



As a result of COVID-19, graduate students and junior researchers around the world have observed a dramatic reduction in opportunities to share and present their scholarly work, give and receive feedback, and learn from one another. United Arab Emirates University, Education University of Hong Kong, and University of Helsinki have joined efforts to organize the **International Graduate Studies Seminar [IGSS 2021]** to address this issue. With the theme ***Innovative Approaches in Teaching, Learning, and Research***, IGSS 2021 will provide an online platform for graduate students and junior researchers from the three Universities to continue to develop themselves and grow as scholars, specifically in the field of Education. Plenary talks (including a meet-the-editors session) and faculty workshops on a variety of topics will be offered. There will also be small group student-led conversations and thematic presentations and discussions.

**Looking forward to seeing all of you at IGSS 2021!**

**Day One: United Arab Emirates University (26 Jan 2021, Tuesday)**

All sessions will be recorded.

*Time	Day 1 – 26 Jan 2021 (Tuesday)
10-10:15 AM	<ul style="list-style-type: none"> <li>• Welcome Remarks from the:               <ul style="list-style-type: none"> <li>○ Prof. Ali Hassan Al Marzouqi, Dean of UAEU College of Graduate Studies</li> <li>○ Dr. Najwa Alhosani, Acting Dean of UAEU College of Education</li> <li>○ Organizing Committee</li> </ul> </li> <li>• Orientation – Schedule for the 3 Days</li> </ul> <p> ZOOM Link: <a href="https://uaeu-ac-ae.zoom.us/j/93281845006">https://uaeu-ac-ae.zoom.us/j/93281845006</a></p>
10:15-11:30 AM	<p>UAEU Keynote Speaker with Peer Commentaries</p> <p><b>KEYNOTE: <i>Re-envisioning the Landscape of Teaching, Learning, and Research in Postgraduate Education</i></b></p> <p><b>Speaker:</b> Dr. Mark Baildon (NIE/NTU)  <b>Peer Commentaries from:</b> Dr. Hassan Tairab (PhD Coordinator) and Dr. Ali Shehadeh (MEd Coordinator)</p> <p>This talk aims to go beyond the usual technocratic solutions to improve postgraduate education (e.g., program structures, mentoring programs, writing retreats, etc.). While these are important, they don't go far enough in addressing the problems facing university education and research (e.g., managerialism, obsession with metrics and rankings, etc.). Instead, we will explore possibilities to re-envision the purposes and practices of teaching, learning, and research in postgraduate education to build more inclusive institutional cultures, support different forms of scholarly work, and be more responsive to our communities and the grand challenges of our times. We will examine the question of how we might collectively imagine, create, and enact new academic cultures among faculty and students that engender more generative and satisfying knowledge work.</p> <p> ZOOM Link: <a href="https://uaeu-ac-ae.zoom.us/j/93281845006">https://uaeu-ac-ae.zoom.us/j/93281845006</a></p>

11:45 AM  
-12:45 PM

**Dr. Maria Estratopoulou - *Assessing children 'at risk' : See beyond the obvious in school settings***

Early identification efforts are particularly critical during the educational years, when students are most amenable to change in behavioural, social, and academic arenas and before students with emotional and/or behavioural disorders (EBD), developmental disorders and a number of mental health conditions, experience negative outcomes within and beyond the school setting. Given the costs associated with these conditions to students themselves, their families, and society as a whole, it is not surprising that a growing area of interest in educational research focuses on assessing children 'at risk'. The session focusing on the importance of using observations, to identify children 'at risk' for emotional/behavioural difficulties and/or developmental delays in school settings and the presentation of the Motor Behaviour Checklist for children (MBC; Efstratopoulou, Janssen & Simons, 2012) as an assessment instrument for teachers and educational professionals to rate their students and check the effectiveness of their interventions. The MBC for children is a valid and reliable assessment tool, which provides valuable information on motor, emotional, behavioural and overall development of children. It has been translated in seven languages and has been used by professionals around the world, for early diagnosis purposes and for assessing the effectiveness of interventions. Research aiming to provide the Arabic version of the instrument and new data on the area of early diagnosis in a specific (Arabic) population will assist professionals and multidisciplinary groups working in the field of Special Education, in carrying out more accurate, valid and complete early screening assessments. Ideas for engaging Graduated students and early year researchers from UAEU and Universities overseas in the project will be discussed further during the session.

 ZOOM Link: <https://uaeu-ac-ae.zoom.us/j/94950036949>

**Dr. Ali Shehadeh - *Leadership in Publishing Research: Nurturing and Training Young Researchers***

Today, publishing research is hitting virtually all universities and research centers around the world. However, high quality publishing continues to be a real challenge for many researchers, in particular research students and novice researchers (i.e., young researchers). The main purpose of this talk is to suggest five instructive and practical ways for nurturing and training young researchers, and providing leadership in publishing research. These are: (1) Providing leadership in the form of holding workshops and seminars; (2) Providing leadership in the form of mentoring young researchers; (3) Providing leadership in the form of editors and reviewers' guidance; (4) Providing leadership in the form of co-authoring and co-presenting with young researchers; and (5) Providing leadership by creating research groups within and among institutions. The ultimate goal for providing this leadership is to enable young researchers get published, join the publishing community, and contribute to the body of knowledge in their respective disciplines.

 ZOOM Link: <https://uaeu-ac-ae.zoom.us/j/94409330426>

**Dr Mona Aljanahi - *Go Big or Go Home: The Rhizomatic Literacy Practice of High School Students in the UAE: From Proposal to Publication***

New trends in literacy studies shifted their focus from looking at the consequences and gains of literacy to examining its uses by various cultural groups. These new trends try to situate literacy

practices in different spheres and contexts as literacy varies across cultural, social, individuals, geographical, and historical timeframes. This study tried to trace the myriad of literacy practices of high school students at home and school spheres in the United Arab Emirates. The study used a convergent concurrent mixed method. Findings revealed that the UAE high school students' inside-school literacy practices were uniformed in nature, where students felt that in order to do well, they had to adhere to rules and guidelines set by the textbook and/or the teachers. Furthermore, the findings showcased the complexity of students' literacy practices, particularly outside-school literacies, rendering them to fall under the overarching concept of the rhizome as well as the New London Group's (1996) definition of Multiliteracies. This presentation focuses not only on the study's content, but sheds light on how this particular project evolved into published articles in Q1 journal.

 ZOOM Link: <https://uaeu-ac-ae.zoom.us/j/94237605447>

**Dr. Khalifa Al Suwaidi – *Charting the Path for Innovation in Education***

Innovation in education needs reliable foundations as well as international cooperation. Most importantly, it needs incentives and methods to disseminate best practices. In this lecture, I will first focus on some of these practices, including the Master of Innovative in Education which is offered by the College of Education at the United Arab Emirates University as a practical model for preparing a generation of creative educators. Second, I will talk about the platform that has been developed by the International Task Force on Teachers for Education 2030 in order to exchange global experiences within the community of teachers. Then, I will talk about the UNESCO Hamdan Award for Best Practices in Teacher Development in the World as a model for rewarding best practices in teacher development. Finally, I will give an overview of the World Giftedness Center which is an electronic platform that promotes and shares with the world best practices in developing talents and gifts. This innovative platform will be launched in October 2021.

 ZOOM Link: <https://uaeu-ac-ae.zoom.us/j/94058755959>

1 – 2 PM

**Informal Networking (Thematic and Mixed-Interest Groups):**

3 Minute Sharing for Each student per room with 2 minute Q and A (5 minutes sharing per student)  
15 rooms of 10 students each



<b>SIG 1: Teacher Learning &amp; Professional Development</b>	Moderator: Basma Al Abri	<a href="https://uaeu-ac-ae.zoom.us/j/96206388177">https://uaeu-ac-ae.zoom.us/j/96206388177</a>
<b>SIG 2: Classroom Practices</b>	Moderator: Hind Al Ghufli	<a href="https://uaeu-ac-ae.zoom.us/j/95724346791">https://uaeu-ac-ae.zoom.us/j/95724346791</a>
<b>SIG 3: Literacy and Language Education</b>	Moderator: Sana Al Maktoum	<a href="https://uaeu-ac-ae.zoom.us/j/93656576515">https://uaeu-ac-ae.zoom.us/j/93656576515</a>
<b>SIG 4: Parenting &amp; Family</b>	Moderator: Abeer El Dib	<a href="https://uaeu-ac-ae.zoom.us/j/95401072850">https://uaeu-ac-ae.zoom.us/j/95401072850</a>

	<b>SIG 5: Curriculum &amp; Pedagogy</b>	Moderator: Fajr Al Kouz	<a href="https://uae-u-ac-ae.zoom.us/j/97746075872">https://uae-u-ac-ae.zoom.us/j/97746075872</a>			
	<b>SIG 6: Policy &amp; Leadership</b>	Moderator: Aizhan Shomotova	<a href="https://uae-u-ac-ae.zoom.us/j/97191660435">https://uae-u-ac-ae.zoom.us/j/97191660435</a>			
	<b>SIG 7: Socio-emotional Development</b>	Moderator: Bernadette Guirguis	<a href="https://uae-u-ac-ae.zoom.us/j/99328369958">https://uae-u-ac-ae.zoom.us/j/99328369958</a>			
	<b>SIG 8: Physical Activity, Motor Skills and Learning</b>	Moderator: Sabahet Bruncaj	<a href="https://uae-u-ac-ae.zoom.us/j/91318737825">https://uae-u-ac-ae.zoom.us/j/91318737825</a>			
	<b>SIG 9: Mathematical Development and Learning Difficulties</b>	Moderator: Nabil Al Farra	<a href="https://uae-u-ac-ae.zoom.us/j/95353372023">https://uae-u-ac-ae.zoom.us/j/95353372023</a>			
	<b>SIG 10: Learning, Motivation and Well Being</b>	Moderator: Waed Bark	<a href="https://uae-u-ac-ae.zoom.us/j/93612816393">https://uae-u-ac-ae.zoom.us/j/93612816393</a>			
	<b>MIG 1</b>	Moderator: Najla Al Owais	<a href="https://uae-u-ac-ae.zoom.us/j/98199731381">https://uae-u-ac-ae.zoom.us/j/98199731381</a>			
	<b>MIG 2</b>	Moderator: Hanan Al Marshadi	<a href="https://uae-u-ac-ae.zoom.us/j/93277541446">https://uae-u-ac-ae.zoom.us/j/93277541446</a>			
	<b>MIG 3</b>	Moderator: Halima Omar	<a href="https://uae-u-ac-ae.zoom.us/j/93273313660">https://uae-u-ac-ae.zoom.us/j/93273313660</a>			
	<b>MIG 4</b>	Moderator: Eman Ragheb	<a href="https://uae-u-ac-ae.zoom.us/j/96584734324">https://uae-u-ac-ae.zoom.us/j/96584734324</a>			
	<b>MIG 5</b>	Moderator: Abdulla Taha	<a href="https://uae-u-ac-ae.zoom.us/j/91682346531">https://uae-u-ac-ae.zoom.us/j/91682346531</a>			
2 – 2:15 PM	<b>Wrap Up</b>					

*\*All timings presented above are in UAE Time Zone (GMT +4)*

**Day Two: The Education University of Hong Kong (27 Jan 2021, Wednesday)**

All sessions will be recorded.

*Time	Day 2 – 27 Jan 2021 (Wednesday)
2-2:10 PM	<p>Welcome by Head</p> <p> ZOOM Link: <a href="https://eduhk.zoom.us/j/92586876480">https://eduhk.zoom.us/j/92586876480</a></p>
2:10 – 3:10 PM	<p><b><i>KEYNOTE PLENARY SESSION: “Meet Journal Editors and Get your Work Published”</i></b></p> <p><b>Speakers:</b> Dr Derwin Chan, Dr Sun Jin, Dr Alfredo Bautista (Department of Early Childhood Education, ECE), Dr Wang Zhen Lin (Department of Psychology)</p> <p><b>Overview:</b> In this session, four EdUHK-based Associate Editors will discuss factors to consider in preparing manuscripts for publication in academic journals. Dr Derwin CHAN will give an overview of the peer review process and delineate key steps and tips for you to increase your chances of success. He will also elaborate on how to handle the reviewers’ criticisms professionally and how to increase the satisfaction of both reviewers and editors. Dr SUN Jin will offer advice on how to choose the most suitable journal for our work and how to avoid some common pitfalls in manuscript preparation. Dr Alfredo BAUTISTA will focus on the need to tailor our writing to the specific characteristics of each journal and will elaborate on the importance of being strategic, realistic, persistent, and resilient. He will also argue that gaining extensive experience as peer-reviewers allows us to improve our own skills as authors. Dr Zhenlin WANG will introduce new trends in academic journal publications including open access journals, pre-registered reports, and data depository. She will also review the standard for statistics reporting in social science and education.</p> <p> ZOOM Link: <a href="https://eduhk.zoom.us/j/92586876480">https://eduhk.zoom.us/j/92586876480</a></p>
3:10 – 4:10 PM	<p><b>PARALLEL WORKSHOPS:</b></p> <p><b>Dr LI Jianbin</b> (Department of ECE).</p> <p><b>Title:</b> <i>“Meta-Analysis: A Powerful Technique to Synthesize Literature”</i></p> <p><b>Overview:</b> Evidence-based prevention and intervention strategies as well as policy making are often developed based on robust empirical findings. However, inconsistent and inconclusive findings from the literature are adverse to such endeavour. Meta-analysis is a powerful technique for researchers to quantitatively summarize empirical findings from the existing literature to achieve relatively-conclusive conclusions of a research topic. This technique is not only frequently used in psychological and educational studies, but it is also widely applied in other disciplines (e.g., management, criminology, public health, social work, medicine, etc.). In this talk, I will briefly introduce the definition and several popular types of meta-analysis, present the procedure of how to organize a meta-analysis, and discuss some key points that requires particular attention when conducting and publishing a meta-analysis.</p>

**Synopsis:** Meta-analysis is a powerful technique for researchers to quantitatively summarize empirical findings from the existing literature to achieve relatively-conclusive conclusions of a research topic. The presenter will briefly introduce the definition and several popular types of meta-analysis, present the procedure of how to organize a meta-analysis, and discuss some key points that requires particular attention when conducting and publishing a meta-analysis.

