

PAPER PRESENTATIONS

Transforming early education through social and emotional learning: A case study of challenging behaviours in three Trinidadian schools

Presenter: Sabeerah Abdul-Majied, School of Education, The University of the West Indies, St. Augustine, Trinidad and Tobago

Too often students fail academically despite teachers' best efforts. Although previously underestimated, we now know that social and emotional learning (SEL) is an enabler for academic success. The Collaborative for Academic, Social, and Emotional Learning (CASEL) describes SEL as the process young people and adults internalize to apply knowledge, skills, and attitudes for developing healthy identities, managing emotions, and achieving personal and shared goals (CASEL, 2020). SEL also assists with developing empathy and decision making. Since learning at school is a social process, intentional SEL instruction can improve student outcomes. Traditionally however, SEL is left to chance. This research, a segment of a larger qualitative study, addresses the following research questions: How could undesirable behaviours which students demonstrated at three schools be categorised? And how successful were the strategies teachers used to address students' challenging behaviours? A yearlong, multi-site case study was conducted in classrooms for 6-year-old learners at three primary schools in Trinidad. Bronfenbrenner's (1979) ecological systems model of human development guided the study. Six students were observed during class and break times. Data were collected from field notes and teacher, student and parent interviews. Student behaviours were qualitatively analysed and themes developed. Findings included that students' behaviours could be categorised by personality types, school environment and home factors. Teachers, however, treated all undesirable behaviours as "bad behaviour" providing ineffective support. Recommendations include teacher use of strategies specific to categories of behaviour observed and continuous professional development for SEL instructions.

Exploring the dynamics of early childhood teacher support: Nurturing parent and learner engagement in remote education

Presenters: Sabeerah Abdul-Majied, Sandra Figaro-Henry, School of Education, The University of the West Indies, St. Augustine, Trinidad and Tobago

The COVID-19 lockdown forced a revolution in Caribbean education, as it did worldwide. Early childhood education like teaching at the primary and higher levels, had to shift from in-person group settings to emergency remote teaching (ERT). Unlike teaching older students, young learners need constant adult supervision to guide remote learning at home. Supporting parents in their changed supervisory role therefore became critical, to reduce the pressure of the new learning experience (Chase & Taylor-Guy, 2020). Teachers also needed new strategies to continue providing young learners with access to learning. The purpose of this study was therefore to understand the critical competencies early childhood teachers cultivated to support parents and young learners at one laboratory preschool during ERT. A descriptive case study investigated how teachers supported parents and 3-4-year-old learners during emergency remote teaching. The Resilience in Human Development theoretical framework, which Southwick, Bonanno, Masten, Panter-Brick, and Yehuda (2014), define as the capacity of dynamic systems to successfully adapt to disruptions which threaten how they function, guided the study's design. Creswell's (2016) recommendation that case study research requires data from multiple sources guided data collection and analysis from teacher questionnaires, written teacher reflections, parent questionnaires and consultant feedback reports. Findings indicated teachers had to assist parents to overcome emotional, pedagogical, and technical software challenges. Teaching innovations included teacher made videos, virtual field trips and manipulatives found in nature. Recommendations include focusing not only

on teacher resilience but also national policy support for continuity in early childhood teaching during emergencies.

Adaptation of TVET mathematics curriculum: A quantitative analysis of students' ways of thinking

Presenter: Crescentiana Alfred, Caribbean Educational Research Centre, The University of the West Indies, Cave Hill, Barbados

Current mathematics curricula do not fully meet the learners' intellectual needs and epistemological justifications (Harel, 2008). Learners are unable to discern how and why mathematical facts they use came about, and their connections with other facts. The mathematics discipline comprises two types of knowledge: ways of thinking and ways of understanding, which should constitute elements of the mathematics curricula. However, having knowledge of facts does not satisfy students' intellectual needs (Goldenberg, 1996). Adapting the TVET mathematics curricula using the habits of mind approach will provide a coherent body of ways of thinking to guide the instructional objectives rather than a list of facts and skills to be mastered. While some facts and skills must be included, the focus ought to be on the reasonings that were used to establish the facts and ways of thinking to use the facts to develop the skills required. Since the majority of students with incorrect ways of thinking also have incorrect ways of understanding (Samosir & Herman, 2023), this study aims to analyse students enrolled in TVET programs ways of thinking in response to twenty-five multiple choice items. These items were used as part of a diagnostic test of TVET students' numeracy knowledge and skills in five areas. The results revealed that Measurement and Geometric Thinking are two areas where TVET mathematics curricula need to be adapted. The results of this quantitative analysis are significant for education policy makers in enforcing curriculum guidelines to improve TVET students' ways of thinking mathematically.

