority groups constitute integral parts of Chinese culture, and minority cultures have gradually gained respect from other countries along the route under the "Belt and Road Initiative" (Yang, 2018). Spreading minority cultures to the world is conducive to understanding China's values and traditions, thereby gaining more chances for the prosperity of the ethnic cultural landscape and contributing to China's "Belt and Road" strategy (Liu, 2017). On the other hand, after the promulgation of the Outline of the National 13th Five-Year Plan for Cultural Development and Reform (2017), a cultural system featuring local and ethnic folk customs took shape and the state schooling system attached more importance to intercultural education to spread China's voice and stories in international communication.

Nevertheless, ethnic minority students' English language and intercultural learning are confronted with huge challenges. The economic development in minority settlements is relatively slow causing the lack of abundant teaching resources, advanced teaching instruments, and diversified teaching methods (Zhao & Lv, 2022). Local governments in ethnic areas allocate limited funds for school facilities and teacher training which adversely affects the passion for English teaching and learning (Geng, 2018; Yao, 2015). Ethnic minority students' insufficient English language abilities, learning motivation, and intercultural competence attracted the attention of some scholars (e.g., Bai, 2014; Geng, 2018; Li, 2021). It is observed that studies on ethnic minority students' English language and intercultural learning were mostly conducted in Minzu universities that mainly recruit ethnic minorities or universities in minority areas (e.g., Li, 2020; Ge, 2018; Xu, 2014; Yan et al., 2018; Zhao & Lv, 2022). Few studies are concerned about pedagogical suggestions for their English language and intercultural learning in regular universities (in contrast with Minzu universities) where Han students make up a large proportion.

In regular universities, minority students must learn English regardless of their varying English proficiencies before entering universities. College English is a compulsory course for non-English majors at most regular universities in mainland China. Although different universities adopt different textbooks for this course, the teaching objectives meet with requirements stipulated by the higher education department of the Ministry of Education (MOE). *Guide to College English Teaching* (2020) promulgated by the MOE emphasized the value of culture in the College English curriculum and advocated improving college students' intercultural competence. Difficulties of ethnic minority students in English learning as well as their intercultural attitudes are under-explored. The gap is probably filled through an investigation into the present situation of College English from both students' and teachers' perspectives. Therefore, the purpose of this study is to probe into ethnic minority students' challenges in English learning and their needs for support from teachers

and the university. Suggestions about intercultural teaching methods, especially tailoring ethnic minority students are provided, and opinions on College English curriculum development are discussed. In the context of College English, we intend to find answers to the questions:

(1) How do teachers teach intercultural knowledge in College English?

(2) What difficulties do ethnic minority students encounter in College English?

(3) How do ethnic minority students regard intercultural learning in College English?

2. Research Methods

This study was conducted at a regular university located in southwest China. The researchers initiated a casual chat with a few ethnic minority students as a warm-up to foresee the operability and problems in the research design. Six ethnic minority students (i.e., two Uygurs, one Tibetan, one Korean, one Mongol, and one Kazak) from ethnic areas were invited. They belong to common ethnic minorities with relatively large numbers in China. After the researchers expressed respect for the ethnic minority languages and cultures and explained the proposed suggestions on the College English curriculum reform for ethnic minority students, they were willing to share more authentic information related to their sociocultural environments. Therefore, the researcher decided to conduct the purposive sampling method by posting recruitment leaflets and the snowball sampling method assisted by the six minority students. The purposive sampling method is based on three aspects: (1) participants can speak their ethnic minority languages, so they are regarded as trilingual (minority language, Putonghua, and English) learners; (2) participants have learned College English at this university so they could share what they have acquired and expect from this course; (3) participants could recognize the characteristics of their ethnic cultures and give some examples. Finally, 36 ethnic minority students of different majors were recruited. Subsequently, we invited six teachers who have taught College English for over seven years to share their teaching methods in the class. Table 1 and Table 2 illustrate the demographic characteristics of participants.

Table 1. Student participants' information.

Categories	**Frequency**	**Percentage**
Age		
18-22	35	97.2
Over 22	1	2.8
Gender		
Male	14	38.9
Female	22	61.1
Nationalities		
Uyghur	18	50
Kazak	12	33.3
Tibetan	5	13.9
Mongolian	1	2.8

Table 2. Teacher participants' information.

Categories	Frequency	Percentage
Gender		
Male	1	16.7
Female	5	83.3
Academic Degree		
Master	2	33.3
Doctor	4	66.7
Length of Teaching		
7-10 years	4	66.7
Over ten years	2	33.3

In the first stage, we conducted semi-structured interviews for these 36 students. Questions are primarily concerned about their gains from College English, challenges in learning English and desired learning outcomes. In the second stage, we interviewed these six College English teachers individually, attempting to understand their opinions about intercultural learning in this course and the corresponding class activities they organized. Additionally, they were asked to recall the performance of Han students and ethnic minority students in the College English class.

3. Findings and Discussions

We conducted the thematic analysis to deal with these interview data. After analysis, we canvass three broad themes including ethnic minority students' English language learning and intercultural attitudes in College English, as well as the views of teachers about the intercultural part of College English teaching and the specific teaching methods.