 ZOOM Link: <https://eduhk.zoom.us/j/97874584795>

**Dr LAM Ho Cheong** (ECE Department)

**Title:** *“Mixed methods? But the methodological assumptions of qualitative and quantitative research are different”*

**Overview:** In my earlier PhD, I conducted quantitative intervention study with the use of experimental design. Later on, I have become fascinated with qualitative research, in particular phenomenography, which is now the main theoretical and methodological framework used predominately in most of my research work. Going back and forth between quantitative and qualitative research approaches, I started to realize the great differences in the methodological assumptions behind the two approaches. They differ in terms of the purpose of conducting a study (to verify or to formulate a theory), research question (closed or open ended), the object of study (the phenomenon or the participants’ ways of seeing the phenomenon), sampling methods (random selection of a large number of participants or selecting those participants who give us new insight into the phenomenon), generalizability (across people or across situations), etc. In this presentation, I will illustrate these differences with the use of examples in my own research in classroom learning and teaching of Chinese characters in kindergarten and junior primary school settings as well as in my experience in teaching research methods at the Education University of Hong Kong.



**Synopsis:** In this workshop, the presenter will analyse the great differences in the methodological assumptions between quantitative and qualitative research approaches, drawing on examples from his own research in kindergarten and junior primary classrooms in Hong Kong.

 ZOOM Link: <https://eduhk.zoom.us/j/92940046789>

**Prof Kerry LEE** (ECE Department)

**Title:** *“An advanced introduction to latent variable modelling”*

**Overview:** In this workshop, I will introduce the use of the Mplus programme for latent variable modelling. One of the advantages of using Mplus is its abilities to accommodate a variety of data. However, the use of complex designs and the presence of non-normal data do require special handling. I will talk about some of the work-arounds that I have come across in analysing data that often turn up in developmental research.

	<p><b>Synopsis:</b> The presenter will introduce the use of the Mplus programme for latent variable modelling and will talk about some of the work-arounds to deal with developmental research data.</p> <p> ZOOM Link: <a href="https://eduhk.zoom.us/j/91217401771">https://eduhk.zoom.us/j/91217401771</a></p> <p><b>Prof Sue SALTMARSH</b> (ECE Department of ECE)</p> <p><b>Title: “Frankenstein’s dilemma: Key issues in research ethics”</b></p> <p><b>Overview:</b> The monster at the centre of Mary Shelley’s gothic horror novel, Frankenstein; or The Modern Prometheus – considered by many to be the first literary work of science fiction – holds an iconic place in the popular imagination. Created from human body parts and brought to life by the young scientist, Victor Frankenstein, the monster and his murderous impulses have long been considered a kind of cautionary tale about the excesses of science and the risks they posed to values and norms of the day. This workshop, however, proposes that a central thesis of the novel – and Victor Frankenstein’s dilemma – is primarily concerned with personal and professional ethics. Drawing on insights from Shelley’s novel, and informed by principles underpinning research ethics documents that guide research practice, the workshop will consider some of the key issues with which contemporary researchers must grapple: What is the function and purpose of ethical review procedures? What constitutes risk when researching in different kinds of settings? How can ethical dilemmas be anticipated and avoided? How does researcher identity and positionality impact on the ethical conduct of research? How can researchers best balance procedural requirements with practical realities? The workshop will be interactive, providing opportunities for discussion of both the policy and pragmatic dimensions of ethical practice in contemporary research.</p> <p><b>Synopsis:</b> This workshop considers questions of personal and professional ethics in research. Drawing insights from Mary Shelley’s Frankenstein, we will explore guiding principles of research conduct and implications for contemporary researchers.</p> <p> ZOOM Link: <a href="https://eduhk.zoom.us/j/91868740667">https://eduhk.zoom.us/j/91868740667</a></p>
4:10 – 4:30 PM	<b>BREAK</b>
4:30 – 6 PM	<p style="text-align: center;"><b>Special Interest Groups (SIGs) Sessions<sup>#</sup></b></p> <p>There will be around 5 presenters in each Special Interest Group (SIG) from the three Universities, supported by a facilitator (faculty member from EdUHK). Each contributor will record a 15-minute video presentation (slides plus voice; camera is optional). Contributors will watch all the videos in their SIG in advance AND think of one key question to be asked to the other authors in her/his session. Approximately, there will be 15 minutes for discussion per study. If time permits, the facilitator will open the floor to questions from the audience. To conclude the session, the facilitator will summarize the main take-aways from the discussions. All sessions will be recorded. Tentative list of SIGs:</p>

**1. Teacher Learning and Professional Development**

 ZOOM Link: <https://eduhk.zoom.us/j/97409514480>

**2. Classroom Practices**

 ZOOM Link: <https://eduhk.zoom.us/j/95739259175>

**3. Literacy and Language Education**

 ZOOM Link: <https://eduhk.zoom.us/j/93665809564>


**4. Parenting and Family**

 ZOOM Link: <https://eduhk.zoom.us/j/94468667933>

**5. Curriculum and Pedagogy**

 ZOOM Link: <https://eduhk.zoom.us/j/97969722978>

**6. Policy and Leadership**

 ZOOM Link: <https://eduhk.zoom.us/j/95068815257>

**7. Socio-emotional Development**

 ZOOM Link: <https://eduhk.zoom.us/j/98360288586>






*\*All timings presented above are in Hong Kong Time Zone (GMT+8)*

*# Please refer to the Appendix for the Abstracts*



**Day Three: University of Helsinki (28 Jan 2021, Thursday)**

All sessions will be recorded.

*Time	Day 3 – 28 Jan 2021 (Thursday)
9:00-10:15 AM	<p><b>Keynote: “Cognitive and affective factors and math performance”</b></p> <p><b>Speaker:</b> Associate Professor Johan Korhonen (Educational Psychology, Åbo Akademi, Finland)</p> <p> ZOOM Link: <a href="https://helsinki.zoom.us/j/67101059418">https://helsinki.zoom.us/j/67101059418</a></p>
10:30 AM - 12:00 PM	<p><b>Special Interest Groups (SIGs) Sessions<sup>#</sup></b></p> <p>Sessions are discussions based on paper presentations made as videos, watched before the discussions. Discussion sessions are organized by a PhD student and supported by a senior researcher) (5 minutes per paper for presentation &amp; discussions)</p> <p><b>8. Physical Activity, Motor Skills, and Learning</b>  ZOOM Link: <a href="https://helsinki.zoom.us/j/68307329019">https://helsinki.zoom.us/j/68307329019</a></p> <p><b>9. Children with Special Educational Needs</b>  ZOOM Link: <a href="https://helsinki.zoom.us/j/65626253766">https://helsinki.zoom.us/j/65626253766</a></p> <p><b>10. Mathematical Development and Learning Difficulties</b>  ZOOM Link: <a href="https://aboakademi.zoom.us/j/68341999300">https://aboakademi.zoom.us/j/68341999300</a></p> <p><b>11. Learning, Motivation, and Well-Being</b>  ZOOM Link: <a href="https://aboakademi.zoom.us/j/63627090943">https://aboakademi.zoom.us/j/63627090943</a></p>

\*All timings presented above are in Finland Time Zone (GMT+2)

# Please refer to the Appendix for the Abstracts

Special Interest Group:  
Policy and Leadership

Name:  
Joseph Haw

Title:  
Need supportive teaching is associated with optimal achievement: Evidence from a developing country

Abstract:

The Philippines participated for the first time in the Programme for International Student Assessment (PISA) in 2018, and its performance was one of the lowest in the world. To address this, the government has initiated system-level reforms. Such reforms, however, require massive financial investments and have been shown to have minimal impact in developing economies. Improvements in teaching and learning hold greater promise in increasing achievement. The aim of this study was to examine whether key teaching practices are associated with student achievement. Informed by self-determination theory, we examined whether need supportive teaching, defined as teachers' support for students' autonomy, competence, and relatedness, would be associated with student achievement. We analyzed the 2018 Philippine PISA data, which contained responses from 7233 students nested within 187 schools. Hierarchical linear modelling was used. Results indicated that need supportive teaching positively predicted student achievement after controlling for gender and socioeconomic status. The positive association between need supportive teaching and achievement generalized across school types (public vs private; rural vs urban) and socioeconomic contexts (i.e., different socioeconomic quartiles). Our results suggest the potential importance of enhancing need supportive teaching practices as a way to improve student learning outcomes.

Special Interest Group:  
Children with Special Educational Needs

Name:  
Wong Chun Man Victor

Title:  
A look at distance learning strategies for Special Education Needs (SEN) Education

Abstract:

Every child, including those with learning challenges, can discover their true potential if they can be provided with the right learning environment and a high quality of education. Applied Behavior Analysis (ABA) is an effective pedagogy used for students with special education needs (SEN), especially those with autism special disorders (ASD). ABA break downs the target learning tasks into small and manageable steps for SEN students to enhance their learning and mastering of meaningful new behaviors. ABA is the scientific approach of changing human behavior in their natural environment. Using ABA, therapists could identify the children's motivations and develop programs and procedures to best fit their needs through analyzing and tracking their behavior. An effective ABA based intervention program always requires one on one intensive training. However, a shortage of therapists and high tuition are the major challenges for a SEN student to receive such training. Covid-19 creates more complications as face to face interaction is not encouraged. General online learning platforms cannot provide a suitable learning environment for SEN students to continue their learning at home.

In this talk, Victor will share his idea on conducting ABA at students' homes. He will highlight the current status and major challenges faced by the Education industry in doing so, and how emerging technologies such as artificial intelligence (AI) and the Internet of Things (IoT), might provide the solutions in overcoming the challenges through individualized education program and real-time virtual support. He will also talk about his experience in engaging educational practitioners, parents or caregivers; as well as a method to accelerate the assessment process, and thus creating a more effective individualized MOOC-like experience for students with special education needs.



## Appendix

Special Interest Group:  
Learning, Motivation, and Well-Being

Name:  
Joseph Haw

Title:  
Need Supportive Teaching Optimizes Student Achievement via Intrinsic Motivation: Testing Self-Determination Theory's Universality Across 79 Regions from Eight Cultures

**Abstract:**  
Self-determination theory (SDT) emphasizes the importance of teachers' support for autonomy, competence, and relatedness to optimize student motivation and learning. However, past studies have mostly focused on support for autonomy with fewer studies that examined support for all three basic needs simultaneously. SDT has also been criticized for being Western-centric by cross-cultural researchers. This study investigates how need supportive teaching predicts student achievement via intrinsic motivation. We examined the generalizability of this theoretical model across 8 cultural groups. Participants included the 524,764 (51% females) 15-year old students from 79 countries/regions who participated in the 2018 Programme for International Student Assessments (PISA). Multigroup confirmatory factor (CFA) analysis was used to examine the construct validity of the scales used. Next, multilevel structural equation modelling (SEM) was conducted to investigate whether need supportive teaching predicted achievement via intrinsic motivation. Gender, SES, and school-level effects were controlled. Multigroup CFA revealed that the scores on the need supportive teaching and intrinsic motivation had adequate construct validity and were largely invariant across the eight cultural groups. The multilevel SEM indicated that need supportive teaching positively predicted achievement via intrinsic motivation. These results held after controlling for the effects of gender and SES. Results of the structural model were also consistent across the eight cultural groups. Need supportive teaching optimizes student achievement by facilitating intrinsic motivation across multiple cultural contexts. Across the globe, educators may need to focus on teaching in need supportive ways to facilitate students' optimal motivation and learning.

Special Interest Group:  
Classroom Practices

Name:  
SHI Xiaobo

Title:  
An Investigation Into Professional Knowledge of EFL Teachers in Chinese Kindergartens

Abstract:

Since the study of teacher knowledge is significant for teacher professional development and teacher education programs, researchers have been attempting to identify the domains of teacher knowledge in different subjects and different levels of education. However, empirical studies of early childhood (EC) teacher knowledge who teach English as a foreign language (EFL) are very limited. In China, English teaching has been forcefully banned in kindergartens since 2018, due to a severe lack of capable English teachers and unsatisfactorily running EC English programs. There is a strong demand for more empirical studies which can inform the Chinese policy makers to regulate the field properly. This study therefore aimed at addressing these gaps by investigating what constituted the professional knowledge of EC EFL teachers, the sources of their knowledge, and the relationships between their knowledge and practice in the Chinese context. Two inter-related studies were carried out for collecting both quantitative and qualitative data. Four hundred and twenty-four Chinese English teachers in kindergartens completed the questionnaires in Study 1 and six of them participated in the stimulated recall classroom observations in Study 2. Based upon quantitative and qualitative data analyses, eight areas of teacher knowledge were constructed from the participants' responses and accounts: first language acquisition theories, second language acquisition theories, linguistic knowledge, general pedagogical knowledge (GPK), pedagogical content knowledge (PCK), knowledge of context, knowledge of self and knowledge of early childhood English educational values. The findings also revealed many important sources which affected teacher knowledge: years of experience, major subjects studied, English teaching workshops attended, self-regulated learning, self-reflection and pre-service education. The findings also revealed the relationship between teacher knowledge and practice in two ways: The first was that teacher knowledge could predict their practice; and the second was that teacher knowledge could represent an operational model which underpinned practice. PCK, GPK and knowledge of context were the categories which significantly affected teacher practice. However, not all teacher knowledge found application in practice because contextual factors intervened in the process. Five contextual factors were found: kindergarten, children, policy, teachers themselves and children's families. The complexity of EC English teaching was revealed. It is expected that this study will aid in developing teacher education programs and professional standards for EC EFL teachers in China and other EFL contexts.