A review of principals' leadership styles on teacher performance

Presenter: Kerry-Ann Alexander, School of Education, The University of the West Indies, Mona, Jamaica

Locally and globally, school leadership continues to be a contentious issue when it comes to institutional leadership. As a result, this conceptual paper is based on a review of literature that examines the impact of principals' leadership styles on teacher performance. The Path-Goal Theory of Leadership is the theoretical framework that was used to underpin this research, which was devised by Martin Evans (1970), explored by House (1971), and later developed by House and Mitchell (1974). The purpose of this desktop model conceptual research is to consult a variety of primary sources to: (a) review the impact of principals' leadership styles on teacher performance; (b) analyze data from empirical studies to better understand how principals' leadership styles impact teacher performance; and (c) identify the types of leadership styles that enhance teacher performance. A systematic literature search was conducted using over 35 peer-reviewed articles through the search of several databases made available through the "UWllinc" online library. Literature findings show that teachers' performance is greatly affected by a directive leadership style (Saleem et al., 2020). Teachers' performance and motivation will improve when they are treated with respect, participate in decision-making, and are given encouragement. Literature has recommended that to improve teacher performance, school principals should use a directive style of leadership (Okoji, 2015).

Education and identity: Textbooks as epistemological battleground

Presenter: Moji Anderson, Department of Sociology, Psychology and Social Work, The University of the West Indies, Mona, Jamaica

Teaching the undergraduate class Anthropology of Africa at the UWI Mona, I have been exposed year after year to students' ill-informed views on the continent and their ignorance of the connection between those views and their own sense of racial identity. They blame the media and their schooling for this. Picking up on the latter culprit, the primary research question driving this project is, "is there racist and Eurocentric bias in Caribbean textbooks"? Secondary level schoolbooks listed under History, Social Studies and Caribbean Studies from the list of textbooks on the Ministry of Education, Youth and Information's website were reviewed for the existence of stereotypes and adherence to Euro-American epistemological models. This research is less interested in quantitative assessment (e.g., "4/10 books contained bias"), and more in a qualitative narrative of issues found in the texts. Understanding education as hegemonic and selective, and textbooks as a critical agent for communicating the ideals of that hegemon, I investigate the ways in which colonial epistemology is transmitted and/or resisted in Jamaican schoolbooks. This project concludes that some textbooks reflect the constant battle that has been described by many scholars of Jamaica, the Caribbean and the African diaspora: between colonial and decolonial discourses and epistemologies. I recommend i) entering schools to learn how these texts are engaged in the classroom, and ii) a rewriting of school textbooks to present decolonial perspectives that will stimulate racialized self-confidence among our youths and pave the way for an emancipated Jamaica.

Exploring the transition of university professors to positions of additional responsibility

Presenter: Shernett Auld, Ontario Institute for Studies in Education, Canada

Effective leadership by academic administrators is an area of significant relevance to self-governing institutions of higher education. The success of universities is dependent upon a high degree of competent performance from professors and researchers of varying ranks, particularly those who assume positions of additional responsibility (PAR). These PAR include, but are not limited to, Department Chairs, Deans, and Associate Deans. Most universities do not adequately prepare faculty for the challenges of PAR, leading newly appointed academic administrators to experience needless stress and to be less effective administrators, particularly in their early years in these positions (Armstrong & Woloshyn, 2017). Although the higher education literature contains an abundance of research about university presidents, academic deans, and department chairs (White, 2014), research which focus specifically on these role transitions are sparse. The purpose of this study is to fill a significant gap in the literature by exploring the experiences of professors who have transitioned to PAR. This study also aims to provide recommendations regarding how universities may improve governance and leadership practices to support transitions to PAR. Using a qualitative case study design, six professors who transitioned to PAR within two faculties of a medium-sized university in Southern Ontario were interviewed. Respondents revealed that they were unprepared for leadership roles, and they provided recommendations regarding how universities can support transitions to leadership posts. Universities are encouraged to implement measures such as formal transitional arrangements, formal leadership training and formal mentoring to ensure that those in PAR are adequately prepared and supported.

The experiences of first-year college composition writing students in a synchronous online remote learning environment

Presenter: Tracy-Ann Beckford, Department of Language, Linguistics and Philosophy, The University of the West Indies, Mona, Jamaica

This presentation explores the experiences of first-year college composition writing students in a synchronous online remote learning environment. A qualitative approach, in the form of a case study, was utilized. The study involved 14 participants from a class of 32 students in a teacher training institution in Jamaica. Convenience sampling was used. The data were collected from a questionnaire, semi-structured interviews, and analysis of artifacts which were samples of participants' writing. The constant comparative method was employed in this study. While participants had challenges with internet connectivity, limited peer interaction, and the slow rate of instructional feedback, they felt that instruction was effective due to the instructor's personality, involvement, and excellent pedagogical skills. The findings of this study can be instructive to educators utilizing online remote teaching. Most of the study participants expressed that they could learn English face-to-face or through online remote learning equally well; it all depends on the instructor. While 57% of the participants said that they preferred face-to-face instruction, they said that the methodology that their instructor employed would be effective in any mode. Recommendations include finding ways to mitigate challenges with internet connectivity and weak peer-to-peer interaction, and developing lecturer schedules that will enable faster feedback on students' writing.