First, the majority ethnic minority students (n=32, 88.9%) showed ambition in English language learning although they admitted that they lagged behind most Han students. English proficiencies vary due to different language policies at their local schools before entering universities. For all Tibetan and Mongolian students (n=6, 16.7%), they have learned English since primary school. Uyghur and Kazak students from Xinjiang (n=30, 83.3%) received formal English education at school when they attended the college preparatory school, lasting for two years. The purpose of preparatory courses is usually to improve ethnic minority students' Putonghua language skills and other humanistic knowledge, preparing them for incoming study at inland universities. All the student participants (n=36, 100%) think highly of the importance of three languages (i.e., their mother tongue, Putonghua, and English). In terms of English learning motivation, most students (n=29, 80.6%) regard College English as examination-orientated and they aspire for skills to pass CET 4 or CET 6 (i.e., English as a foreign language test for non-English majors in China, including Band 4 and Band 6) from the course. A few students (n=7) learn English out of interest and expect to learn basic communicative skills from the course.

Second, some students (n=22, 61.1%) reported that they seldom take the initiative to link language learning with cultural learning in College English classrooms, but they (n=18, 50%) used to absorb culture-related knowledge from social media, like watching English movies or videos. Regarding their attitude toward their own culture, all of them actively share their ethnic-featured culture including their languages with a sense of pride. However, they are concerned about their expressions due to insufficient English ability. Stated in another way, they feel confident in intercultural exchange with Han students with their enhanced Putonghua ability but feel overwhelmed while sharing cultures with English.

Third, all teacher participants (n=6) underscore the weight of intercultural learning in the College English teaching scheme. In terms of teaching methods, they'd like to organize teamwork to discuss culture-related topics, or roleplay scenes related to the content in the coursebook. Activities primarily aim to obtain cultural knowledge and compare Chinese and Western cultures. Only one teacher, a male ethnic minority teacher who is Tibetan showed concern about intercultural communication within the national boundary. He shared his experience of organizing activities with special consideration for ethnic minority students. He also pointed out the significance of integrating Chinese culture which embraces all ethnic cultures into intercultural English teaching.

After reflecting on these findings, we provide some suggestions for College English curriculum development. First, teachers should arouse students' intercultural learning motivation since most students relate English language learning with pure language skills, particularly test-taking skills. Second, approaches to motivate intercultural English learning should consider the contribution of different ethnic cultures, being essential cultural knowledge underlying intercultural communication. Third, regarding ethnic minority students' varying English proficiencies, universities need to offer some workshops or training classes to help enhance their English ability and confidence in speaking English. Fourth, it is worthwhile to consider organizing seminars for teachers on how to effectively carry on activities to promote intercultural teaching in College English. Fifth, if conditions permit, extra College English classes are set up, tailored for ethnic minority students. Particular teaching plans are made for them so it would be beneficial to their English language learning and the cultivation of intercultural competence.

The study is limited in that most of the results are self-reported. Another limitation is the insufficient samples of ethnic minorities confined at one university. We appeal for more samples representative of ethnic minority students' opinions in the future study. Additionally, we hope that English intercultural learning of ethnic minority students at regular universities could receive more scholar's attention and institutional support, hereby promoting the curriculum of College English.

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Translanguaging in Hong Kong Education: The Offline and Online Classrooms

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Abstract: While Chinese and English are the official languages of Hong Kong, post-secondary institutions in the city use English as the medium of instruction (EMI). However, the "Fine-tuning MOI Policy" has made space for translanguaging in the EMI classroom of secondary education; additionally, linguists have never come to a consensus about whether there should be space for the shared first language (L1) in the second language (L2) classroom where English is considered a lingua franca (ELF). Alongside this situation is the outbreak of Coronavirus disease 2019 (COVID-19) in Hong Kong, which has made teaching and learning activities take place in the mixed mode throughout 2021. But still, it remains unclear whether translanguaging is perceived and experienced differently in the online lesson setting. This action research aims to examine how post-secondary students in a face-to-face setting and students in an online setting consider the impact of using Chinese in an EMI environment. Two groups of students, one in the classroom and the other on Zoom, were given the same lecture on academic writing. The lecture was delivered in English supplemented by Chinese, and the students were asked to complete a questionnaire on their learning experience afterwards. Independent samples t-tests suggest that those who attended the lecture on Zoom tended to value the use of Chinese for "providing clear explanations", "stimulating learning interest", and "maintaining attention" more significantly than those who attended it face to face. Such differences were addressed by follow-up interviews with student representatives from both groups.

Keywords: EMI, translanguaging practices, bilingual education, online teaching, higher education

1. Introduction

When multilingualism is a matter of fact in multicultural societies, research on the use of multiple languages in teaching and learning activities has gathered momentum in applied linguistics. Translanguaging in education, associated with the older concept classroom code-switching, refers to a pedagogical practice that draws on different linguistic resources shared by the teacher and students in a classroom to optimize their learning experience. A typical instance is using the shared L1 to explain the target language L2. Meanwhile, over the past few years, COVID-19 caused schools and institutions to continue their teaching and learning activities in mixed mode, with the teacher and some students in the physical classroom, and the others in the virtual classroom supported by a video-conferencing application, such as Zoom and Teams. Nonetheless, it remains unclear whether translanguaging is perceived and experienced differently in the monolingual online lesson setting, so this paper will address the question using Hong Kong as an example.