Special Interest Group:  
Teacher Learning and Professional Development

Name:  
Yu Jiashun

Title:  
Hong Kong Child Care Workers in Neo-Liberal Times: Professional Identities and Practices (proposal sharing)

Abstract:

Standing at the core of a teaching profession, professional identities and practices of Hong Kong child care workers are matters of great concern in the post-harmonisation period. The release of reports concerning child care services and the recent passage of government's motions of purchasing premises to increase the provision of day child care centre services has signified the government's clear intention to bring up again the issue of marginalization of

the child care sector; however, professional identities and practices of child care workers working in these early childhood institutions remain in deep freeze. This study aims to investigate child care workers' perceptions, negotiations and constructions of their

professional identities and practices shaped by changing social, political, economic and educational contexts of Hong Kong. Specifically, the split system, the caring characteristic and neo-liberal technologies of accountability, parental choice and operation flexibility, are identified as some of the changing landscapes of early childhood services in Hong Kong that bear much significance to child care workers' professional identities and practices in the post-harmonisation period. The study adopts a qualitative approach and the post-structural

perspective to address how child care workers constitute their professional identities and practices between discourse(s) given rise from changing social, political, economic and

educational contexts and individual agency. Eighteen child care workers and six child care centre supervisors from six day child care centres will be involved. Data will be collected from individual interviews and analyzed with a grounded approach. The study aims to provide the missing piece of early childhood services in Hong Kong to fill research gaps identified from both local and international literature and inform policymakers and early childhood researchers and teacher educators about the future development of the child care

sector and possible ways to professionalize the workforce.

Special Interest Group:  
Socio-emotional Development

Name:  
Sisi TAO

Title:  
The effects of preschoolers' physical aggression on parenting behavior: A transactional model

Abstract:

Child physical aggression (PA) is defined as harming or threatening harm by means of physical damage, such as hitting or pushing. Given the negative role PA plays in children's development, researchers are keen on investigating the relations between parenting behavior and child PA for early intervention. Although the effects of parenting behavior on child aggression have been well-documented, limited study has investigated the link reversely, namely, to examine the effect of child aggression on parenting behavior. The purpose of this study was to understand the bidirectional relations between parenting behavior and child aggression in early childhood. Participants were 341 children and their parents from three kindergartens in one mainland Chinese city Guangzhou recruited by using stratified and convenience sampling strategy. Time 1 data was collected in October 2019, time 2 in February 2020 and time 3 in June 2020. At each timepoints, parents (i.e., mothers and fathers) were asked to complete a survey to report their own parenting behavior, spouse's parenting behavior and child PA. Results indicated that the associations between parenting behavior and child PA were transactional. Specifically, T1 negative parenting behavior significantly predicted more T2 child PA, which in turn, increased T3 positive parenting behavior. Findings of this study contributed the literature by identifying the transactional relations between parenting behavior and preschooler's PA in Chinese context. It was appealed that the effective interventions for child aggression must necessarily take into account the parents' role and the child's role within a comprehensive interactive framework.

Special Interest Group:  
Classroom Practices

Name:  
YEUNG CHEUK LAM JERRY

Title:  
Arts and Creativity in Hong Kong Kindergarten Education

Abstract:

In Hong Kong, the learning area “Arts and Creativity” was recently introduced in the Kindergarten Education Curriculum Guide (KECG) (Curriculum Development Council, 2017) designed by the Education Bureau (EDB). Thus, Hong Kong kindergarten teachers are currently encouraged to integrate Arts and Creativity in the classroom. However, little is known about how this learning area is being enacted in practice. The only official information available comes from the Quality Review (QR) reports, which are used by the EDB for quality review and accreditation purposes. In this study, I analysed the QR reports focusing on teachers’ pedagogical practices pertaining to Arts and Creativity. The study had two objectives: (1) To examine the presence of the various art forms in Hong Kong kindergartens; and (2) To identify positive pedagogical practices and exemplars of good teaching and learning activities in this learning area. A coding system composed of four analytic dimensions and 22 categories was employed. Only those QR reports written in English and after the 2017/18 academic year were analysed (n=164). Two researchers analysed the QR reports independently, until 100% agreement was achieved. Preliminary findings show the existence of an important mismatch between KECG’s curriculum vision for Arts and Creativity and actual classroom practices, as the notions of self-expression, communication, unleashing creativity, and freedom are barely represented in the QR reports. These findings question the socio-cultural appropriateness of the Western notion of creativity within Hong Kong’s official curriculum framework. These findings have strong implications for curriculum designers, teacher educators, and professional development providers.



Special Interest Group:  
Mathematical Development and Learning Difficulties

Name:  
HUANG, Qi

Title:  
Chinese mothers' and fathers' scaffolding in children's mathematics: Examining the mediating role of children's initiative during parent-child mathematical activities

Abstract:

Many studies have shown a positive link between mothers' scaffolding and children's math learning, but the mechanism driving the link and whether mothers' and fathers' scaffoldings promote children's math learning similarly or differentially are not well understood. This study investigated the direct relationships between mothers' and fathers' scaffoldings and children's math performance, and the indirect relationships via children's initiative during parent-child math activities. Participants were 96 two-parent Chinese families with children aged 60 – 80 months. All children completed a formal (academic worksheet) and an informal (scoring-board game) math activity with their mothers and fathers, separately. Children's math ability was assessed individually. The processes of mother-child and father-child interactions in the math activities were videotaped. For each parent-child dyadic activity, parent's scaffolding strategies were coded in terms of cognitive, emotional, and autonomy supports. Occurrences of children's self-starting, metacognition, or persistent behaviors were coded as children's initiative. Results showed that parental scaffolding strategies and children's initiative varied across partners and types of math activities. Path models further revealed that mothers' scaffolding strategies had direct relationships with children's math ability. Whereas fathers' scaffolding strategies were indirectly related to children's math ability through children's initiative. This study suggests that quality scaffoldings from both mothers and fathers support children's mastery of math. More importantly, it demonstrates the unique mechanism that fathers' scaffolding encourages children's initiative-taking, which in turn leads to children's math achievement.



## Appendix

Special Interest Group:  
Literacy and Language Education

Name:  
Liubov Darzhinova

Title:  
The role of parsing strategies in comprehension of L2 Russian syntactically ambiguous sentences

### Abstract:

In written language processing, parsers make use of semantic information and are guided by syntactic constraints. Many factors affect stimuli processing and comprehension, and parsing strategies are among them. The present study addresses the question of whether or not there is a transfer of L1 parsing strategies to L2 sentence processing. So far, the literature says that language learners are occasionally driven by L1 structural constraints in processing of their target language. Is this point valid for different structures and languages? To test this, the study focuses on L2 comprehension of Russian globally and temporarily ambiguous participial relative clause sentences with a complex nominal group – in what way it is affected by L1. The study engages both monolingual speakers of Russian with no/little L2 knowledge and English-speaking learners of L2 Russian. Theoretically significant to psycholinguistics, this research is first-ever in making comparisons of L1 and L2 comprehension of the reviewed sentences. The study examines whether the Recency Preference and Predicate Proximity model (Gibson et al., 1996) can account for the data from monolingual speakers of Russian and English-speaking advanced learners of Russian. Also, the research has potential implications for language pedagogy in fostering the most effective L2 teaching scenarios and in stimulating teaching Russian syntax to native and non-native language speakers.

Special Interest Group:  
Parenting and Family

Name:  
Cen Huixin

Title:  
The Influences of Family and School on Building Healthy Eating Habits among the 6 to 9-year-old Children

Abstract:

This research explores the Influences of family and school on building healthy eating habits among the 6 to 9-year-old Children under the Guangfu culture(Cantonese culture), can provide early evidence for similar future research in Guangdong-Hong Kong-Macao Greater Bay Area (GBA). The research investigates how family factors influence children's eating habits and conclude the situation of home-school cooperation by using the mixed method. The researcher invites more than 270 families (90 Hongkong families, 90 Shenzhen families, and 90 Zhaoqing families) to fill in the dietary literacy questionnaires and calculate the scores of their children's healthy eating habits based on the suggestions of the daily food pyramid. The researcher also interviews 6 educators and 6 parents (selected from those filled in the quantitative questionnaires) in these three places to see the systemic strategies under the framework of Epstein's home-school-community partnership. The research also figures out the mediator and moderator to see the risky factors and the potential alternative solutions for those children whose parents have poor dietary literacy and have little time to cook and prepare food at home. At the same time, the researcher also pays attention to the feedback and willingness of home-school collaboration from the interviews to draw practical conclusions. This descriptive and correlation research can be beneficial to develop culturally appropriate intervention or prevention programs, services, or suggestions under the Guangfu culture, which is the core culture of the GBA. The findings also can provide indications to the local governments in the aspect of executing relevant existing policies.

Special Interest Group:  
Classroom Practices

Name:  
Joanne Wong

Title:  
Early Childhood Music Education: How does it differ between the East and West?

Abstract:

Music education is part of Early Childhood Education (ECE) curriculum frameworks around the world, which agree on the importance of music in fostering children's creativity and self-expression. While there is widespread belief that Western education systems foster creativity to a larger extent than Eastern systems, no research has examined this topic in ECE settings. This survey study used data from 398 kindergarten teachers in Hong Kong (N=199) and Spain (N=199). There were two research goals: (1) To examine the frequency with which teachers carry out 19 specific music-related activities and compare whether provision of each activity differs significantly in the two regions; (2) To compare whether provision differs significantly according to activity content and nature. Of the 19 activities presented, reported frequency means were significantly higher for eight activities in Hong Kong and four activities in Spain. 'Singing and voice' activities presented the highest means in Hong Kong, whereas 'Rhythm and movement' activities were the most frequent in Spain. Most importantly, reproductive and teacher-led music activities were more frequent in both regions than creative-fostering and child-led activities. However, contrary to popular beliefs, Hong Kong teachers reported providing significantly more creative music activities than their Spain counterparts. We conclude there is an important disconnect between curriculum recommendations and actual practices. Music activities seem to be used primarily as fillers, are reproductive in nature, and fail to support children's creativity and self-expression. Implications for curriculum designers and teacher educators are discussed.

Special Interest Group:  
Teacher Learning and Professional Development

Name:  
Ho Yan Lam

Title:  
A documentary analysis on music education in Hong Kong kindergartens: Vision vs reality?

Abstract:

In recent years, Hong Kong has focused on enhancing the quality of Early Childhood Education (ECE) services. The Education Bureau (EDB) has designed a new curriculum framework, the Kindergarten Education Curriculum Guide (KECG) (Curriculum Development Council, 2017), in which Music is included as a subdomain of the learning area "Arts and Creativity". However, limited research has investigated how kindergarten teachers implement the curriculum objectives pertaining to music in the classroom. This is the purpose of this study, in which I analyzed the content pertaining to Music in Quality Review (QR) reports, where EDB provides feedback to kindergartens on the quality of services provided to children. I focused on three aspects: (1) Types of music activities alluded to, (2) Positive feedback regarding Music pedagogical practices, and (3) Negative feedback and recommendations for improvement. Content analysis (Creswell, 2018) was used to examine 164 QR reports (written in English from 2017 to 2020). Twenty-nine analytical categories were used. Preliminary findings show that the QR reports: (1) Allude mostly to teacher-led, reproductive music activities (e.g., singing, movement activities), while creativity-fostering and thematic-based activities are mentioned rarely; (2) Highlight as positive that teachers provide sufficient music activities and that children enjoy completing them; and (3) Comment that teachers should provide more diversified music activities and improve the lesson plans' design. This research suggests the existence of a pronounced gap between the KECG curriculum vision and actual classroom practices. Implications for teacher educators, curriculum designers, and professional development providers are discussed.

Special Interest Group:  
Socio-emotional Development

Name:  
LIU SISHAN

Title:  
The Relationship Between Parent-child Activities and Preschoolers' Prosocial Behaviour

**Abstract:**

Little research has considered whether parent-child activities facilitate children's social-emotional development and whether these contributions have gender differences in Chinese culture. To address this gap, this study aims to assess the extent to which story reading, family games, and art activities are positively related to prosocial behaviours in children. A total of 150 preschoolers (aged 5–6) who are studying in K3 will participate in the current study. Their parents will be asked to report the frequency of parent-child activities and the family socioeconomic status. At the same time, parents and teachers will be asked to report children's prosocial behaviours, including empathy, cooperation, sharing, helping, and comforting. Data collection will be conducted through questionnaires in both private and public kindergartens in mainland China. After controlling for some family socioeconomic status factors, we aim to examine whether and to what extent the increasing frequency of parent-child activities will contribute to more prosocial behaviours among boys and girls in Chinese culture. The current study is expected to provide insights into the relationship between parent-child activities and children's prosocial behaviours in Chinese culture. Recommendations will be provided for parents to promote prosocial behaviours in children and prepare them for the social adjustment challenges during the transition from preschool to primary school.