High school boys' perspectives on teaching methodologies in STEM education: A quantitative survey approach

Presenters: Camille Berry, Miguel Ison, School of Education, The University of the West Indies, Mona, Jamaica

This research paper aims to investigate the perspectives of high school boys on teaching methodologies in Science, Technology, Engineering, and Mathematics (STEM) education. By understanding the viewpoints of male students, particularly in the context of STEM subjects, this study seeks to provide insights into effective instructional practices that can enhance engagement, learning outcomes, and participation among boys in STEM classrooms. The statement of purpose and intent for this research is threefold: first, to identify high school boys' preferences and perceptions regarding various teaching methodologies commonly employed in STEM education, second, to explore how these methodologies align with boys' learning styles, interests, and academic experiences and third to implement pedagogies for optimizing the learning experience of the participants. By addressing these objectives, this study aims to inform educators and policymakers about strategies to improve STEM instruction and promote gender equity in STEM fields. The focus of this paper is on the first two objectives of the study. Utilising a quantitative survey design, data will be collected from a sample of high school boys enrolled in STEM subjects across diverse educational contexts. The survey instrument will be designed to capture boys' perceptions of teaching methodologies and their academic experiences in STEM classrooms. In conclusion, this research paper will contribute to the ongoing discourse on effective STEM instruction and gender equity by providing empirical insights into high school boys' perspectives on teaching methodologies and offer a comprehensive understanding of boys' preferences and perceptions regarding STEM instruction.

Exploring the utilization of music-based learning strategies in the comprehension of Language Arts concepts among students

Presenter: Chris-Ann Blake-Coombs, School of Education, The University of the West Indies, Mona, Jamaica

Music is deeply ingrained in Jamaican culture, offering untapped potential as a conduit for preserving and celebrating heritage while serving as a valuable tool or learning strategy for comprehension of language arts concepts. Studies in Jamaica highlight the urgent need to enhance English language proficiency, necessitating a re-evaluation of language arts teaching approaches to include music-based learning strategies. Music has emerged as a rich source of cultural context for students. I argue that educators should leverage its potency in the language arts classroom to improve the comprehension of language arts concepts. Thus, this literature review explores the use of music-based strategies to enhance students' comprehension of language arts concepts, revealing a significant gap in using such strategies for comprehension in schools. The literature underscores notable gaps, particularly the absence of specific music-based techniques while emphasizing that music resonates with students, enhancing their academic material retention. Hence, it should be an integral component of teachers' instructional toolkit. Additionally, the literature highlights that the integration of cultural music into curriculum delivery can positively influence students in many ways, thus emphasizing that cultural music can be used in music-based strategies specifically in the comprehension of language arts concepts. Consequently, it is recommended that educators within the Jamaican context, particularly language arts educators adopt context-responsive and culturally relevant approaches to create authentic learning environments, alongside developing practical, tailored music-based approaches to unlock the inherent power of music-based learning in language arts comprehension.

Perceptions of virtual laboratories and attitudes towards chemistry among Jamaican grade 10 students

Presenter: Sharon Bramwell-Lalor, School of Education, The University of the West Indies, Mona, Jamaica; Nicole Kerr-Walker, Department of Natural Sciences, St. Jago High School, Jamaica

The COVID-19 pandemic posed challenges to science teaching in high schools, especially laboratory work, but at the same time provided opportunities for utilizing alternative strategies such as virtual laboratories. This sequential multimethod study presents findings of students' self-reported perceptions of virtual laboratories, and attitudes towards chemistry. In the first phase, 153 grade 10 students completed two adapted Likert-type survey instruments, the Perceptions of Virtual Laboratories (PVLS) and Attitudes towards Chemistry (ATC). The results indicated students held moderate perceptions of virtual laboratories ($M= 40.56$; $SD = 9.23$), and attitudes towards chemistry ($M=43.94$; $SD=5.81$). Spearman's rho revealed a statistically significant positive correlation, $r(151) = .182$, $p = .024$, between these two variables. In the study's second phase, a subgroup of 21 students were trained, and carried out four virtual chemistry laboratory exercises. After the intervention, students again completed the PVLS and ATC. However, Wilcoxon matched-pairs signed-ranks test indicated there was no significant change in students' attitudes towards chemistry ($z = -.374$, $p = .708$), nor perceptions of virtual laboratories ($z = -.078$, $p = .938$). The modest positive relationship between students' perceptions of virtual labs and their attitudes towards chemistry suggests that virtual laboratories have the potential to favourably influence students' chemistry perceptions. Further the sustained attitudes and perceptions following students' use of the virtual labs, indicate their potential use as a tool for supplementing chemistry teaching. Institutions should consider investing in training teachers in using virtual laboratories to assist science teaching and learning.

Supporting faculty in their development as reflective and reflexive practitioners

Presenter: Mervin E. Chisholm, Centre for Excellence in Teaching and Learning, The University of the West Indies, Mona, Jamaica

The purpose of this qualitative research study was to investigate the place of reflection and reflexivity in a Certificate in University Teaching and Learning (CUTL) programme employing the Critical Friends' Group (CFG) approach. Various approaches have been used in the pedagogical development of university faculty. The CFG approach (Azevedo, Baldanza, & Dowd, 2023) holds some promise for the development of faculty as reflective and reflexive practitioners. The researcher conducted semi-structured interviews with ten faculty members completing the CUTL programme which lasted for approximately one hour. The information rich participants were purposively selected. In addition, notes from observation and informal discussions were utilised. The following research questions guided the study: 1. How did the reflection component of the programme impact you? 2. What role did the critical friends' component play in your reflection and learning about teaching? 3. How did the episodes of observing a colleague and being observed by a colleague impact you? After thoroughly reviewing the data gathered from each interview, including transcription, and multiple re-reading of transcripts, the findings indicated that learning was enhanced by reflection-in-action and reflection-on action. The role of the critical friend was supportive, exerting a push factor, propelling participants to greater levels of reflection. Reflexivity was supported by the peer colleague or supervisor. The study supported other findings, indicating that in supportive and safe environments, critical friends cause heightened reflection on teaching, improvements in teaching and transformational learning.