2. Research Background and Research Questions

The Basic Law of Hong Kong legitimizes "Chinese" and "English" as the two official languages of the city. "Chinese" in Hong Kong refers to "Cantonese" in most spoken settings, "Standard Mandarin Chinese" in written settings, and "Putonghua" in some formal settings. In terms of medium of instruction (MoI), however, "Chinese" often means "Cantonese" to teachers and students. Simultaneously, as English is a powerful language that helps Hong Kong maintain its international status and competitiveness, post-secondary and tertiary institutions normally adopt the EMI policy, which on the record means English is the only language to be spoken in class (Curriculum Development Council, 2004; Tung et al., 1997). Yet at primary and secondary levels, EMI off the record affords occasional use of Chinese in oral instruction

(Wang & Kirkpatrick, 2019). The "Fine-tuning MOI" policy for secondary schools also specifies that English will be "mainly used" in an EMI school (Education Bureau, 2021, A.32), which does not completely rule out the space for Chinese in class. The loose definition of EMI has made Chinese acquire its own rights in Hong Kong post-secondary education, which is mainly for secondary school leavers who fail to enter a bachelor degree program offered by a local university. Furthermore, since the end of last century, English has been considered a tool, not a must, in international communication (Jenkins, 2017). Applied linguists believe that if the L2 classroom would simulate real-word interaction, code-switching back to L1 should not be prohibited when they appear in an EMI environment (Lee, 2012). In particular for students whose English proficiency is limited, such a practice can help facilitate explanations (e.g., Li, 2008), maintain attention (e.g., Uys & van Dulm, 2011), and affiliate with students (e.g., Lin, 1996). In the recent decade, the new concept translanguaging, which embraces code-switching, even suggests the fluid use of all linguistic and cultural resources shared by the teacher and students to meet changing communicative needs during teaching and learning activities (García & Li, 2014). It also helps increase their confidence in learning (Chicherina & Strelkova, 2023). Given these insights, the roles of Chinese played in the EMI environment have become clear and somewhat grounded in education theories.

The above summary has sketched a picture of translanguaging in face-to-face teaching in Hong Kong, but a new trend for broadcast teaching has emerged due to the popularity of synchronous online or mixed-mode teaching throughout the COVID-19 pandemic. As teaching goes online, managing teacher-student communication and clearing up confusion about subject knowledge are often concerns (Clark-Ibáñez & Scott, 2008). Technical issues aside, online teaching is usually faced with challenges of lacking a professional environment (Singh & Meena, in press) and learning engagement (Sharma & Saini, in press). The fundamental differences between the offline and the online may also affect students' perceptions of and experiences with translanguaging in EMI lessons. Thus, this study aims to address two questions:

Will translanguaging be perceived and experienced differently by students in a face-to-face EMI classroom and those in an online EMI classroom?

If it will, to what direction and in what way can the difference be explained or understood?

3. Methodology and Results

This study dealt with an ill-defined, real-world problem involving professionals (teachers) and clients (students). To this end, it took an action-research approach and was divided into two stages: Stage I addressed the research questions using a quasi-experimental design; Stage II obtained insights from Stage I and explained them using a qualitative approach.

The site was a post-secondary institution in Hong Kong (the college henceforth) that offered full-time associate degree (AD) programs for secondary school leavers whose results in the Hong Kong Diploma of Secondary Education Examination (HKDSE) were not good enough to yield a degree offer from a local university. These students needed to take two mandatory courses on academic English in an EMI environment: one on academic writing for evaluation, and the other on academic writing for argumentation. All reported and discussed data in this paper came from the former.

3.1. Stage I – Quantitative Procedure

In week 6 of the semester, 53 students from the first course were invited to participate, with 50.9% of them being males (N = 27) and 49.1% females (N = 26); 79.2% of them speaking Cantonese as L1 (N = 42) and 20.8% being native Mandarin speakers (N = 11). Owing to the mixed mode of teaching during the pandemic, students back then could choose to attend lectures on campus (i.e. face to face) or on Zoom (i.e. online). In lecture 6, 49.1% of them came to school for a face-to-face lesson (N = 26, Group 1 hereafter) while the remainder were on Zoom (N = 27, Group 2 hereafter). Regardless of their preferences, the course lecturer, a male teacher, was obligated to teach the former in the physical classroom, and the whole lecture was synchronously broadcasted to the latter via Zoom.

Lecture 6 of the course taught i) how to carry out evaluation (i.e. weighing the benefits and drawbacks of a controversial solution to a problem) using six different reasoning methods and ii) how to present the evaluation result (i.e.

whether the benefits outweigh the drawbacks or the reverse) in a body paragraph. The lecturer was required to strategically teach the six reasoning methods for evaluation in English supplemented by Chinese. After the lecture, all the participants were asked to complete a questionnaire on the quality of teaching and the outcomes of learning. It was modeled and abridged from the college's official teaching evaluation form to be completed at the end of a credit-bearing course. They were asked to report their perceptions of and experiences with translanguaging in the lecture in a 5-point Likert scale. At the end of the questionnaire, they needed to give a score to the overall effectiveness of using some Chinese in the lecture.