Special Interest Group:  
Socio-emotional Development

Name:  
Kam Wai Yin, Evita

Title:  
An Intervention to Improve Interactions between Parents and Children with Autism: Statistical Analysis of Videos

Abstract:  
Compared to typically developing children, children with Autism Spectrum Disorder (ASD) show more behavioural problems and communication interaction deficits. Hence, improving parent-child interactions might reduce these problems. This study investigates the effectiveness of the Parent-Child Interaction Intervention for ASD (PCII-A) program on dyad interactions between a child with ASD and his or her parent via content analyses of their videos and statistical discourse analysis.

We invited 21 children with ASD or at risk of it (ages 3 to 6 years) and their 21 parents to participate. Parents were asked to complete 10 consecutive weeks of intervention sessions (8 sessions of the parent training workshop, 2.5 hours per session, and 2 sessions of direct training practice with their child, 1 hour per session).

PCII-A sought to:

- 1) Improve parent-child interaction by training parents to improve their relationships with their child during playtime
- 2) Manage children's behaviours by training parents to promote positive behaviours and address inappropriate behaviours by giving praise and appropriate reinforcement
- 3) Improve children's social and communication skills by training parents to use appropriate prompts and questioning skills
- 4) Reduce stress in parents by training them to use relaxation techniques (e.g., breathing)

After the PCII-A parent intervention, the following occurred more often than before: parent positive touch (+13%), child positive touch (+11%), parent laughter (+15%), child laughter (+24%), parent play (+6%), and child play, (+3%). Also, after the PCII-A parent intervention, the following occurred less often than before: child failure to respond (-6%) and child negative behaviours (-7%).



## Appendix

Special Interest Group:  
Curriculum and Pedagogy

Name:  
Zou Fengmei

Title:  
Promoting Secondary School Students' Self-Regulated Learning and Reading Achievement in English  
-- A Case Study in Mainland China

### Abstract:

Self-regulated learning (SRL) refers to the "learning that results from students' self-generated thoughts and behavior that are systematically oriented towards the attainment of their learning goals" (Schunk, 2001, p. 125). Several studies (e.g., Zimmerman, 2013; Perry et al., 2007) have proved the significance of SRL for learners in setting and balancing their learning goals and improving learning achievement. It is also reported to be influential to regulate learners' independent learning habits and skills by taking the responsibility of ones' own learning.

Although the role of SRL in learning various subjects including English language and mathematics has been widely researched in many contexts, very few studies have been done in Chinese educational context which is largely different from rest of the world. To bridge this contextual gap and to add to the knowledge base on SRL research, this study aims to explore the impact of SRL-based instruction in promoting secondary school students' reading achievement in English, the impact of SRL-based instruction in promoting secondary school students' SRL ability and the relationship between SRL ability and English reading achievement. To explore this, this study adopted Zimmerman's SRL cycle model which describes SRL as an interactive and cyclical process that continues in three subsequent phases: forethought, performance phase, and self-reflection.

This presentation reports the relevant literature on SRL, the theoretical aspect of it and the findings of a pilot study conducted in June 2020 as a part of the Doctoral study in a secondary school in Mainland China. It will also report the methodological details of this ongoing research including research design, instruments, and procedures.



Special Interest Group:  
Socio-emotional Development

Name:  
Lizechen

Title:  
Parental Mental Health and Children's Behavioral Adjustment: The Role of Self-Compassion

Abstract:

Parental mental health, as reflected by better mental well-being and lower depressive symptoms, has important implications for children's adjustment, including psychosocial adjustment and physical health (Dwairy et al., 2010). Notably, several studies have shown that parental depressive symptoms are associated with internalizing problems in children (Cummings et al., 2013; Daniel et al., 2012). Children of depressed parents are more likely to have internalizing problems compared to children of non-depressed parents (Dikla et al., 2018). When parents' depressive behaviors are presented frequently, the child may also begin to show their anxiety, insecurity, impulsive aggression, or other behavioral problems (see also Eckshtain et al., 2018; Wang, 2018). Findings based on Chinese samples similarly suggest that paternal depressive symptoms may be transmitted to their children through different processes (Wang, 2018). Among these processes, parents' self-compassion may serve as a link between parental depressive symptoms and child adjustment, parents' self-compassion was longitudinally associated with children's adjustments (Psychogiou et al., 2016). However, little is known about these processes in the Chinese contexts.

In this study, we propose to recruit 200 parents of children at 3-8 years old in late December 2020 to complete the following measures: 9-item Patient Health Questionnaire (PHQ-9; Kroenke & Spitzer, 2002), the 5-item Satisfaction with Life Scale (SWLS; Diener et al., 1985), the 12-item Self-Compassion Scale-Short Form (SCS-SF; Raes et al., 2011), and the 20-item internalizing and externalizing subscales of the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1977). Preliminary findings will be shared at the International Graduate Studies' Seminar 2021: Innovative Approaches in Teaching, Learning, and Research, along with practical implications.

Special Interest Group:  
Policy and Leadership

Name:  
Xeniya Belova

Title:  
Multilingual Policies and Practices in Higher Education: A Case Study in Hong Kong

Abstract:

In the time of internationalization of higher education, cultural and linguistic diversity are becoming important attributes of modern universities around the globe. In Hong Kong, university campuses are extremely multilingual and intercultural due to the adoption of multiple languages for teaching and learning and enrolment of students coming from various ethnolinguistic backgrounds.

While university policies are being revisited with the purpose of supporting multilingualism and diversity, students and staff in the Hong Kong universities have to face the challenge of multilingual/intercultural interactions. Yet, little is known about the experiences with and perceptions of multilingualism on campuses among the variety of student population, especially international and ethnic minority students.

The current study will explore the multilingual experiences of a variety of student groups against the backdrop of institutional policies in a multilingual university in Hong Kong. For doing so, the study will build on the Model of Investment suggested by Darvin and Norton (2015) and the notions of capital, investment, ideology and identity integrated into the Model. This will enable analysing how students' investments into certain multilingual practices are mediated by various factors such as forms of capital (economic, social, cultural) being acquired and envisaged, institutional ideologies and policies, and students' current and imagined identities. Also, the research will involve the analysis of university documents, which will enable to reflect on the interplay between institutional policies and practices on campus.

The study will follow a qualitative case study approach, where one multilingual university specializing in teacher education will be selected as the research site. Semi-structured interviews, individual reflective essays and document analysis will be the main methods of data collection.

The research findings will shed the light on university multilingualism policies and actions as well as provide an evidence base that will enable educators and policy makers to develop new approaches for promoting multilingual and intercultural communication policies and practices. Also, the research will contribute to the body of literature on multilingualism in higher education in Hong Kong and internationally.

Special Interest Group:  
Parenting and Family

Name:  
Gao Xiaozhi

Title:  
Structural validity of the simplified Parenting Stress Index-Short Form (S-PSI-SF): a Hong Kong sample

Abstract:

The simplified version of the parenting stress index-short form (S-PSI-SF) has been investigated in Taiwan and Mainland China and was found to have comparable reliability and validity as the longer version. However, it was not known whether its properties generalized to other societal settings. Furthermore, previous studies examining its structure had utilized frequentist confirmative factor analysis, which typically imposes unrealistic constraints. The current study used a Bayesian approach to examine the dimensionality of the S-PSI-SF in 258 Hong Kong parents. Results indicated that a three-factor model best fitted the data. The three factors correlated moderately and one cross-loading and one residual covariance were needed to attenuate misfit. Each factor displayed acceptable internal consistency. Tests for convergent and discriminant validity revealed that the three factors were correlated with parent general distress, authoritative, authoritarian, and permissive parenting behaviors. The findings are consistent with Abidin's parenting stress theory.

Special Interest Group:  
Classroom Practices

Name:  
Jessie Wong and Sophia Lam

Title:  
Enhancing professional excellence: Developing motivational strategies of pre-service teachers in Chinese language classrooms

**Abstract:**  
According to the Chinese Language Education – Curriculum Document (Education Bureau, 2017), the learning objectives of the language include nurturing learners' interest, attitudes and habits in learning Chinese language. Nevertheless, teaching and learning of Chinese language has been focused on developing four skills and language learning strategies of learners. In order to enhance the understanding and knowledge of motivational strategies of pre-service Chinese language teachers, the project aims to adopt blended learning in the Chinese pedagogy related courses of BED (CHL) and PGDE (S) programs. The outcomes of the project include, i) creating teaching videos introducing motivational strategies in Chinese language classroom; ii) develop the skills of students in employing various motivational strategies in their teaching; iii) establish a teaching video corpus of motivational strategies in Chinese language classrooms which attached with lesson plans and commentary; iv) create a motivational strategies handbook for Chinese language teachers. The project also bridges the gap between motivation theories and classroom practices. Dörnyei's (2007) Motivational Strategies Framework will be adopted as it provides the pre-service teachers with practical, systematic, flexible references of how to motivate learners at different stages, levels or contexts. The project also attempts to link the motivation theories and classroom pedagogy in Chinese language classrooms so as to promote a theory-driven teaching approach in schools. This presentation focuses on the preliminary data collected in this project, including questionnaire of the students' questionnaire and the design and development of the deliverables in the project. It is hoped to provide pedagogical insights for language teacher training programs.



## Appendix

Special Interest Group:  
Curriculum and Pedagogy

Name:  
David HO

Title:  
Social Dynamics and Teaching Innovations in Post-COVID-19 Period: Curriculum Design from a Risk Society Theory Perspective

### Abstract:

Think about the crisis. Think about COVID-19. The global pandemic has significantly impacted and adjusted our longstanding teaching and learning practices throughout the whole 2020. Since then, worldwide campuses have determined to shut down. By January 2021, quarantine methods will still be ordered to cope with the crisis all over the world. The longstanding practices of teaching and learning are now facing inevitably upside down changes. Educators have to make dramatic efforts in collectively responding and providing quality education in this new era. Just like other stakeholders in education system, higher education has to adapt teaching innovation and instill dynamics with the rapid changing wider contexts. With these backgrounds, we have witnessed a massive challenge for the global education community under the current crisis. The controversies across different educational sectors mainly refer to the applications and implications of online platforms. Nevertheless, the way-out should be more than online teaching and learning. The theme of this review is about COVID-19 and its cultural dynamics for similarities and differences in pedagogies developed on the (g)local level by innovative curriculum designs from a Risk Society Theory perspective. This review is a pilot study regarding a design progress of an undergraduate course with an intention to explore whether the changes forced on institutions and individuals by COVID-19 pandemic can be regarded as a way-out for the longstanding intentionality of practices.

Special Interest Group:  
Physical Activity, Motor Skills, and Learning

Name:  
Thomas, FAN Chun Man

Title:  
A documentary analysis on Gross Motor Skills Development in Hong Kong kindergartens

Abstract:

In recent years, Hong Kong has shown an increasing concern on improving the quality of Early Childhood Education (ECE) services. The Education Bureau (EDB) had published the Kindergarten Education Curriculum Guide (Curriculum Development Council, 2017). Physical Fitness and Health is one of the key learning areas listed in the Guide. Little research has been conducted to investigate how Hong Kong kindergarten teachers enact the curriculum principles articulated in the Guide, especially those pertaining to Gross Motor Skills (GMS) development. This study examines the content focusing on GMS in the Quality Review (QR) reports, as a way to analyse the correspondence between the official kindergarten curriculum framework and the teachers' pedagogical practices on the ground. Documentary data analysis (Maxwell, 2013) of 164 QR reports, published by EDB between 2017 and 2020, will be conducted. All the reports included in the analysis are written in English, and will be analysed from three dimensions: 1. Types of GMS activity taught in the class, 2. Positive comments toward the pedagogical practice on GMS, and 3. Negative comments and recommendations for further improvement. Inter-rater reliability will be calculated with a second coder. Analysis are currently under way. Implications for curriculum designers and teacher educators are discussed. The findings of the proposed study may contribute to the scarce literature on pedagogical practice of GMS in kindergarten and become strong supporting materials for further curriculum advancement.

Special Interest Group:  
Physical Activity, Motor Skills, and Learning

Name:  
Pang Siu Chuen

Title:  
The physiological variable and the muscle activation patterns of trunk and lower limb in different modes of carrying school trolley and backpack

Abstract:  
Purpose: Analyze the heart rate, the trunk and lower limb muscle activation patterns during different modes of carriage of school trolley and backpack.

Overview:

Students always carry school backpack with all the books and supplies for the whole day. Although the long term effects on the musculoskeletal system are unknown, the repetitive stress of carrying heavy school backpacks may be an important risk factor for the musculoskeletal symptoms which were found amongst primary and secondary school students. Research found that the school backpacks of 10-15% of body weight (BW) are an acceptable limit based on different approaches such as epidemiology, physiology and biomechanics. Unfortunately, previous studies showed that between 4.7% to 38% of children transport the school backpacks which exceeded 20% BW in their daily routine. To compare with carrying the traditional school backpacks, pulling a school trolley is an asymmetric activity pulling loads which are 15.7% BW averagely and about 30% or 2.4kg heavier than a school backpack.

Methodology:

Electromyography will be used to provide the information of neural control during different locomotor tasks such as school backpack and trolley carriage. It is crucial that to apply different data such as physiological and biomechanical information to investigate the risk of loaded school backpack carriage and find out any interventions for related injuries preventions. The study aims to analyze trunk-lower extremity activities during the carriage of school trolley and backpack. 25 school children aged between 12 and 15 years old will be recruited in the study. Subjects will be excluded if they have any injury, postural deformities, spine surgery, history of low back pain and major surgery during the last 6 months.