Embracing change: Exploring educators' journey with the CSEC Revised English A Syllabus: Implications for teacher education

Presenter: Sunita Colai, Department of English, Arima North Secondary School, Trinidad and Tobago

In an endeavour to enhance the pedagogy, learning, and evaluation of English Language in the Caribbean, a revised CSEC English A (Language) syllabus was introduced. This revision brought about substantial changes in English language instruction, necessitating teachers to adopt an integrated teaching approach, introduce a new language mode, manage group dynamics, comply with SBA requirements, deliver new content, and generate additional educational resources. Unfortunately, since its inception in 2018, limited information exists regarding the efficacy of its implementation. This qualitative transcendental/descriptive phenomenological study, conducted in Trinidad and Tobago, sought to elucidate the essence of English teachers' lived experiences with the revised CSEC English A syllabus data from fifteen teachers across four school types were collected through semi-structured interviews and subsequently analyzed using Hycner's (1999) explication process. Fullan's (2016) theoretical framework served as a foundation for data analysis, utilizing a transcendental/descriptive phenomenological approach. The findings unveiled a lack of understanding among teachers regarding the revised syllabus. They failed to recognize its necessity, grappling with time constraints and overwhelming workloads. The implications of these findings go beyond merely describing educators' experiences. They offer more extensive insights that have the potential to influence and shape teacher training, professional development initiatives, and educational policies. Thus, policymakers and educational leaders can utilize these findings to design training programs aimed at supporting teachers in their ongoing development, specifically in the context of curriculum change.

Cognitive behaviour modification methods in reducing aggressive behaviours of students in an urban high school in Kingston, Jamaica

Presenters: Sharline Cole, Susan Anderson, The University of the West Indies, Mona, Jamaica

It is an understatement that acts of violence and aggression are increasing in our Jamaican society. This painful dilemma has taken a debilitating toll on too many of our students. Some students arrive at school with attending behaviours such as trauma, anger, and lack of interest in schoolwork, which can be argued are antecedents to the increasing numbers of violent and aggressive incidents. This descriptive case study showcases the effectiveness of cognitive behaviour modification techniques: specifically, the use of behavioural contract, self-instruction, self-management, and anger management training in reducing aggression among 17 students with behavioural problems. A six-week intervention plan was instituted with mentors who were trained in the different techniques of cognitive behaviour modification. Mentors (under the guidance of the educational psychologist), worked with the student to reduce the aggressive and or violent behaviour in school. The data were collected through focus groups, interviews, observations, behavioural logs, reflective journals, and students' self-reports. The findings revealed that students' use of behavioural contracts, self-instruction and anger management training contributed to their behaviour change. There was noted reduction in the number of fights, skulking and other negative behaviours over the intervention period. In addition, parental involvement in reinforcing the methods positively impacted the students' behaviours. It is therefore recommended that training in the use of cognitive behaviour modification methods can help students develop useful and worthwhile skills in modifying their anti-social behaviour and ultimately controlling violence in school.

Automating the generation of informal reading inventories using artificial intelligence

Presenters: Andre Coy, Department of Physics, The University of the West Indies, Mona, Jamaica; Paulson Skerrit, School of Education, The University of the West Indies, St. Augustine, Trinidad and Tobago; Phaedra Mohammed, Department of Computing and Information Technology, The University of the West Indies, St. Augustine, Trinidad and Tobago; Aneeqah Hosein, Department of Physics, The University of the West Indies, Mona, Jamaica; Yewande Lewis-Fokum, School of Education, The University of the West Indies, Mona, Jamaica

Informal reading inventories (IRIs) are non-standardised reading assessment tools that are meant to allow teachers to determine the strengths and instructional levels of their students. The results of these assessments are often used to shape the approach to classroom routines such as, selecting reading books with appropriate levels of difficulty and setting the objectives of reading instruction. The material used in IRIs are either commercially produced or teacher-made and, by their informal nature, allow teachers to determine the unique needs of each learner under their care. There are guidelines for teachers to prepare their own IRIs, however, they assume, firstly, that the reading materials selected for use as an IRI are appropriate for all the students who will take the test and secondly, that the evaluation will provide an impartial and accurate assessment of students' reading proficiency. These limitations are among the reasons why teacher-prepared IRIs are not often employed in the Caribbean context. This paper proposes an approach to addressing the challenges of creating an IRI by leveraging the power of large language models (LLMs). It will describe the process of customising the IRI (to ensure cultural relevance) using prompt engineering techniques. Comparisons with a validated IRI, using summary statistics and various readability formulae, show that the LLM can produce an IRI with nearly identical text features. A method for testing the validity of the LLM-made IRI is proposed and the potential for automating the entire reading assessment process, from IRI generation to student assessment and scoring, is discussed.