Stage I aimed to examine whether the same translanguaging practice will be perceived and experienced differently by students in a face-to-face EMI classroom and those in an online EMI classroom. It follows that:

H_0 = There is no difference in perceiving and experiencing the translanguaging practice between the two groups.

H_a = There is a difference in perceiving and experiencing the translanguaging practice between the two groups.

3.2. Descriptive Statistics

For Group 1 (N = 26), who attended lecture 6 face to face, 69.3% of them (*N* = 18) strongly agreed (23.1%, *N* = 6) or agreed (46.2%, *N* = 12) that the translanguaging practice "has allowed the teacher to provide clear explanations"; 61.5% of them (*N* = 16) agreed that it "has allowed the teacher to share more advanced knowledge"; 73% of them (*N* = 19) strongly agreed (11.5%, *N* = 3) or agreed (61.5%, *N* = 16) that it "has enabled the teacher to stimulate my interest in the topic"; 92.3% of them (*N* = 24) strongly agreed (19.2%, *N* = 5) or agreed (73.1%, *N* = 19) that it "has made the teacher friendly and approachable"; 69.2% of them (*N* = 18) strongly agreed (15.4%, *N* = 4) or agreed (53.8%, *N* = 14) that it "has provided me with extra opportunities to learn"; 80.7% of them (*N* = 21) strongly agreed (3.8%, *N* = 1) or agreed (76.9%, *N* = 20) that it "has provided me with additional feedback on how well I was learning"; 73% of them (*N* = 19) strongly agreed (19.2%, *N* = 5) or agreed (53.8%, *N* = 14) that it "has helped me to maintain attention throughout"; and 69.2% of them (*N* = 18) strongly agreed (19.2%, *N* = 5) or agreed (50%, *N* = 13) that it "has increased my confidence of learning in the EMI environment". In general, 69.3% of students (*N* = 18) reported that the overall effectiveness of using some Chinese in the EMI lecture was "very good" (23.1%, *N* = 6) or "good" (46.2%, *N* = 12).

For Group 2 (*N* = 27), who attended lecture 6 on Zoom, 88.8% of them (*N* = 24) strongly agreed (48.1%, *N* = 13) or agreed (40.7%, *N* = 11) that the translanguaging practice "has allowed the teacher to provide clear explanations"; 70.4% of them (*N* = 19) agreed that it "has allowed the teacher to share more advanced knowledge"; 89.6% of them (*N* = 25) strongly agreed (29.6%, *N* = 8) or agreed (63%, *N* = 17) that it "has enabled the teacher to stimulate my interest in the topic"; 81.5% of them (*N* = 22) strongly agreed (14.8%, *N* = 4) or agreed (66.7%, *N* = 18) that it "has made the teacher friendly and approachable"; 88.9% of them (*N* = 24) strongly agreed (18.5%, *N* = 5) or agreed (70.4%, *N* = 19) that it "has provided me with extra opportunities to learn"; 85.2% of them (*N* = 23) strongly agreed (3.7%, *N* = 1) or agreed (81.5%, *N* = 22) that it "has provided me with additional feedback on how well I was learning"; 88.9% of them (*N* = 24) strongly agreed (51.9%, *N* = 14) or agreed (37%, *N* = 10) that it "has helped me to maintain attention throughout"; and 74.1% of them (*N* = 20) strongly agreed (18.5%, *N* = 5) or agreed (55.6%, *N* = 15) that it "has increased my confidence of learning in the EMI environment". In general, 88.9% of students (*N* = 24) reported that the overall effectiveness of using some Chinese in the EMI lecture was "very good" (29.6%, *N* = 8) or "good" (59.3%, *N* = 16).

Descriptive statistics revealed that both groups tended to value translanguaging in the EMI lecture, but Group 2 seemed to be more appreciative of the practice in some aspects: i) providing clear explanations, ii) simulating interest in the topic, iii) providing extra learning opportunities, and iv) helping maintain attention. For participants who strongly agreed or agreed to the statement, Group 2 outnumbered Group 1 by more than 15% in each of these aspects. For participants who considered the effectiveness of the practice "very good" or "good" overall, Group 2 outnumbered Group 1 by 19.6%. Thus, the data were further computed to SPSS to assess whether the differences were statistically significant.

3.3. Independent Samples T-Test

Group 1 (N = 26) was associated with a score of agreeing that the translanguaging practice "has allowed the teacher to provide clear explanations" = 3.81 (SD = .939), "has enabled the teacher to stimulate my interest in the topic" = *3.85* (SD = .613), "has provided me with extra opportunities to learn" = 3.85 (SD = .675), and "has helped me to maintain attention throughout" = 3.85 (SD = .881). Group 1 was also associated with a score of considering the overall effectiveness of the practice being positive = 3.85 (SD = .881). By comparison, Group 2 (N = 27) was associated with a score of agreeing that the translanguaging practice "has allowed the teacher to provide clear explanations" = 4.37 (SD = .688), "has enabled the teacher to stimulate my interest in the topic" = 4.22 (SD = .577), "has provided me with extra opportunities to learn" = 4.07 (SD = .550), and "has helped me to maintain attention throughout" = 4.41 (SD = .694). Group 2 was also associated with a score of considering the overall effectiveness of the practice being positive = 4.19 (SD = .622). To test the hypotheses that the two groups were associated with statistically different scores of agreeing to the four statements and rating the overall effectiveness of translanguaging in class, five independent samples *t*-tests were performed consecutively. Except for the data associated with providing clear explanations and helping maintain attention, the Group-1 and Group-2 distributions were sufficiently normal for the purposes of conducting a *t*-test. The results were reported separately below.