Special Interest Group:  
Teacher Learning and Professional Development

Name:  
Shiqi Qiu

Title:  
Kindergarten Teachers' Well-being: A review of the literature

Abstract:

In recent years, the turnover rate of kindergarten teachers is generally high, and ensuring kindergarten teachers' well-being is an effective way to solve the problem. Besides, kindergarten teachers' well-being is very important for their teaching quality which has a great influence on children's learning outcomes. Researches about kindergarten teachers' well-being are usually conducted from three categories: subjective dimensions of well-being, physiological dimensions of well-being, and organization structural dimensions of well-being.

The literature showed that kindergarten teachers' subjective dimensions of well-being are complicated, including multiple dimensions such as self-efficiency, job satisfaction, life satisfaction, burnout, and job-related stress. Kindergarten teachers' physiological dimensions of well-being are relatively clear, which refers to the state of the body. Researches about kindergarten teachers' physical disorders show that the physical condition of kindergarten teachers is not optimistic. The management, supporting, and working atmosphere of kindergartens are organizational structural dimensions of kindergarten teachers' well-being. A positive relationship between teachers and students, a trustful atmosphere among colleagues can contribute to enhancing kindergarten teachers' well-being. Kindergarten teachers' well-being can also be improved by sufficient support from kindergarten.

Researchers are also actively looking for strategies to improve the well-being of teachers. For example, emotional intelligence training can avoid the feeling of frustration, which leads to improving teaching practice, health, and psychological well-being of teachers.



Special Interest Group:  
Literacy and Language Education

Name:  
Artem Zadorozhnyy (Archie)

Title:  
Addressing informal digital learning of English by adapting the three-tier conceptual framework in the context of Kazakhstan

Abstract:

While formal and non-formal types of learning might be defined by its pre-arranged structure and the presence of guidance (Zadorozhnyy & Yu, 2019), the concept of informal learning might be distinguished by its profoundly unstructured and self-regulated nature. By following this stance, the number of authors introduced such notions as informal digital learning of English (IDLE) (Lee & Dressman, 2018), online informal language learning (OILL) (Isbell, 2018), language beyond the classroom (Benson, 2011; Reinders & Benson, 2017) as well as out-of-class language learning (Lai et al., 2015), to name a few. As in essence the aforementioned notions share many similarities and intersections, the current paper refers to informal learning with technology means and questions its recognition with an aim to eliminate the research gap on the topic in the Central Asian region.

By adapting the three-tier conceptualization of Aizawa and Rose (2019), this study attempts to introduce how informal digital learning of English is recognized at different levels (i.e. macro, meso and micro) in the particular context of Kazakhstan. The conceptual model, which will be presented, will cover future research agendas to address informal learning with digital tools at (1) the personal level by underlining the trinity of students' language learning practices (formal, informal, non-formal) in mastering the English language; (2) the institutional level that encompasses all implicit and explicit strategies for supporting students' learning practices at a particular higher education institution (HEI) and at (3) the state level that encloses a set of a guiding principles which were proclaimed based on the governmental aspirations to enhance the level of English language knowledge among Kazakhstani citizens. Following the chosen conceptual model, preliminary research findings, the chosen research methods and future implications will be introduced.

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## Appendix

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## Appendix

Special Interest Group:  
Curriculum and Pedagogy

Name:  
Stuti Rawat

Title:  
The motivation problem of online classrooms

### Abstract:

We conducted surveys among tertiary students and teachers regarding their experiences of synchronous online education in Hong Kong. The surveys were administered to students who had been exposed to online teaching for two months, with online teaching having been introduced from the very beginning of their semester instead of as an emergency response measure mid-semester. We found that students reported a decline in motivation in an online classroom as compared to a traditional face-to-face classroom setting. Similarly, the instructors' responses revealed that teachers in higher education found it harder to motivate students in an online classroom.

This motivation problem is not specific to Hong Kong. A survey of tertiary sector students in Singapore, indicated similar results. In this paper we address the question of why motivation is lower in an online-classroom and what can be done to overcome it? By focussing on the motivation problem, we shed light on a widespread yet under-studied phenomenon characterising online classrooms. This is especially important given the continued prevalence of online education and in order to better leverage its strengths.

Special Interest Group:  
Mathematical Development and Learning Difficulties

Name:  
Hay Mar MYAT KYAW

Title:  
Individual and School Variables Associated with Myanmar Preschool Teachers'  
Mathematics Teaching Practices

**Abstract:**

Over the past few decades, more and more evidence show that early mathematical achievement is a critical predictor of future academic success; thus, early mathematics education has received a dramatic increase in attention in the academia. Using an exploratory sequential mixed method research design, the proposed study aims to explore the mathematics teaching practices of Myanmar preschool teachers and their associated individual and school variables. First, semi-structured interviews will be conducted with 8 preschool teachers, so as to examine how often they discuss different mathematics topics with children, the strategies they use to help children learn mathematics in the classrooms, their beliefs and attitudes regarding mathematics and early mathematics learning, as well as the amount and kind of support given by their serving schools to teach mathematics. Next, based on the results of the interviews and review of relevant literature, a survey regarding Myanmar preschool teachers' mathematics teaching practices and the potential factors affecting their practices will be developed, and 200 preschool teachers will be invited to complete the survey. Path analysis will then be used to analyze the relations of different individual and school variables with Myanmar preschool teachers' different mathematics teaching practices. Results of this study will contribute to the existing literature by extending our knowledge of how preschool teachers' mathematics teaching practices are shaped by factors at different levels of the ecological system. Moreover, recommendations for Myanmar preschool teacher education and professional development will be provided.

Special Interest Group:  
Teacher Learning and Professional Development

Name:  
Sara Hamad

Title:  
Teachers' perceptions about current STEM Education practices, their self-efficacy, and challenges of implementation in United Arab Emirates

Abstract:  
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Teachers' perceptions about current STEM Education practices, their self-efficacy, and challenges of implementation in United Arab Emirates

Sara Hamad is a Ph.D candidate in the Department of Curriculum and Instruction at UAEU in United Arab Emirates. She holds a degree in Computer Engineering (2004), M.I.T. Master of Information Technology (2010), and M.Ed in Curriculum and Instruction (2015). She has been working as a trainer on the use of ICT at schools. Her current research interest focuses on Digital Teaching and STEM Education.

STEM education in UAE is currently receiving a growing attention. UAE educational policy makers and curriculum developers advocate the development and implementation of STEM education at all educational levels. They believe that STEM education has an important role in providing students with a strong education in science, as well as, other subjects. They further believe that STEM education positively affect students' ability to solve problems, be innovative, think critically, and be technology literate. However, little is known about the extent of current STEM implementation, teachers' self-efficacy toward its implementation, and the challenges that might hinder its implementation. The purpose of this study was therefore, to examine current teaching and learning practices associated with STEM implementation, teachers' self-efficacy toward implementation, and the challenges encountered by teachers while integrating STEM related practices that might hinder implementation. A total sample of 64 grade 1 – 12 teachers of science, mathematics, and information communications technology (ICT) selected from schools that currently implementing STEM education as part of their curricular. The participants responded to a survey designed to elicit information on current STEM education practices, teachers' self-efficacy toward implementation, and challenges that might hinder STEM implementation. The findings indicated that STEM education integration provided opportunities for teachers to implement inquiry-based activities, problem-based, project-based classroom activities. The findings also showed that the majority of the participating teachers are highly competent with the knowledge and skills needed to implement STEM education. The most challenging issues identified by teacher that might hinder STEM education implementation included unavailability of related professional development training, lack of related educational pedagogy in pre-service teacher preparation programs, and lack of clear supportive guidelines or standard practices. The findings were discussed within the current reform of science education in the United Arab Emirates.



## Appendix

Special Interest Group:  
Teacher Learning and Professional Development

Name:  
Sana Butti Al Maktoum

Title:  
"It's not fair!" Teachers' perception on yearly evaluation in Schools: the positive, the negative and the in-between

Abstract:  
Sana Al Maktoum has a master's degree from the British University in Dubai in association with the University of Birmingham, Special and Inclusive Education. She earned her B.A with honors in English Language and Literature, from Zayed University. Sana is currently doing her PhD at UAEU, with research focus on second language acquisition and special needs.

The research below falls into the policy and leadership SIG, this study looks into the perception of teachers regarding the evaluation system "Bayanti" that has recently been implemented in schools across the UAE; the collected data categorizes the perception of teachers thematically, therefore exploring both their positive and negative evaluations, as well as the everyday teaching and professional development of teachers. The research study followed a qualitative approach in a case study framework (Yin, 1994) with a semi-structured interview, observations and informal interviews with school personnel which provided a comprehensive study, though in small scale, to the standpoint of educators on the evaluation implementation. Further to that, the researcher utilized an emic perspective, similar to ethnographic studies (Creswell and Poth, 2018), being a former schoolteacher in the studied context. The research aimed in answering the two research questions, the first on the effect of evaluation on teaching. The attitude was a mix of negative and positive but with more negativity which was deduced from the interview, showing evaluation components that are considered "unfair" such as correlating teacher's overall grade to students' scores, teaching hours and teacher training. The second question investigated the pitfalls of evaluation in the context of the United Arab Emirates. The collected data was compared to worldwide practices to evaluate the different variables. The study recommends reflecting on the implications of this evaluation on teachers' practice as this greatly impacts the education cycle for students, what are its central component.



## Appendix

Special Interest Group:  
Literacy and Language Education

Name:  
Sameera Sayed Zadeh

Title:  
The effect of using conceptual mapping in EFL descriptive writing on seventh grades Students' performance and perceptions

Abstract:  
My name is Sameera Sayed Zadeh, a master student in Curriculum and Instruction program ( Portfolio), I work as an English Teacher , and I've 5 years of teaching experince. The topic of my research focus on using the concept mapping in writing descriptive essay and I did it as an action research during this term.

This study aimed to investigate seventh grades performance towards the use of Conceptual Mapping in writing descriptive essays. To fulfill this purpose 54 students from a school in the UAE participated in this study. They were assigned to both control and experimental groups, 27 participants in each group. All of them wrote nine descriptive essays and the topics have been chosen from their English book. The difference was that the students in the experimental group were asked to apply the Concept Mapping in their pre-writing process. Pre-test and post-test have been applied for both groups while the survey was only for the experimental group. This study was conducted over 18 sessions, each consisted of fifty minutes (including the pre-test and post-post-test sessions) three days a week with experimental group undergoing the concept map treatment while the control group without a treatment. The finding showed that there was no significant difference between the experimental group studentsâ€™ performance in writing a descriptive essay than the control group, however it indicated an important difference between the pre-test and post-test of the experimental group with a positive perceptions after applying the Concept Mapping technique. As a result, further action research is needed in this area.

Keywords: Concept Mapping, Writing, Descriptive essay, Pre-writing strategies.

Special Interest Group:  
Literacy and Language Education

Name:  
Maha Al Habbash | Najah | Safa

Title:  
The Line Between: Virtual Re-Tellers Exposing to Two Modes of Visual Literacy

Abstract:

Mrs. Maha Alhabash has an MA in Second Language Teaching and Learning. She is currently a PhD candidate at the UAE University, Department of Curriculum, and Instruction department in language and literacy domain. In her PhD thesis, she is exploring the idea of trans-identity space construction for bilingual learners.

Najah Al Mohammadi has an MA in Second Language Teaching and Learning. She is currently a PhD candidate at the UAE University, Department of Curriculum, and Instruction department in language and literacy domain. In her PhD thesis, she is exploring the students' orientations regarding critical framing in reading.

Safa AlOthali has an MA Leadership and School Administration. She is currently a PhD candidate at the UAE University, Department of Curriculum, and Instruction department in language and literacy domain. In her PhD thesis, she is exploring promoting classroom interaction when using videos.

This case study aimed at understanding how the enactment of actual two modes of visual literacy (TV Mode vs. Virtual Reality) contributes to our understanding of story re-tellers' ways of representation, elaboration and gist recalling. Six fourth grade students were exposed to two types of visual representations. First, they were exposed to a silent story through ordinary TV representation and later to the same story using Virtual Reality. The study fathomed the differences between the two modes of representation in terms of volume and reaction of students to the use of TV versus Virtual reality using the same content. To gauge the volume of retelling, the occurrences of representation, gist recalling, and elaboration were tabulated during the observation. The students' reaction by retelling, was analyzed through using their natural expressions and responses to the silent story. The use of other different multimodalities such as videos, audios, visual reading materials contributed to consolidate the results. Additionally, a casual interview was conducted with the six participants to capture the students' views towards the use of two different modes of visual literacy. The study results revealed that the VR use is significantly higher than the TV in terms of the volume of retelling (representations, elaboration and gist recalling). In terms of their reaction by retelling, the participants were more excited, engaged, and reactive when using the VR, which was reflected in the interviews. The results from this study contribute to our knowledge base, pedagogical base, and research of using virtual reality as a vibrant tool when delivering literacy.





## Appendix

Special Interest Group:  
Curriculum and Pedagogy

Name:  
Basma | Bernadette | Sana

Title:  
Students, Teachers and the Noticing Hypothesis in three educational settings

Abstract:  
Basma Abdulla Abri - instructor at the Higher Colleges of Technology. She has a BA in English (TEFL) from ADU, a M.Ed in Education Management and Policy from HCT, and a M.Sc. in Instructional Technology, from NYIT. She is currently pursuing a PhD in Language and Literacy Education at UAEU.

Bernadette Guirguis is currently a second year PhD student in Language and Literacy Education under the supervision of Professor Negmeldin Al Sheikh. She is also a member of the PhD academy in the Curriculum and Instruction Department at United Arab Emirates University. Her doctoral research interest is in literacy and multimodality. She holds a master's degree in Public Policy and Administration (Distinction) and BA in Business Administration both from the American University in Cairo, Egypt.