Investigating teachers' migration and its impact on their job transition process: Revolutionized management approach to Jamaican education systems

Presenters: Zavia Cunningham, Bolapeju M. Agboola, The University of the West Indies, Mona Campus, Jamaica

This study aimed to investigate the reasons for Jamaican teacher migration and the impact on their experiences and job adaptation processes in new countries. Migration brings opportunities for growth and economic benefits; however, teachers could face challenges such as adjusting to new cultures and education systems, and far-reaching cost impact on Jamaican education in terms of training and replacement of vacancies created. Hence, research questions were premised on the outcomes of an extensive review of literature and theories of management. Using a qualitative phenomenological approach rooted in the constructivist paradigm, the researchers analyzed the individual narratives of purposively and conveniently selected thirty (30) Jamaican secondary school teachers, aged between 25-40 who possess a minimum of two years teaching experience and migrated overseas to provide insights into their emotional, professional, and cultural journey post-migration. Information was gathered from participants using survey (online) semi-structured interviews. Confidentiality, informed consent, and assent were utilized as an ethical protocol. Results highlighted several themes: the challenges of environmental and cultural adjustments, the importance of institutional support, the balance between financial motives and national loyalty, and the pivotal role of adaptability and resilience. A revolutionized management approach to teacher migration has significant implications for Jamaicans because it alerts the government to plan how to recruit for vacant positions and acts as a guide for policymakers to develop robust retention policy initiatives and to explore areas of benefits and collaboration with other countries. It also provides insights and job-coping strategies to already migrated teachers.

Interrogating sixth form students' perceptions on participation in school-based extra-curricular activities at a school in Trinidad

Presenters: Tracey Elcock, Sharon J. Jaggernauth, School of Education, The University of the West Indies, St. Augustine, Trinidad and Tobago

Schools fulfil students' educational needs through broad experiences within academic, co-curricular and extra-curricular programmes. School-based extra-curricular activities (SBECA) provide structured leisure environments that nurture students' development. SBECA enrich the formal curriculum by engaging students in real-life problem-solving scenarios that strengthen personal relationships, improve academic achievement, develop contemporary skills, minimise high-risk behaviours, enhance creativity, productivity, and well-being, and develop rounded individuals. Why students participate in SBECA is under-researched in Trinidad and Tobago. This qualitative case study was conducted at one secondary school in southern Trinidad where students' interest in SBECA is low, despite being initiated and managed by students and support by the school's administration. Seven purposively sampled Sixth Form students participated in 30-minute, semi-structured interviews. Transcribed interviews were thematically analysed to generate themes and a descriptive narrative that explicated students' perspectives on the benefits, challenges, and opportunities for improving SBECA at the school. Results indicate that students engaged in two or more SBECA including academic, athletic and performing arts clubs, as well as service organisations and student government. They appreciated the freedom of expression, sense of belonging and community, teamwork, and managing conflicts, but struggled with financing SBECA and achieving academic-SBECA balance. They advocated increasing stakeholder involvement, improving resource allocation, and expanding SBECA offerings. Expanding SBECA offerings could broaden students' skills base, make school more enjoyable, and smoothen the transition to post-secondary life. Strengthening adult involvement can improve SBECA management, facilitate academic-SBECA balance, and prepare well-

rounded twenty-first-century citizens. Further research should explore perspectives on SBECA across schools and stakeholder groups.

Cultivating workplace transition readiness: A mixed-methods study of "home" residents in urban Jamaica

Presenter: Debra Ferdinand-James, School of Education, The University of the West Indies, Mona, Jamaica

The mission of The University of the West Indies, School of Education (SOE), Mona campus includes promoting educational advancement through community outreach. To this end, the SOE undertook a requested Transition Project for teenage residents of a national children's home in readiness for summer employment. The project's 14 virtual training sessions included goal setting, social media management, resume preparation, and job-interviewing techniques. In resume reviews of the latter, the first Presenter and facilitator observed that several residents showed an interest in the hospitality industry, a key revenue-generating sector for Jamaica's economy. Subsequently, she piloted an educational tour on careers in the hospitality industry for the residents with a renowned global hotel chain, in keeping with experiential theory. This educational tour complemented the residents' virtual sessions in readiness for their school-to-work transition in the July-August period. While much research has been done on the study topic in a developed country context, feedback from youth in a Caribbean context is limited in scholarly literature. The purpose of this research is to explore local "Home" residents' reactions to piloting the educational tour as a school-to-work transition strategy. A mixed methods design was used for collecting, analyzing, and integrating quantitative and qualitative study data for residents' reactions to their hospitality industry educational tour. The study results showed more favourable than unfavourable reactions from residents to their education that can narrow the gap in the scholarly Caribbean literature on this topic. Recommendations are made for enhancing high school-to-work transition strategies and future research.