For the scores of agreeing that the translanguaging practice "has allowed the teacher to provide clear explanations", the assumption of homogeneity of variances was tested and satisfied via Levene's F test, $F(51) = .938$, $p = .337$. The independent samples *t*-test was associated with a statistically significant effect, $t(51) = 2.496$, $p = .016$. Students on Zoom were associated with a statistically significantly larger mean of agreeing to the statement than those in the face-to-face classroom. Cohen's d was estimated at 0.68, larger than a medium effect based on Cohen's (1992) guidelines. Since the assumption of normal distribution was not satisfied, a robust Welch *t*-test was further performed and associated with a statistically significant effect, $F(51) = 6.157$, $p = .017$. The statistical significance was confirmed.

For the scores of agreeing that the translanguaging practice "has enabled the teacher to stimulate my interest in the topic", the assumption of homogeneity of variances was tested and satisfied via Levene's F test, $F(51) = .003$, $p = .959$. The independent samples *t*-test was associated with a statistically significant effect, $t(51) = 2.301$, $p = .026$. Students on Zoom were associated with a statistically significantly larger mean of agreeing to the statement than those in the face-to-face classroom. Cohen's d was estimated at 0.62, close to a medium effect based on Cohen's (1992) guidelines.

For the scores of agreeing that the translanguaging practice "has provided me with extra opportunities to learn", the assumption of homogeneity of variances was tested and satisfied via Levene's F test, $F(51) = 2.369$, $p = .130$. The independent samples *t*-test was not associated with a statistically significant effect, $t(51) = 1.351$, $p = .183$. Students on Zoom were not associated with a statistically significantly larger mean of agreeing to the statement than those in the face-to-face classroom. Cohen's d was estimated at 0.36, close to a small effect based on Cohen's (1992) guidelines.

For the scores of agreeing that the translanguaging practice "has helped me to maintain attention throughout", the assumption of homogeneity of variances was tested and satisfied via Levene's F test, $F(51) = .002$, $p = .967$. The independent samples *t*-test was associated with a statistically significant effect, $t(51) = 2.668$, $p = .010$. Students on Zoom were associated with a statistically significantly larger mean of agreeing to the statement than those in the face-to-face classroom. Cohen's d was estimated at 0.73, close to a large effect based on Cohen's (1992) guidelines. Since the assumption of normal distribution was not satisfied, a robust Welch *t*-test was further performed and associated with a statistically significant effect, $F(51) = 7.066$, $p = .011$. The statistical significance was confirmed.

For the scores of considering the overall effectiveness of the translanguaging practice being positive, the assumption of homogeneity of variances was tested and satisfied via Levene's F test, $F(51) = 2.190$, $p = .145$. The independent samples *t*-test was not associated with a statistically significant effect, $t(51) = 1.623$, $p = .111$. Students on Zoom were not associated with a statistically significantly larger mean of acknowledging the translanguaging practice than those in the face-to-face classroom. Cohen's d was estimated at 0.45, close to a medium effect based on Cohen's (1992) guidelines.

In summary, quantitative data analyses have indicated that there was no statistically significant difference in the general perception of translanguaging practice between students in the face-to-face classroom and those on Zoom, but

that the latter were associated with a statistically significantly larger mean of learning experience than the former in three aspects: being provided with clear explanations, being made interested in the topic, and being kept maintaining attention.

3.4. Stage II – Qualitative Procedure

Given the statistically significant differences in these aspects between the two groups, three students from each group were invited to a semi-structured interview on the impacts of using some Chinese in the EMI environment on their understanding of subject matter, interest in the topic taught, and concentration in class. Stage II aimed to account for the subtle differences between those in the face-to-face classroom and those on Zoom. The interviews with Group 1's representatives were conducted face to face; those with Group 2's via Zoom. All interviewees were asked three questions:

What do you think about the teacher's use of Chinese in the EMI environment to your understanding of "evaluation"?

What do you think about the teacher's use of Chinese in the EMI environment to your interest in "evaluation"?

What do you think about the teacher's use of Chinese in the EMI environment to your concentration in class?

3.5. Key Findings from Interviews

In response to the first question, interviewees from both groups showed appreciation for the teacher's use of Chinese in the lecture. They reported that this had helped them understand how to take different approaches to evaluation. That said, one representative from Group 2 mentioned, "because it is not easy to follow when you listen to a lecture online, speaking Chinese really helps a lot"; another from Group 2 echoed, "maybe he speaks clearly to students on campus, but his voice sometimes goes unclear via Zoom, and in this situation I prefer him using Cantonese". In response to the second question, a representative from Group 2 said, "attending class with a PowerPoint presentation via Zoom can be boring, and the topic is abstract, but his Chinese examples make it look interesting enough"; another from Group 2 stated, "on the top-right computer screen is a teacher with no body language and few facial expressions, and you will lose interest in the topic if he keeps speaking a language that you are not so good at". In response to the third question, even a representative from Group 1 pointed out, "students who attend class from home may not listen if he keeps using English; there are too many temptations on computer"; another from Group 2 was aware of the trick, "I am easily distracted, but I can be brought back to the lecture when he suddenly changes to speak Cantonese".