Sana Al Maktoum has a master's degree from the British University in Dubai in association with the University of Birmingham, Special and Inclusive Education. She earned her B.A with honors in English Language and Literature, from Zayed University. Sana is currently doing her PhD at UAEU, with research focus on second language acquisition and special needs.

Noticing a language feature is essential for language learners, as per Schmidt's noticing theory which is crucial in educational settings and is part of instruction and pedagogy. The ability to be aware is inherent within humans which means learners tend to notice, adjust and correctly produce language. Within Schmidt's noticing theory, scholars have deduced features that can be utilized in educational settings such as the well-known (Present-Practice-Produce) PPP methods, discovery learning (Boers, 2018), processing instruction (Van Patten, 1996), and input enhancement (Sharwood Smith, 1993).

The four features have been studied and authentic examples are presented to fully highlight the practice behind the theory. The examples we present are focused on three educational contexts: a higher education institution, a primary school and a French language Institute. Furthermore, the three methods of teaching and learning were all conducted via various online learning platforms. This proposal aims to plan interviews in the different educational settings mentioned above and elicit participant remarks as to whether and to what degree they observed this "noticing" phase during their cognitive/speech processing or teaching. The paper will attempt to provide a set of recommendations and pedagogical implications.

Special Interest Group:  
Curriculum and Pedagogy

Name:  
Najla Al Owais - Nabil Al Farra

Title:  
Fifth Grade Students' Mathematical Problem-Solving Strategies in the UAE

Abstract:

Najla Al Owais & Nabil Al Farra are currently in their second year of their PhD program in Math Education (Curriculum & Instruction), at College of Education, UAEU. Najla has had previous experience as a middle school math teacher, whilst Nabil has taught math previously in public and private schools in the UAE. Najla is interested on research in the area of cross cutting issues of assessment & mathematics learning. Nabil's research interest range across technological, pedagogical and content knowledge of preservice and in-service mathematics teachers.

Researchers in Mathematics Education have emphasized students' problem-solving at school level (Amado, Carreira & Jones, 2018), however, more needs to be done in problem-solving studies within UAE school contexts. There are several methods and approaches to problem-solving (Gourdeau, 2019), nonetheless, students still struggle when it comes to applying these approaches to their own problem-solving. The purpose of this study is to analyze the problem-solving techniques that students in a fifth - grade classroom use when it comes to solving mathematical word problems. This study will identify the challenges students face in problem-solving and will provide possible solutions. Fifth grade students in two schools (each school in a different Emirate in the UAE) will be given a 15 question (word problems) test to solve by providing detailed justifications. The questions will be based on TIMSS past exams, with some modifications. The study will also be based on a preliminary pilot study concerned with problem-solving in the fifth grade in the UAE. Initial analysis from the pilot study generated five themes: (1) Logical Thinking Skills, (2) Computational Skills, (3) Problem-solving Strategies, (4) Use of Justifications, and (5) Use of Representations (Graphs, figures, pictures, tables, etc). Semi-structured interviews will be conducted to selected students after analysis of the problem-solving questions and answers to further explore their experience in those five thematic areas of problem solving

Special Interest Group:  
Parenting and Family

Name:  
Aizhan Shomotova

Title:  
Fording the COVID-19 River: Female PhD students coping with family, academic and job duties and demands

Abstract:  
Aizhan Shomotova is a current Doctoral Fellow of College of Education (CEDU), Department of Foundations of Education. Major in Leadership and Policies in Education. Research interests focus on higher education, education leadership, sociology in education, organizational change, well-being, family and parenting, Central Asia and Middle East studies.

In response to the COVID-19 outbreak, many governments requested social distancing and applied lockdown of cities, the shutdown of schools, daycares, and extracurricular programs. Teachers, students, and parents reverted to online homeschooling. This shift added tremendous burden and workloads for most parents. Recent study results confirmed that women took on a lot more responsibility for household chores and care of children and family during the pandemic (Azcona, Bhatt, & Love, 2020). In that sense, female doctoral students had to make more checks and balances to accomplish their daily work, pursue their graduate studies, take care of their young children, and help them with their homeschooling. The purpose of this study is to explore female Ph.D. students' lived experiences under the pressure of the pandemic and investigate the main strategies of coping with the multiple duties they have had. This case study applies a qualitative methodology, interpretative phenomenological approach (IPA). The data for this study was from in-depth semi-structured interviews with a homogenous and purposeful sample of female Ph. D. students (n=8) who share the same experience. The preliminary results of this case study indicated that those female Ph.D. students forged complex realities, viewed themselves as "spreading-thin", and used many tactful strategies to cope with their different duties during the COVID-19 situation.



## Appendix

Special Interest Group:  
Parenting and Family

Name:  
Ghada Alkilani - Mervet Mashhoor

Title:  
Coping with COVID-19: The Experience of Parents with Special Needs Children During Online Learning

Abstract:  
Ghada Alkilani: UAEU student since 2002: Bachelor of English Literature, Masters in Education, Doctoral Candidate, and twelve years in practice teacher. Finding the best practice in teaching kindergartners is my interest, using different methods and learning theories that will lead children to learn how to learn on their own.

The sudden shift from in-school classrooms to online learning has disrupted the education system globally. This shift has a lasting impact on students, particularly those with special needs. Although there are many studies dealt with Covid-19 and its impact on special needs children (Mendoza, et al. 2019; Cahapay, 2020), there is not a single study that was conducted to see how parents with special needs students cope with this crisis.

The essence of parents' experience is fundamental to understand the daily challenges they are facing with their children during the pandemic crisis. Studying parents with special needs children who suffer from serious cases such as deficiencies in social skills, verbal and non-verbal communication, adaptation, and interaction with their community are fundamental to understand the education process at home and how parents are trying to cope with the situation albeit their different roles at home to support family, support education and to sustain their work.

This study has emerged from the complaint of those parents. It is targeting the challenges, the daily trouble, and the endurance they have during their special needs children's online classes. Data will be collected from five parents of different cases of special needs children using surveys and parents' interviews to answer the targeted questions. This study will illustrate the most common challenges of parents with special needs children, it will also suggest some recommendations that could help the parents to overcome this challenging situation.



## Appendix

Special Interest Group:  
Policy and Leadership

Name:  
Mohammed Madi A. Yousif

Title:  
A Quantitative Study on Perceptions of Top Administrators, Faculty and Students on the Internationalization of Higher Education Institutions within the UAE

### Abstract:

Mr. Mohammed Madi A. Yousif is an expert in the field of Leadership, and Higher Education. Yousif is Ph.D. candidate in Leadership and Policy Studies in Education from UAEU. His dissertation is titled "Examining the University's Perception toward the Implementation of internationalization in the higher education institutions in the UAE."

Within the past decade, Student Academic Mobility (SAM) has been the center of focus for institutions around the world seeking to internationalize. With the emergence of academic hubs and branch campuses in developing countries, the patterns of student flows are fluctuating and challenging the traditional flows and modes of SAM. The purpose of this research is to compare two dichotomous systems of higher education; the EU region and the GCC region, analyzing their various approaches to SAM. The findings will be extremely useful to policymakers and relevant stakeholders who wish to internationalize the policies directed at their higher education systems and improve their SAM programs. Data on the policies and relevant SAM programs were collected through secondary sources on the internet, and a comparative analysis was performed using the theories underpinning SAM. The research brought forth common themes and issues, similarities and differences along with an outcome assessment for each of the SAM programs in the two regions. The major findings of the research indicate that while both regions have varied modes of SAM programs, leveraging on their respective demographics, EU has a unified strategy for promoting SAM in their region whereas the GCC region is clearly lacking in a regional strategy for promoting SAM



## Appendix

Special Interest Group:  
Policy and Leadership

Name:  
Fajr Alkouz

Title:  
Classroom power relations: Understanding the influence of mandating organizational knowledge and physical spaces on communication and collaboration

Abstract:  
AlKouz is a PhD student at UAEU, specializing in English Language and Literacy. Prior to her enrollment in UAEU, she served as senior instructor at the English Department in the Australian College of Kuwait. Her research interests include: world Englishes, multilingualism, literature, literary criticism, and cultural studies.

The notion of hierarchy is central to the bureaucratic and classical view of organizing educational operations, which imply a top-bottom processing of hierarchal authority. Educational organizations regularly implement systematic and standardized bodies of knowledge and behavioral practices, which embody a form of hierarchal control that is exercised over students and teachers at different levels, thereby influencing their communicative and collaborative experiences in the classroom. The purpose of the current study was to explore the influence of mandated organizational knowledge and physical spaces through enforced surveillance in classrooms on communication and collaboration among students and faculty members in a Kuwaiti higher education organization. Marion and Gonzales's (2014) perspectives on cooperative systems and structural-functionalist theory and Foucault's notions of docility (1997/2012) and technologies of the self (1977) guided the study. A qualitative methodology was employed through the use of reflective narratives and semi-structured interviews of students and faculty members. The findings of study showed that there was a strong association between schools' mandated organizational knowledge and physical space(s) and authorial power. Authorial power was noted to mainly link to teachers' acclaimed role for facilitating knowledge and controlling classroom physical spaces. Yet, the participants suggested creating spaces where such authorial power can be "awarded" and "shared" as a possibility for maintaining more democratic and student-centered classroom settings. Conclusions were drawn from the study findings, and implications for policy, practice, and research were discussed.



## Appendix

Special Interest Group:  
Policy and Leadership

Name:  
Halima Ahmed Omar

Title:  
Organizational Commitment among National and Expatriate Instructors at a Public Educational Institute in the United Arab Emirates

### Abstract:

Many organizations diligently search for highly committed employees as a key human resource (HR) strategy. This is highly contingent on how HR conceptualizes Organizational Commitment (OC), defined as overall individuals'™ engagement and identification within an organization (Mowday, Porter & Steers, 1979), and on its association to a wide range of outcomes of interest to researchers, such as job performance, absenteeism and turnover (Cohen, 2007). This interest has directed many scholarly investigations to explore antecedents that shape OC beginning from leadership and perceived organizational support, reaching to justice, trust and coworker support (Meyer & Allen, 1991). However, few empirical studies have examined the national origin as an antecedent that influences organizational commitment, particularly with current globalization, massive downsizing initiatives, and constant organizational restructuring processes (Van Knippenberg & Sleebos, 2006). In this paper, I argue that there are differences in the overall OC between UAE national instructors and expatriates. Moreover, different national origins will reveal different scores on the three OC dimensions (affective, continuance and normative). First, I will briefly highlight previous literature of a similar focus in the UAE and Gulf region. Second, I will conduct a mixed method research on government instructors in the Emirate of Abu Dhabi. Finally, I will highlight a number of recommendations for decision makers that help in optimizing the OC levels of different national backgrounds in light of the study main findings.

Special Interest Group:  
Socio-emotional Development

Name:  
Sabahet Bruncaj

Title:  
Imagining my future self: An exploratory look into Emirate High School students linguistic and verbal expressions in the context of English Medium Instruction

Abstract:  
Sabahet Bruncaj, a PhD candidate from UAEU who is focused on Bilingualism and Emotional expression. An Educator with experience working with the United Arab Emirates Ministry of Education and New York City Department of Education on literacy and language. Experience as a Translator for the United States Department of Justice and an Interpreter with the Department of Defense.

To aspire is to conjure words, images, and ideas for the sake of further imagining. When High School students are asked to consider their course of study to consider their future self, they are being asked to express a future self. In a second language context, this goal holds distinct expressional intricacies which highlight the absence of context-free language learning. Further it demonstrates that a target language continually infuses norms, where learners navigate through the confluences of vernacular choices and emerging identities, specifically within English Medium Instruction (EMI). The aim of this study is therefore to consider the impact of second language learning (L2) and explore the narrative expressions of grade 11 Emirate female high school students within an EMI context. The study will reflect on learner output as it relates to an independent task centred on expressing future employment and life aspirations in both written and visual form. An inquiry into the affective quality of lexical choices and visual representations from L2 learners and it establishes an ontological distinction between knowing a word and associations with the word. The study strives to purposefully reflect on the relationship between the linguistic and visual choices of learners while presenting their aspirational selves. The study aims to further rationalize a shift in the learning of L2 emotive vocabulary and calls for a consideration into solidify practices that further uphold the intricates of bilingual emotional expression through lexical choices that may create a narrative self.





## Appendix

Special Interest Group:  
Classroom Practices

Name:  
Hind Aleghfeli

Title:  
Using Karaoke (Same-Language-Subtitling) to Improve Reading Fluency in English as a Foreign Language for Students with Reading Difficulties

### Abstract:

My name is Hind Aleghfeli. I taught English for twelve years, mostly in inclusive classes and such experience enlightened on areas I might be lacking as a teacher and inspired me to seek a higher degree in the field of special education where I can support my students more effectively.

Reading Fluency is one of the five essential components of reading along with, phonemic awareness, phonics, vocabulary development and comprehension (Pinnell, 2008). This study aims to investigate the effectiveness of the -Same-Language Subtitling- reading program, on a student's reading achievement through a 10-week intervention. The study used mixed-method research design. The participant was a sixth grade Arab female student with learning difficulties. The intervention program was based on same-language subtitled (SLS) media through using Karaoke to improve reading fluency in English as a foreign language. The study employed a pretest, three ongoing tests, and a posttest assessment to evaluate the student's reading scores, and investigate the effectiveness of the intervention program. The Oral Reading Fluency (ORF; Barth et al, 2012) test was used to collect data on student's reading fluency skills. Data were analyzed and mean scores were compared resulting in statistically significant difference ( $p$ -value= 0.01). Additionally, semi-structured interviews were conducted with three schoolteachers to determine a) the student's reading level in both Arabic and English, b) material recommendations, c) and academic and behavioral background. Results revealed by the end of the program, that the student achieved significant improvement on reading fluency skills indicating the overall effectiveness of the intervention.