Exploring curricular opportunities for primary school mathematics teachers' to infuse education for sustainable development into their teaching

Presenters: Therese Ferguson-Murray, Lois George, School of Education, The University of the West Indies, Mona, Jamaica

Education for Sustainable Development (ESD) is seen as critical due to its emphasis on developing knowledge, values, attitudes, skills and behaviour in support of sustainability. The Change from Within (CFW) programme, a school-based initiative that seeks to address violence and indiscipline through a process of culture change within schools, is implemented under the banner of ESD as it seeks to promote peacebuilding; respectful, peaceful and positive relationships; and educational achievement through meaningful and engaging pedagogies. Given that several of the CFW schools are located in or have students drawn from inner-city and/or low-income areas that can be characterised by poverty, social deprivation and crime, ESD is particularly relevant to promote educational attainment, values and behaviours aligned with sustainability. This study is drawn from a larger qualitative study, which seeks to explore the infusion of ESD in primary-level mathematics instruction within one CFW school. This is seen as part of an effort to contribute to peacebuilding within the school whilst also boosting mathematics performance and embedding sustainability content into a core subject. Using content analysis, this paper will share preliminary findings from an analysis of the Grades 1 and 4 Mathematics Curricula to highlight opportunities for ESD infusion. The findings will hold implications for ESD and peace education not only in mathematics but in other subjects offered within schools in Jamaica and the region, particularly with

respect to the ways in which curricula can be used to enhance learners' engagement with increasing complex sustainability issues.

The overhangs are present: Jamaican education policy as a perpetuation of coloniality

Presenter: Stephen Francis, University of Bristol, England

This study investigates how stakeholder relationships contribute to social injustices arising from National Student Dress and Grooming Policy Guidelines in Jamaica's Public Education Institutions (PEIs). Drawing on semi-structured interviews with Jamaican education policymakers, secondary-level PEI administrators, and education researchers, this study uses Reflexive Thematic Analysis to analyse their responses alongside the 2018 National Student Dress and Grooming Policy Guidelines. Further, it highlights how colonial legacies continue to affect education policy in postcolonial contexts. Despite the need for adequate stakeholder engagement in policymaking, the findings reveal that hierarchical relationships and a lack of meaningful engagement allow racist, sexist, and classist views to persist in local education policy. The research also highlights the implications of Eurocentric grooming standards leading to the marginalization of Black, working-class students. This research has implications for various education stakeholders in Jamaica and other postcolonial contexts, highlighting the need for inclusive and participatory policy-making processes centering the needs and experiences of marginalized students. The findings suggest that shifting from Eurocentric policies toward more culturally responsive approaches would be a step toward promoting social justice in education. Furthermore, this study contributes to broader conversations about relationships between colonial legacies, education policy, and social justice. By highlighting how colonial histories continue to shape educational policy, this research underscores the need for critical engagement with the historical roots of social injustices in education. The findings suggest that a shift toward more inclusive and culturally responsive policy-making processes is necessary to address the ongoing legacies of settler colonialism in education.

Unveiling the cognitive landscape: Exploring Jamaican high school students' mathematics achievement across three cognitive domains and gender dimensions

Presenter: Lois George, School of Education, The University of the West Indies, Mona, Jamaica

Understanding the multifaceted nature of student mathematics achievement necessitates delving into cognitive domains such as knowledge, comprehension, and reasoning. These domains encapsulate the thinking processes essential for students as they grapple with various mathematical concepts and tasks. However, the scholarly focus on this crucial aspect remains sparse. This presentation aims to fill this gap by investigating Jamaican students' mathematics achievement across three cognitive domains—knowledge, comprehension, and reasoning—across four years (2015, 2016, 2018, 2019) and by gender. This study used the Caribbean Secondary Education Certificate (CSEC) mathematics results of 69,945 public school students from 161 secondary schools in Jamaica. The analysis of the data using descriptive statistics and an independent t-test revealed a consistent pattern of cognitive domain performance across all grade levels and throughout the four years. Notably, students exhibited the highest proficiency in the knowledge domain, followed by comprehension, and finally, reasoning. Furthermore, our study revealed noteworthy gender disparities in the knowledge and comprehension domains, with females outperforming males, albeit with minimal effect sizes. This research sheds light on the nuanced dynamics of student mathematics achievement, emphasizing the significance of cognitive domains and their implications for educational practice. The practical implications gleaned from this study and potential avenues for future research will be discussed, offering valuable insights for educators, policymakers, and researchers alike.

A qualitative study exploring the techno-pedagogical strategies used to foster the digital skills of students at a tertiary institution in Barbados

Presenter: Sasha Goodridge, School of Education, The University of the West Indies, Mona, Jamaica

The educational system is increasingly concerned about digital literacy as students navigate the new digital environment. Essential digital skills for success in the digital age include the ability to access, organize, comprehend, integrate, communicate, evaluate, and generate information through digital devices and networked technologies. Researchers emphasize embedding strategies in the curriculum of schools to develop students' digital literacy skills. Hence, one can ask the question, 'What techno-pedagogical strategies are needed in the teaching and learning process to develop the digital competence of students?' To answer this question, a qualitative study was conducted to obtain the experiences of a computer studies tutor at a community college in Barbados. The data was collected through interviews, observations, photographs, and document analysis. The results show that blended learning using the flipped classroom teaching strategy was used to develop the digital skills of students. The online component was supported by the Moodle Platform, and several Moodle features were utilized, as well as external apps such as Flipgrid. The blended learning approach was used to develop several digital skills, such as access to course material, technical skills to navigate a course page, collaborate with peers, and engage in real-world problems. It also fosters communication between peers using digital resources or applications such as discussion forums. However, the teacher still relied on transmissive pedagogy to explain concepts. The findings indicate a need for additional training in incorporating technology into the classroom and support structures to encourage the use of technology to improve students' digital competence.