In summary, the interviewees partly explained why translanguaging in the EMI lecture could have made a more significant positive impact on the students online than those offline. The online setting might pose difficulties in comprehending the teacher's speech, create a barrier to non-verbal communication between the teacher and students, and decrease students' attention span in class. These problems especially could be alleviated by strategic use of L1. This might be why the translanguaging practice may have a greater impact on students online than those offline in terms of being provided with clear explanations, being made interested in the topic, and being kept maintaining attention.

4. Discussion and Conclusion

This study has discovered that, at a general level, translanguaging may be perceived and experienced similarly by Hong Kong post-secondary students in a face-to-face EMI classroom and those in an online EMI classroom. Whether they attend class synchronously offline or online, translanguaging is deemed effective in oiling the wheels of teaching and learning, though it may not directly open up more learning opportunities. As the line between the online and offline blurs, students in the physical classroom sometimes behave as if they were attending class online, which may make them unaware of any minor differences unless strongly emphasized. Notwithstanding, the students' perceptions and experiences are not exactly alike. Compared to the former, the latter tend to find the teacher's use of Chinese more helpful in improving their understanding of subject matter, arousing their interest in the topic, and helping them concentrate in class. The subtle differences can be attributed to the characteristics of the virtual classroom. Unlike the physical one, the virtual classroom can be easily disturbed by network connectivity issues (Singh & Meena, in press), shortage of e-learning

skills (Clark-Ibáñez & Scott, 2008), and other applications running on the student's device, not to mention the lack of effective paralinguistic and non-verbal communication between the teacher and students. When combined, they can lead to an unfavorable environment for learning which makes students give up listening. Translanguaging with L1 can help to ease the effects of these problems by removing the L2 barrier, decreasing the psychological distance between the teacher and students, and (re)focusing students' attention. These pedagogical compensations re-create an engaging and dynamic learning atmosphere that simulates the face-to-face counterpart (Alasmari et al., 2022). Thus, at a deeper level, students in an online EMI classroom will be more appreciative of translanguaging than those in a face-to-face EMI classroom.

The world has entered the post-COVID era. Although online teaching will not completely replace face-to-face teaching, synchronous online teaching has become part of the new normal. Further studies are recommended to examine to what extent the merits of face-to-face pedagogical practices and perspectives are transferrable to online teaching and how they are adopted (or adapted) across the blurring line between the offline and online classroom settings.

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The Effectiveness of Pedagogical Translanguaging in Alleviating FLA among Chinese Tertiary EMI Learners

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Abstract: When internationalization began to permeate the world's higher education, the English-medium Instruction (EMI) approach has been massively emerging in Chinese institutions. Given the dominance of native-speakerism, the EMI approach becomes demanding in learners' English proficiency. However, while many learners are non-native speakers with limited language ability, they have been experiencing wide range of negative emotions, distinctly including foreign language anxiety (FLA) as an influential one in terms of content learning and language acquisition. In this regard, translanguaging is introduced as a theory and pedagogical strategy to counteract the EMI's monolingualism, and thus promote the learners' emotional well-being in relation to foreign language learning and using. However, research on the topic which incorporates pedagogical translanguaging with its emotional aspect is still at experimental stage. Therefore, the present study investigates how the use of pedagogical translanguaging strategies help alleviate the Chinese EMI learners' FLA and enhance their foreign language enjoyment (FLE). Using a mixed methodological framework, the study adopts qualitative methods including classroom observations and interviews with stimulating recalls by the observational recordings, and adapted Scales of FLA and FLE to provide a full appreciation of the affective potentials of pedagogical translanguaging. The findings of the study provide implications for EMI stakeholders to recognize the unique affective benefits of utilizing pedagogical translanguaging in EMI classroom settings.

Keywords: EMI, pedagogical translanguaging, foreign language anxiety, foreign language enjoyment

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‘Are Chinese Principals Instructional Leaders Yet?’ A Scoping Review of the Literature in Chinese Context

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Abstract: It has been about a decade since the Chinese government promulgated the Professional Standards for Principals of Compulsory Education Schools in 2013. Instructional leadership (IL) then became one of the principals’ professional responsibilities in mainland China. This study aims to explore the literature on principal’s IL in the Chinese context by conducting a scoping review. It synthesized the research state and discussed the future research directions of IL in China. 22 studies written in English from Scopus, Google Scholar and Web of Science and 55 empirical studies written in Chinese in CNKI (zhiwang) were selected with the principles of the topic of IL and in the context of mainland China. The results first showed that the empirical studies of IL in Chinese context started relatively late, and the numbers were limited. Second, influencing factors and development strategies of IL were highly discussed by different scholars. They also developed new models in Chinese context with new dimensions and explored relationships between IL and other concepts based on the unique educational context. It was encouraged that more IL studies with diverse research directions in China in the future. Moreover, in-depth investigations of the new dimensions in the Chinese context will also expand the global knowledge base of IL.