Special Interest Group:  
Mathematical Development and Learning Difficulties

Name:  
Abdul Rahman A A Adlouni

Title:  
The impact of using a web-based dynamic algebra notation system (Graspable Math) to enhance students' achievement and motivation in mathematical algebraic skills for middle school students

Abstract:  
This presentation reports on a study that explored the effectiveness of virtual manipulatives of web-based dynamic algebra notation system (Graspable Math) on promoting mathematical algebraic skills for students in the eighth grade in the UAE private schools. An explanatory quantitative quasi-experimental design was employed to achieve the purpose of this study. The quantitative phase of the study featured a pre and post-test after the implementation of a web-based dynamic algebra notation system (Graspable Math) for four weeks. The qualitative phase of the study featured a collection of documents of evaluations which were conducted biweekly during the implementation of the program. These evaluative checklists were used to measure the students' progress in mathematical algebraic skills and their achievement and motivation. The participants of this study were eighth-grade students who were selected conveniently and purposively (n=97). The results obtained from the pre-and post-test indicated that there is a significant difference between the pre and post-test in terms of mathematical algebraic skills. The qualitative results revealed that the use of the Graspable Math program to promote mathematical algebraic skills leads to progress in students' achievements and motivation, and accuracy of algebraic skills. The study discusses critical issues related to eighth-graders' mathematical algebraic skills. It suggests a number of recommendations for teachers, curriculum designers, and proposes some implications for future research.

Special Interest Group:  
Mathematical Development and Learning Difficulties

Name:  
Najla Al Owais

Title:  
Exploring Mathematics Through Literature: An Experimental Study

Abstract:

Najla Al Owais is currently pursuing her PhD degree in Math Education at UAEU. She has an MA in Translation & Interpreting from the American University of Sharjah and B.Sc in Math Education from Zayed University. She has previously worked as a middle school mathematics teacher and as a freelance translator. Her research interests are: problem-solving, math & literature, working memory and mathematics, mathematics assessment.

The purpose of this paper is to analyze the effectiveness of using children's literature to promote mathematical understanding and learning. While almost all children enjoy story telling time at school, math aversion can be noticed at the early stages of school. However, mathematical skills such as logical thinking, problem solving, patterns and number sense are all important for children in  $k \leq 4$  and can be presented to students in non-mathematical contexts. Combining mathematics with specific literature will provide the researcher the opportunity to investigate any marked increase in students' understanding in mathematics. An experimental group from the third grade will be chosen and will be exposed to story books and picture books related to their mathematical topics and will also be given mathematical activities related to the literature. The control group on the other hand, will be exposed to the natural mathematical classroom settings. The study will cover 4 – 6 weeks of classes, and students from both the experimental and control groups will undergo the same pre and post testing. Clinical semi-structured interviews will be undertaken for select students from both groups to gain better insight regarding their mathematical thinking & understanding. This paper will provide suggestions based on the experimental study in implementing mathematics through literature, and will provide a list of possible books related to different mathematical concepts and how they may be utilized.

Special Interest Group:  
Learning, Motivation, and Well-Being

Name:  
Asma Saeed Khethail

Title:  
Innovation in KG schools in Al Ain:

Enabling and hindering factors and procedures followed

Abstract:

Both qualitative and quantitative methods were used to explore this study. For the quantitative method, researcher use questionnaire which was built to collect data from leaders & teachers in three kindergartens, one of kindergarten achieved A level in irtiqaa inspection, one achieved B level and the last one achieved C level regarding school implementing for innovation. The survey contains the three-innovation process, each indicate the seven elements of creating innovation which aims to investigate the study. The questionnaire conducted online questionnaire for remote kindergartens which located outside Al Ain , which is done through email, is On the other hand, some questionnaire conducted as hard copies for kindergartens located inside Al Ain.

The qualitative method of the study will gather the data using personal interviews with participants in order to make a decision from their experiences. is school ready to implement the innovation. I will conduct twenty four interviews in three different kindergartens which have different irtiqaa inspection results band A, band B and band C respectively with one principal, one vice principal, one english head of faculty, one Arabic head of faculty and two Arabic subject teachers and two English subjects of teachers from each kindergarten focus group interview .These methods were used to investigate the main challenges schools face in implementing innovation, enable and hinders factors their implementation, and what it can do to improve process in the future.

This study has shown that the main factors that facilitate or hinder implementing innovation in Kindergarten schools in Al Ain, the procedures used in implementing innovation practices in KG schools in Al Ain and the improvement recommendations for implementing innovation in KG schools. First of all, we recommended for ADEC to focus on following categories teacher factors, curriculum, teaching and assessment factors, parents and students factors, school context factors and finally school leadership factors respectively from the high importance factors to less importance factors. As the facilitate innovation factors (6 factors) are less than hinder innovation factors (11 factors), school leaders are recommended to start with the hinder innovation factors and focus on creating an action plan to overcome them inside the kindergartens. School leaders might start with using time effectively and create timeline for planning and implementing innovation practices. It is very important to make connection between studentâ€™s innovation practices and assessment to make sure studentâ€™s understand and are learning. Moreover, kindergartens recommended to create innovation teams and enrich the outcomes-based curriculum with the 21 century skills, critical thinking skills, problem solving skills and innovation skills. ADEC recommended to utilized innovation resources & technology and to recommended to collaborate with kindergartens to plan for their needs of innovation resources upon the teaching and learning planning. School leaders also should be clear with awareness of the innovation, sufficient training,



## Appendix

planning for innovation interestâ€™s ideas for KG students. Education system in the UAE are encouraged to offer autonomous, taking risk and trying new things for school administrations. Also, its weighty to have common and shared policies with common frame work for implementing the innovation practices especially in the early stage. ADEC need to reduce the heavy requirement and demands and build strong connection with parents and community.



## Appendix

Special Interest Group:  
Learning, Motivation, and Well-Being

Name:  
Bernadette Michel Fakhry Guirguis

Title:  
The Contextual Features of a Virtual Library as Multimodal and Multiliteracies Space

### Abstract:

Bernadette Guirguis is currently a second year PhD student in Language and Literacy Education under the supervision of Professor Negmeldin Al Sheikh. She is also a member of the PhD academy in the Curriculum and Instruction Department at United Arab Emirates University. Her doctoral research interest is in literacy and multimodality. She holds a master's degree in Public Policy and Administration (Distinction) and BA in Business Administration both from the American University in Cairo, Egypt.

New trends in literacy studies entail multiliteracies and multimodality as forms and representations of literacy. Accordingly, the sophisticated literacy modes such as recording, storing, and presenting information changed drastically. The velocity of changes in literacy compel modern library to respond to multiliteracies and multimodalities. This case study explored parents (n=8) and library personnel's views about a modern multimodal library for children, where children interact and use different multimodal literacy. The study questions target the source of attraction for young learners to join this virtual library; the library features that captivate children to spend hours in the library and the literacy events that children love most. Preliminary results of this study indicated that parents realized that their children spend more than four hours in the library. Moreover, parents viewed that the interactive features of the library sparks children's curiosity and creativity which fuel and release their imagination, specially the creative blend of local heritage themes with modern technology-mediated literacy materials (e.g., camels, sand dunes, Arabian tents, rugs, virtual reality rooms, film-making studio for children, board games, 3D workshops, cozy nooks for reading, station for story-making, stop motion frame animation, the cloud-an interactive bubble-shaped virtual board for special needs children). These multimodal literacy activities enable children to navigate through various texts and to interact with virtual texts. The study offers some recommendations for research, curriculum resources, instruction, and library design.

Special Interest Group:  
Learning, Motivation, and Well-Being

Name:  
Fajr Alkouz

Title:  
Examining the attitudes of mainstream teachers toward the inclusion of multilingual linguistic repertoire(s) in L2 classrooms

Abstract:  
Alkouz is a PhD student at UAEU, specializing in English Language and Literacy. Prior to her enrollment in UAEU, she served as senior instructor at the English Department in the Australian College of Kuwait. Her research interests include: world Englishes, multilingualism, literature, literary criticism, and cultural studies.

The study will examine the importance of involving the English language learner's (ELL) full linguistic repertoire(s) in ESL classrooms by way of humanizing English language teaching. Despite the popularity of investigating multilingualism in the ESL field, few studies have investigated teachers' responses to it within the Kuwaiti context. This study therefore hopes to contribute to this locally underdeveloped area in multilingualism research by examining the attitudes of mainstream ESL teachers toward the inclusion of multilingual linguistic repertoire(s) in L2 classrooms within the higher education context in Kuwait. In addition to qualitative data, Reeves' (2006) "English-as-a-second-language (ESL) Students in Mainstream Classrooms A Survey of Teachers" will be utilized to collect quantitative data from ten participants, aged between 24 and 60 years. Participation will be open to native and nonnative speakers of the English language, who teach in the English language program at a mid-sized college in Kuwait and have between two and twenty five years of teaching experience. In addition to a demographic survey, which will collect information about the participants' subject area(s), gender, years of teaching experience, native language, second-language proficiency (if any), and types of English language teaching training, the survey will gauge the participants' agreement or disagreement with a number of ELL inclusion-related statements, the frequency of certain teaching behaviors, and the benefits and challenges of ELLs' linguistic background inclusion. The importance of examining the attitudes of mainstream teachers toward ELLs lies in the fact that their perceptions can greatly affect the quality of instruction and student achievement.



## Appendix

Special Interest Group:  
Children with Special Educational Needs

Name:  
Omniah AlQahtani

Title:  
Exploring Parents' perspectives on Distance Learning for Children with ASD in UAE

### Abstract:

My name is Omniah Al-Qahtani, I am doing my PhD on the Special Education in the UAEU. My research area is the education of students with Autism Spectrum Disorder. I am a mother of a child with ASD and hence, I would like to make a difference in the education of ASD learners and increase their future life opportunities. I believe this can be achieved by the persevere research at the first point.

Distance learning (DL) can be a significant contribution to education in situations like the covid 19 pandemic which the world experienced recently. During the lock-down period, many educational programs have been changed, making it possible to continue the learning process for learners with disabilities, particularly students with Autistic Spectrum Disorder (ASD). The aim of the study is to explore the distance learning procedure from the perspectives of parents of children with ASD.

A qualitative research design has been used and semi-structured interviews were conducted with six mothers of ASD learners discussing about benefits and challenges of the distance learning procedure. In addition, their suggestions to improve the quality of the distance learning process were taking into consideration in the discussion of the study. Parents' responses indicated some benefits of the DL procedure during lockdown situations, however many challenges for both the ASD students and their parents were reported. Training for both parents and teachers were highly suggested to overcome the challenges during DL and improve their overall experience.



Special Interest Group:  
Children with Special Educational Needs

Name:  
Abeer Arafa Abdelaziz Eldib

Title:  
Stress in Mothers of Children with Autism in the United Arab Emirates

Abstract:

Abeer Arafa El dib. I am a special needs teacher for about 10 years. I got my Master degree in Special Education in 2016. My research interests are autism, learning disabilities, and dyslexia.

Online learning became an obligatory choice for many educational systems to pursue learning and teaching processes during the lock down period due to Coronavirus pandemic. This new reality was challenging for all students and especially for students with Attention Deficit and hyperactivity Disorder [ADHD] who have a persistent pattern of inattention and/ or hyperactivity-impulsivity that interferes with functioning in every day activities. This study aimed to explore mothers'™ perspectives of children with ADHD with and without learning problems on the online learning experience. Using a qualitative approach, four mothers were interviewed using semi-structured interviews and their perspectives were recorded and analyzed. Four independent themes were explored : (a) Benefits of Online learning, (b) Challenges during Online learning procedures, (c) Suggestions for improvement, and (D) Reported mothers'™ stress during online learning. The perspectives shared by mothers indicated that online learning was beneficial under the lockdown period, due to flexibility in time and management, a better understanding of the child'™s characteristics, and pursuing the learning process. However, critical challenges were reported by mothers that were related to uncontrolled hyperactive behavior, mothers' difficulties in using computers, unsuitability to primary school students'™ qualities, writing skills difficulties, and shortages of resources. Modifying online learning to accommodate these challenges and the needs of students with ADHD is a necessity for better academic learning outcomes in similar situations

Special Interest Group:  
Physical Activity, Motor Skills, and Learning

Name:  
Theo Mbay

Title:  
The effects of physical activity and motor skill interventions on cognitive and academic performance in young children: a systematic review

Abstract:  
Mbay, T.1, Jylänki P.1, Hakkarainen, A.1, Sääkslahti, A.2, Aunio, P.1

1 University of Helsinki, Finland 2 University of Jyväskylä, Finland

The effects of physical activity (PA) interventions on cognitive and academic performance have been well documented (Haverkamp et al. 2020; Singh et al. 2019). However, the main focus has been in adolescents and the magnitude of the impact has not been quantified in young children. This systematic review aims to summarise the current evidence on the effects of PA and motor skill (MS) interventions on cognitive and academic outcomes in 3-7-year-old children. A literature search was conducted from seven databases according to the PRISMA guidelines. A total of 30 articles were identified and included in the final analysis. The quality of the included articles was assessed by the Effective Public Health Practice Project (EPHPP) – assessment tool. Two (7%) of the included studies received a high-quality ranking, four (13%) a moderate-quality ranking, and 24 (80%) a weak-quality ranking. Of the 30 articles included, 18 (60%) assessed the effects of PA/MS interventions on cognitive outcomes, 11 (37%) on academic performance, and 1 (3%) on both. For cognitive and academic outcomes, respectively, 13 of 19 (63%) and 7 of 12 (58%) showed statistically significant beneficial effect of PA intervention. The effect sizes ( $d$ ) ranged from 0.20 to 2.75 ( $\bar{x}$  1.10) for cognitive outcomes ( $n = 11$ ) and from 0.25 to 2.47 ( $\bar{x}$  0.85) for academic outcomes ( $n = 5$ ). In conclusion, PA/MS interventions appear to have a beneficial effect on the cognitive and academic performance of young children. However, due to the poor quality of the evidence, these findings should be interpreted with caution.