English educational enclosures: Exploring the relationship between school and prison for Black Caribbean Students in the UK

Presenter: Montel Gordon, University of Glasgow, Scotland

This paper endeavours to explore the concept of 'educational enclosures' in an English context to further understand the punitive approach taken by schools. Scholars have shown that the education system operates a pipeline from schools to prison (Warren, 2021; Pane and Rocco, 2014; Kim et al., 2010) for primarily people of colour. The flow has accelerated dramatically recently under the auspices of wars against drugs/crime/terror waged by the US government against its own people. Similar trends have emerged in UK scholarship. Researchers have linked the longstanding tradition of disproportionately excluding Black and minority children (Gillborn and Demack, 2018; Demie, 2021; Wallace and Sailsbury, 2021) to disproportionately imprisoning them. Through my PhD research, narrative interviews with former prisoners from Birmingham, focusing on their educational experiences were conducted. The findings show that schooling experiences played a large role in their later imprisonment. The theory of educational enclosures as a framework was utilized, to understand the persistent neoliberal attacks on the education system (Lissovoy, 2012); in addition to the historical contours that has prohibited Black Caribbeans from succeeding in the English system. Institute of Race Relations researcher Jessica Perera's case study of their exclusion and criminalisation in London argues that successive governments have restructured education to the detriment of the working class and created a racialised 'educational underclass'. This 'educational underclass' is spun from school exclusion into the criminal justice system and prison. Concurrently, through the impact of the pandemic, we see how inequalities in education have become exacerbated.

Exploring exemplary pedagogies in a Jamaican non-traditional high school: The case of David Watson

Presenter: Daneille Green, University College London, England

Rooted in colonialism, the Jamaican secondary education system has been characteristically stratified along class boundaries. Through merit-based selection, middle class children conventionally access their education in elite, top-performing “traditional” secondary schools while their lower-class contemporaries are disproportionately educated in the underserved, underperforming “non-traditional” spaces. Jamaican academics have repeatedly commented on this systemic divide and its implications for educational and overall national progress. However, with the nascent bridging of the divide in both educational quality and achievement, the extant literature lacks empirical evidence of the pedagogies that are currently being applied in non-traditional secondary schools to successfully meet the educational needs of students from marginalized backgrounds. This case study therefore explored the pedagogical perspectives and practices of David Watson, an exemplary teacher in a non-traditional secondary school. David emerged as exemplary through a community-nomination process that involved parents, students, teachers, and administrators within the selected school. Video/audio-recorded observations and ethnographic interviews conducted with both David and his students were the main sources of data generation. Thematic analysis revealed that David’s pedagogy is primarily distinguished by his rejection of stereotypical deficit perspectives of lower-class students’ learning capabilities and the concomitant adoption of a social justice pedagogical stance that balances high academic and behavioural standards with warm holistic student support. David’s case highlights the need for initial and continued teacher education courses in contextually and culturally responsive pedagogies to strengthen Jamaican teachers’ capacities to foster equitable access to quality education for historically marginalized student populations.

Educating Caribbean archivists: The challenge of Caribbeanization, portfolio learning and the digital turn

Presenter: Stanley H. Griffin, Department of Library and Information Studies, The University of the West Indies, Mona, Jamaica

When a small group of archivists met in Jamaica in 2013 to craft an Archives programme for the Department of Library and Information Studies at The University of the West Indies (UWI), their major challenge was the localization and Caribbeanization of an archive’s curriculum developed from standards in North America and the United Kingdom. Even though most of this group of Caribbean archivists had received their professional education overseas and were conditioned by Western education, their practical experiences at home had sensitized them to the need for a curriculum that would accommodate and celebrate the non-traditional records, records formats and record-making environment of the Caribbean region. This paper discusses the challenge of developing a Caribbean-oriented curriculum that emphasizes and ensures socio-cultural confidence, practice-based experience, and digital professional competencies. Using Stacy Denny’s (2023) pronouncement on the attempts at Caribbeanization in the region’s education sector as a theoretical framework, this paper examines how this goal was achieved through the archival curriculum, its assessments and course delivery. It discusses the value of interdisciplinary or multidisciplinary content and instruction to the quest of Caribbeanization. The Covid-19 pandemic created opportunities for changes in assessment, facilitating deeper experiential learning and professional development.