Keywords: instructional leadership, a scoping review, Chinese context, empirical studies

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Kindergarten Principal's Role during COVID-19 and Beyond: Hong Kong Experience

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Abstract: With three years of quarantines and various school closures, the COVID-19 pandemic has had a major impact on early childhood education in Hong Kong. While teachers and children were unprepared for online learning, kindergarten principals need to decide what is best for their children and ways to lead their teachers through this transition. Additionally, parents had diverse concerns that needed to be addressed, with some anxious about the learning gap and others struggling to provide support for online learning at home. Returning to school posed challenges for both teachers and children, presented unique challenges for the kindergarten principal who had to balance the need for safety protocols with the need to provide a nurturing and supportive environment for young children, teachers and staff. Two Hong Kong kindergarten principals reflect jointly on the pandemic challenges and recoveries on working teachers and staff, children and families, as well as the programmes and daily schedule at their kindergartens. They run kindergartens that offer half-day and whole day programme respectively, providing a comprehensive understanding of the early childhood landscape of Hong Kong during COVID-19. In this presentation, they will also share their envisioned future for their kindergartens, and their plans to move forward after the pandemic.

Keywords: kindergarten, principal's role, early childhood education, post pandemic

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ploring the L2 Motivational Self of Chinese Students in Learning English: A mixed-methods Study

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Abstract: This research proposal aims to conduct an extensive investigation into the motivational factors influencing mainland Chinese students' second language (L2) learning of English in English Medium Instruction (EMI) universities in Hong Kong. The study intends to employ a mixed-methods approach, incorporating both quantitative and qualitative data collection techniques. To begin with, an online motivation questionnaire will be distributed to 400 mainland Chinese students enrolled in the eight government-funded universities in Hong Kong. This questionnaire will help gather information on their motivational beliefs and attitudes towards L2 learning. Subsequently, in-depth interviews will be conducted with a subset of 24 students, selected through purposeful sampling, in order to gain deeper insights into their motivational experiences. This research holds potential significance in enhancing our understanding of mainland Chinese students' L2 motivation within the unique context of Hong Kong EMI universities. The findings will contribute to the development of educational interventions aimed at improving L2 motivation among this student population. Furthermore, the study's outcomes have the potential to enrich theoretical knowledge regarding L2 motivation in foreign language learning settings. Additionally, the research will shed light on the future of higher education in Hong Kong, considering the implications of the findings for language education policies and practices.

Keywords: L2 motivational self system, Chinese students, EMI, Hong Kong, future of higher education

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Building Leadership Capacity Using a Professional Learning Mentoring Chain: Reimagining the Curriculum with an Arts Immersion Approach

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Abstract: Although the Arts offer enriched opportunities for learning and engagement across curriculum areas, few generalist primary teachers (GPTs) in Australia have the capability or confidence to use the Arts in this way. Additionally, many primary arts teachers do not have expertise in all five arts subjects or in integrated learning. This study investigated an innovative, unique approach to professional learning based on a partnership between a university (QUT) and five Brisbane metropolitan primary schools. The Professional Learning Mentoring Chain was developed to build capacity in primary arts teachers and GPTs to become pedagogical leaders in their schools. Primary arts teachers completed an AMP It Up! drama module at QUT before engaging in on-the-job professional learning by co-mentoring with GPTs through using an Arts Immersion approach. AMP It Up! modules build teachers' capacity to be Arts Mentor Practitioners (AMPs) working alongside their colleagues in schools. An Arts Immersion approach uses the arts as a domain of learning and as unique languages across the curriculum for integrated learning. This approach resists siloing disciplines within the curriculum and is explored in a qualitative case study, funded by a (institution) Early Career Research Grant. Research Questions: 1) How does the AMP it Up! training program prepare primary arts teachers to become AMPs in a primary school? 2) How can a co-mentoring professional learning chain build the capacity of GPTs and AMPs as pedagogical leaders? 3) How does an Arts Immersion approach influence teacher interpretation of the curriculum in primary schools?

Keywords: Arts Immersion, professional learning, co-mentoring, curriculum, pedagogy

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Career Assessment Development for the Future: A Game-Based Perspective on Developing Career Adaptability Assessment in SEN Students

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Abstract: In response to assessing career development needs of students with special educational needs (SEN), this study introduces an innovative game-based assessment tool, the 4C board game, to evaluate career adaptability from four key dimensions: "Concern," "Curiosity," "Control," and "Confidence." Gamification techniques hold promising potential in enhancing the engagement and validity of assessments for students with SEN. Differing from traditional self-reported scales, the 4C game incorporates the perspectives of multiple assessors, such as teachers and practitioners, providing valuable assessment information to understand SEN students' career adaptability skills. Among over forty SEN school leavers who attended a post-secondary training program for SEN, periodic evaluations at three-time points (T1, T2, and Follow-up) revealed significant enhancements in SEN students' career adaptability over the last two academic years after attending. Notably, career curiosity and confidence exhibited steady growth, while career concern and control demonstrated fluctuating yet positive trends. This finding underscores the necessity for regular assessments to optimize the training program for SEN school leavers, with a focus on providing practical support based on individual assessment results. In preparation SEN school leavers for social integration, the game-based 4C board game offers a holistic and context-rich evaluation of their career adaptability. This innovative assessment method offers a nuanced understanding of students' career development and serves as a valuable and engaging tool for stakeholders to identify the career aspirations of SEN school leavers and provide tailor-made training, which also supports their career adaptability strategies, enabling a smoother social integration and facilitating their pursuit of a meaningful life.