Special Interest Group:  
Physical Activity, Motor Skills, and Learning

Name:  
Anssi Vanhala

Title:  
The relations of physical activity, executive functions and early numeracy in preschoolers

Abstract:  
Anssi Vanhala<sup>1</sup>, Airi Hakkarainen<sup>1</sup>, Eero A. Haapala<sup>2</sup>, Arja Sääkslahti<sup>2</sup> & Pirjo Aunio<sup>1</sup>.

<sup>1</sup>Faculty of Educational Sciences, University of Helsinki, Finland

<sup>2</sup>Faculty of Sport and Health Sciences, University of Jyväskylä, Finland

Early numeracy (EN) is an important predictor of later mathematical and academic performance (Duncan et al., 2007). Physical activity (PA) has shown to be beneficial for higher-order cognitive processes called executive functions (EF) in preschoolers (Best, 2010). EF are important for the development of EN (Schmitt et al., 2019), and reported to mediate the relation between PA and EN in school-aged children (Donnelly et al., 2016). However, in preschoolers, findings about the relations of PA and EF have been mixed (McNeill et al., 2018; Willoughby et al., 2018) and there is a lack of studies investigating the relations between PA, EF and EN. The aim of this paper is to report the relations between PA, EF and EN, and the mediating effect of EF in the relation between PA and EN in preschoolers.

Participants were 207 children aged 3-5 years (107 girls, 100 boys) from Active Early Numeracy research project. EN was measured using an EN test (Van Luit et al., 2006), which assesses counting and numerical relational skills. Computer-based tests were used to assess two components of EF (Lee et al., 2018). Inhibition/switching were measured using a modified Flanker task and working memory/updating by using the pictorial updating task. Time spent in moderate and vigorous PA was measured using waist-mounted accelerometers (Actigraph wGT3X-BT).

The path model analysis showed that vigorous PA was positively related with EN through working memory/updating, while moderate PA showed a negative relation to EN through inhibition/switching

Special Interest Group:  
Parenting and Family

Name:  
Arve Fiskerstrand

Title:  
Literature review – Parental Involvement and Mathematics Outcome

Abstract:  
Volda University College, Faculty of Humanities and Education, Norway University of Helsinki,  
Faculty of Educational Science, SEDUCE, Finland

Previous research have shown that the impact and influence of parental involvement is associated with children's outcome, as learning, achievement, affections, motivation and affiliation (Boonk, Gijsselaers, Ritzen, & Brand-Gruwel, 2018). With system features from scoping reviews this literature review is the first focusing on the concept's parental involvement and mathematics outcome. Using search engines, 1397 articles from 2010 to 2019 were identified, and in the wake of the inclusion and exclusion process 169 articles (n-group) related to children aged from 6 to 16 years were selected for the review. An analysis operationalized the concepts of parental involvement and mathematics outcome. 82 concept variables of parental involvement were identified and classified into 11 categories. These were discussed in relation to 36 identified mathematics outcome variables classified in the categories learning, emotions, cognitions, motivations and behavior. As a result, the analysis identified a predominance of research focusing on parent activity towards the youngest children and parent support for the older children. In addition, significant parts of the research were aimed at achievement (Wilder, 2014) as a mathematical outcome and measuring instrument for parental involvement. Finally, the analysis stimulated to a suggestion for a new interpretative framework and definition of parental involvement which can be considered relevant and adequate even outside a mathematical context.

Special Interest Group:  
Mathematical Development and Learning Difficulties

Name:  
Heidi Hellstrand

Title:  
The development of children's early numeracy skills during a kindergarten year

Abstract:  
Heidi Hellstranda\*, Johan Korhonen, Pirjo Auniob

aFaculty of Education and Welfare Studies, Åbo Akademi University, Vasa, Finland bFaculty of Educational Sciences, University of Helsinki, Helsinki, Finland

Abstract

The aim of this study was to examine the development of children's early numeracy skills during a kindergarten year. The study group consisted of 361 children (176 girls;  $M_{age} = 6.20$ ,  $SD = 0.30$ ) from 21 kindergarten groups in the Swedish-speaking areas of Finland. The children's early numeracy skills were measured at three time points during the kindergarten year (beginning, middle, and end) with the Early Numeracy test (EN-test) for screening and identifying children at risk in mathematics learning. The EN-test focus on four early numeracy core skills: symbolic and non-symbolic number knowledge (NK), understanding mathematical relations (MR), counting skills (CS), and basic skills in arithmetic (BA). Four early numeracy profiles were identified in the beginning of the kindergarten year: average performing (67%), low performing with average skills in NK (19%), low performing with critical skills in NK (10%), and at risk for mathematical learning difficulties (3%). Age, gender, and language were not related to group-belonging. In the presentation we will also focus on the development of the early numeracy skills between and within the early numeracy profile groups during the kindergarten year. The results are discussed in context of assessment for identifying and supporting children at risk for learning difficulties in mathematics in early stage, and how systematic assessment can promote children's mathematical learning and give equal opportunities for every child to develop sufficient early numeracy skills.

Keywords: at risk of mathematical learning difficulties, early numeracy, kindergarten, numerical development

Special Interest Group:  
Classroom Practices

Name:  
Terhi Vessonen

Title:  
Assessing Preschoolers' Early Numeracy and Language Skills Using Teacher Rating Scales: Validity and Reliability Evidence

Abstract:  
Vessonen, T.1, Widlund, A.2 & Hakkarainen, A.1 1University of Helsinki, Finland  
2Åbo Akademi University, Finland

Teacher rating scales provide a tempting alternative to time-consuming and exhaustive formal testing to measure preschoolers' early numeracy and language skills (Südkamp et al., 2012). However, previous research on teacher rating scales have included several limitations in research design (e.g., narrow target groups and inadequate concurrent measures; Reid et al., 2014; Baker et al., 2016). Thus, the aim of this study was to extend previous research by developing valid and reliable teacher rating scales for assessing 3- and 4-year-old children's early numeracy and language skills. Fifty-six preschool teachers assessed children's (N = 281) early numeracy skills (counting, relational and arithmetic skills) using TRS-EN and expressive language skills using TRS-EL. Both scales demonstrated excellent internal consistency, TRS-EN  $\alpha = .953$ ,  $n = 217$  and TRS-EL  $\alpha = .921$ ,  $n = 238$ . Standardized early numeracy and language measures were also used to measure children's skills directly. Significant moderate to strong positive correlations were obtained for both TRS-EN (all:  $r = .691$ , 3-year-olds:  $r = .619$ ; 4-year-olds:  $r = .592$ ) and TRS-EL (3-year-olds:  $r = .425$ ; 4-year-olds:  $r = .560$ ) with the direct assessments. There were also strong correlations between the TRS-EN counting ( $r = .606$ ) and relational skills ( $r = .605$ ) with the direct early numeracy assessments counting and relational skills items. The results indicate adequate psychometric properties for the developed scales and that the scales could be used to recognize preschoolers' whose development should be further examined. In addition to these results, in IGSS 2021 we will present findings concerning structural validity using confirmatory factor analysis.

Special Interest Group:  
Children with Special Educational Needs

Name:  
Pinja Jylänki

Title:  
The effects of combined math language and fundamental motor skill intervention to preschoolers' early numeracy

Abstract:  
Jylänki, P1., Sipinen, E.1, Mbay, T.1, Sääkslahti, A.2 & Aunio, P1

1University of Helsinki, 2University of Jyväskylä

Previous research has shown that early numeracy (EN) and language skills are developmentally related (Purpura et al. 2011), and specific math language (i.e. concepts) has important role in this relation (Toll & Van Luit 2014). EN interventions have been found effective, but lasting effects have seldom reported (Aunio, 2019). Fundamental motor skills (FMS) have been associated with EN in preschool age children, but causal relation have not reported (Gashaj et al., 2019). It is possible that combining FMS and EN in interventions produces long lasting learning effects. The aim of this study is to examine the effects of an intervention program, which combines math language and FMS practice, to improve EN.

Eighteen children ( $M = 4.4$  years,  $SD = 0.5$ ), 11 girls and 7 boys, from two preschools, participated our pilot study in autumn 2020. The participants were identified by their teachers as at risk in their mathematical language learning. Children's EN and FMS were measured before and after intervention. As this intervention study is part of a larger project we will be able to use matched performance control design with several pre- and post-tests (e.g. Cooper, et al. 2007). Teachers were trained to conduct the intervention in their preschools. During intervention sessions storybooks with rich mathematical language were read with dialogic reading technique. During sessions children also practiced FMS, which included the same mathematical concepts as the books. One session lasted 45 minutes (2 x week, 8 weeks). In IGSS we will present preliminary results of the intervention.

Special Interest Group:  
Learning, Motivation, and Well-Being

Name:  
Anna Widlund

Title:  
Reciprocal effects of mathematics performance and school burnout during adolescence

Abstract:  
Anna Widlund, Heta Tuominen, & Johan Korhonen

#### Abstract

The majority of previous research on the relation between students' academic performance and school burnout have been cross-sectional, and thus, offer limited evidence in terms of causation. Of the few longitudinal studies that exist, many have focused on older students (e.g., university students), studied a rather limited time frame, and used grade point averages to represent students' performance. Therefore, the present study aimed to complement previous work by investigating concurrent and cross-lagged development of adolescents' mathematics performance (test scores) and perceived school burnout (exhaustion, cynicism, and inadequacy) during the course of lower secondary education. Information about Finnish students' (N = 1126) mathematics performance and school burnout was collected at four time points across grades 7 and 9 (ages 13-15). Path analyses revealed that exhaustion, cynicism, and inadequacy had different longitudinal relations with mathematics performance. Both positive (within 7th grade) and negative (7th to 9th grade) paths were found from exhaustion to mathematics performance. Inadequacy had negative long-term effects on performance, whereas no significant paths were found from cynicism. However, negative effects were detected from mathematics performance to all three aspects of school burnout, at least once across the four time points, suggesting that the longitudinal relationship between mathematics performance and school burnout, at least to some degree, is reciprocal.





## Appendix

Special Interest Group:  
Learning, Motivation, and Well-Being

Name:  
Peixin Nie

Title:  
Effects of Music Training on Children's Cognitive Functions – PhD project

Abstract:  
Peixin Nie<sup>1,2</sup> and Mari Tervaniemi<sup>1,2,3</sup>

<sup>1</sup>Cicero Learning, Faculty of Educational Sciences, University of Helsinki, Helsinki, Finland <sup>2</sup>Cognitive Brain Research Unit, Faculty of Medicine, University of Helsinki, Helsinki, Finland <sup>3</sup>Advanced Innovation Center for Future Education, Beijing Normal University, Beijing, China

### Abstract

Music training has been found beneficial to cognitive function. In this presentation, I will briefly introduce a one-year music intervention that we conducted in a primary school in Beijing China ( $n = 123$ , 7-11 years of age before training). The aim of the study was to investigate whether music training, compared with second language training and no training, could bring advantages in children's primary auditory functions as well as the cognitive functions, in both behavioral and psychophysiological perspective. Although without significant enhancement on EEG responses, the music group showed a significant improvement on digit span backward task but not digit span forward task, compared with the other two groups. The finding indicated that at least at behavioral level, the music training may benefit more the executive system of working memory. Due to the mixed findings in the current and previous studies about the music effect on digit span task and other executive functions, we will also discuss the role of different language/cultural backgrounds played in the effect, with evidence from an ongoing online study comparing the music effect on different memory functions in both Finland and China.

Keyword music training, cognitive functions, transfer effect

Special Interest Group:  
Curriculum and Pedagogy

Name:  
Emeka Nwoke

Title:  
HIGH SCHOOL BIOLOGY CURRICULUM ANALYSIS

Abstract:

School science curriculum has always played a major role in shaping what type of science is taught in the classrooms. Since the introduction of scientific literacy concept into the science education enterprise in the late 1950s, it has helped to shape the type of science taught in schools. This paper examines scientific literacy themes emphasized in high school biology curriculums in Finland and Nigeria to determine similarities and differences based on pre-determined variables in the PISA 2015 scientific literacy framework, and the study employed deductive content analysis as a methodological approach.

The results of the analysis were compared using the Chi-square mathematical tool and it showed that high school biology curriculums in Finland and Nigeria expressed scientific literacy themes in similar ways; however, the degree of emphasis on some elements of the scientific literacy concepts differ significantly. The Finnish high school biology curriculum emphasized more on scientific competencies and contexts of learning, while that of Nigeria emphasized more on scientific knowledge and attitude.

In conclusion, the study shows that though both countries are culturally different, yet both can teach school science in similar ways with different degrees of emphasis on some concepts, therefore, both countries can learn from each other in the ways they organize and implement their high school biology curriculums and can collaborate meaningfully in science education.