Keywords: School leavers, special educational needs, career assessment, board game, career adaptability assessment

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Enhancing Creative Problem-Solving and Social-Emotional Learning through an Entrepreneurship Education Training Programme: An Exploratory Action Research

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Abstract: Entrepreneurship training is conceptually tied to creative problem-solving (CPS) and social-emotional learning (SEL) thanks to its emphasis on innovation and pragmatism. Amidst the long-standing and well-publicized shortfall in creativity and interpersonal competencies amongst secondary schoolers in Hong Kong, our team intended to, via the present pilot action research project, gauge the impact of a self-developed Entrepreneurship Education (EE) training programme on elevating both the CPS and SEL amongst a group of local secondary students.

Five 2-hour, face-to-face, EE training sessions were implemented in a Hong Kong secondary school from February to April 2023. Several training sessions incorporating a host of EE elements, including the Design Thinking process, team building, applications of business model(s), pitching and experiential learning in an authentic context (i.e., a business pitching contest followed by a campus-wide exhibition fair), were featured. The flipped classroom pedagogical approach was also incorporated to enhance activity-based learning and student engagement. A mixed- method evaluation framework was adopted to evaluate the impact of this initiative. Besides administering a set of questionnaires tapping into various indicators of student participants' CPS and SEL (e.g., empathy, leadership, entrepreneurial passion, and competence etc.) before and after the training, our team also conducted semi-structured focus group interviews with students and teachers involved to solicit their perception of the training.

Despite its exploratory nature, the present initiative constitutes a pioneer endeavor in the local secondary school context to utilize EE in promoting CPS and SEL. Discussions pertaining to the major findings and implications are also featured in this presentation.

Keywords: entrepreneurship education, creative problem-solving, social-emotional learning, design thinking, Hong Kong secondary education

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What Elicit Dual Focus Learning in IDLE Personal Beliefs and Affective Factors towards Technology Acceptance

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Abstract: The ability to attain desired learning outcomes with Informal Digital Learning of English (IDLE) practices has been extensively researched. Among the publications, scholars in the field has argued for the significance of quality IDLE frequency, defined as the dual focus of both context meaning and linguistic form, instead of the overall quantity of IDLE, that correlates and predicts the learning achievement. However, little research attention has been given to the potential factors that encourage students to engage in dual focus learning, which is the research gap that this study addresses. After a review of existing literature, we identified two critical variables that contribute to deep learning: technology beliefs and language affection which have the potential to elicit the dual focus learning behavior. Based on this deliberation, we measured these two variables with the Technology Acceptance Model and the the Attitude and Motivation Test Battery and quantified quality IDLE frequency with the Digital Diary technique for path analyses. With a sample of 155 Chinese university students, the analyses revealed that (1) both technology beliefs and language affection can significantly predict quality IDLE frequency, but (2) not all elements within these two variables contributes to the testified relationship. The influence of cultural-specific educational contexts in IDLE practices are discussed.

Keywords: informal digital learning of English, quality IDLE, dual focus learning, technology acceptance, learning attitudes and motivation

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从未来教育视角出发，聚焦分布式领导在幼儿园中的应用

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摘要： 一直以来，教育变革和发展都是全球关注的重要议题之一，作为教育的重中之重，在未来教育强调注重人性化和创新性的同时，学校的管理模式和管理者风格会发生怎样的转变呢？然而，近些年，随着分布式领导的盛行，学校管理将焦点从个人“领导者“的属性和行为方面发生转移，由主要领导引领整个团队，转向选拔并组织各个层面的能力优势者，以多个参与者的相互作用的集体活动为模式，并鼓励领导角色的动态变更。本文旨在通过未来教育视角，借鉴中小学分布式领导管理经验，聚焦于分布式领导与幼儿园管理模式相结合，并赋予其新的定义，重构分布式领导的框架体系，以幼儿园管理和运行的机制为载体，重新思考分布式领导对于幼儿园管理模式的意义，并具体探讨分布式领导在幼儿园中的应用。

关键字：未来教育视角; 幼儿园; 分布式领导

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From the Perspective of Future Education, Focus on the Application of Distributed Leadership in Kindergartens

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Abstract: For a long time, the reform and development of education has been one of the important issues of global concern. As the top priority of education, when the future education emphasizes humanization and innovation, how will the management mode and management style of schools change? However, in recent years, with the prevalence of distributed leadership, the focus of school management has shifted from the attributes and behaviors of individual "leaders", with the main leader leading the entire team, to the selection and organization of ability strengths at all levels, based on the interaction of multiple participants in the collective activity model, and encourage the dynamic change of leadership roles. This paper aims to draw lessons from the experience of distributed leadership management in primary and secondary schools from the perspective of future education, focus on the combination of distributed leadership and kindergarten management mode, give it a new definition, reconstruct the framework system of distributed leadership, take the mechanism of kindergarten management and operation as the carrier, and rethink the significance of distributed leadership for kindergarten management mode. The application of distributed leadership in kindergarten is discussed.

Keywords: future education perspective, kindergarten, distributed leadership

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