Pandemic pedagogy: Stakeholders' perceptions of academic leadership in teacher education in Trinidad and Tobago during COVID-19

Presenter: Cecilia Hall, Mundy Viar, The University of the West Indies, Global Campus

The coronavirus disease, COVID-19, was seen as a major crisis which resulted in shifts in the education system worldwide. Education institutions were affected by these shifts, and many transitioned fully to online teaching and learning. Academic leadership was challenged with putting systems in place to facilitate the shift to online instruction. The purpose of this study was to identify stakeholders' perceptions of academic leadership in teacher education during the COVID-19 pandemic. The intent was to examine what stakeholders at a higher education institution in teacher education in Trinidad and Tobago perceived to be the role of academic leaders during COVID-19 and future crisis. Using qualitative research as the chosen method to govern the study, a narrative inquiry approach was used to conduct interviews and focus group meetings. The research included a convenience sample of five academic leaders, six members of faculty, and seven prospective teachers all from one higher education institution. The findings indicated that, although the technological infrastructure was in place to support online instruction, some stakeholders believe that educational programmes must be redesigned for the virtual classroom. There is a need for more communication and collaboration and moral and emotional support from academic leadership. Additionally, improvements in technologies, both hardware and software, are necessary, and professional development must be ongoing. Recommendations include the implementation of leadership development programmes, the redesigning of the curriculum to reflect adjusting and adapting face-to-face classes to online instruction, and a policy be created to introduce open and distance learning education programmes.

Understanding implementation gaps: The case of the Caribbean Advanced Proficiency Examination (CAPE) Communication Studies syllabus in Trinidad and Tobago

Presenter: Sharmila Harry, School of Education, The University of the West Indies, St. Augustine, Trinidad and Tobago

Curriculum development as a process is crucial for quality education and enhancing the effectiveness of teaching and learning. However, in many cases implementation gaps occur as there seems to be incongruence in the actual classroom practice of the curriculum change and the intended use. This is because the implementation phase is treated as an event and ignored. The purpose of this qualitative case study therefore is to investigate teachers' perspectives of the barriers that influence the implementation of the CAPE Communication Studies syllabus in Trinidad and Tobago. It is intended that this study will shed light into the process of implementation and offer insights so that curriculum developers can better address problems at the implementation stage, and improve the implementation of CAPE Communication Studies, which will contribute towards revolutionizing Caribbean education. Additionally, this study will contribute to the sparse local literature on implementation theory. The main method of data collection consisted of semi-structured interviews with teachers. The findings indicate that the implementation process is complex and there are several factors such as school culture, lack of principal's support, large class size, time constraints, syllabus demands and lack of clarity of the innovation that are barriers to the implementation of CAPE Communication Studies. It is recommended that curriculum developers must plan for the implementation phase as it is in sync with revolutionizing curriculum reform. This planning must consider the challenges that would influence implementation.

The reflective teacher sense of efficacy and its influence on students outcome

Presenters: Tashane Haynes-Brown, Sharline Cole, School of Education, The University of the West Indies, Mona, Jamaica

Reflection is what allows us to learn from our experiences: it is an assessment of where we have been and where we want to go next (Barrett, 2010). Reflection is performance-based and provides an examination of one's practice. Through reflection, teachers are able to assess their competence in pedagogical delivery and students' outcomes. Since reflection "requires thoughtful and careful reporting and analysis of teaching practice, philosophy, and experience" (Barrett, 2010. p. 1), there is no doubt that one's sense of efficacy is affected. This qualitative research sought to explore the feelings and perspective of 10 teachers who engaged in reflective practice and its influence on their wellbeing and efficaciousness towards students' outcomes. The findings suggest that the teacher who reflects is more likely to seek help, is more concerned about pedagogical delivery and is more likely to take responsibility for students' failure. The reflective teacher is more efficacious with an improved sense of wellbeing. Evidence also suggests that teachers who have no connection with the students and see teaching as just a job are least likely to reflect and are more likely to make external attributions when there is failure. Training institutions and the ministry of education should develop protocols and training in working with schools to develop a culture of reflection.

The lived curriculum experiences of rural youth in one TVET programme in Jamaica: Implications for educational reform

Presenters: Yolanda Henry, Tamara Scott McFarlane, School of Education, The University of the West Indies, Mona, Jamaica

Although Jamaica is now experiencing record low levels of unemployment, the country's youth (aged 15-29 representing 29% of the total population and 42% of the working age population) are still plagued with significant levels of un- and under-employment. This situation has exacerbated the continuing struggle to overcome economic stagnation and social mobility which is associated with the Caribbean's exploitative colonial past. Jamaica's National Development Plan (Vision 2030) acknowledges that a well-functioning system of education is the engine of change for upward social mobility and will provide the needed impetus to address the country's economic crisis. The purpose of this qualitative case study is to examine the lived curricula experiences of a cohort of rural youth who participated in a skills-based training programme. Preliminary findings suggest that beneficial effects of skill-based programmes are mostly transitory and help to perpetuate a cycle of generational poverty. However, the findings add to the conversation regarding the sustainability of the proposed reforms for Jamaica's education system. Additionally, they underscore the extent to which critical reforms can assist in Jamaica realising its Vision 2030 goals regarding education, training, and economic development. Recommendations flowing from the research are that youth training programmes should be of shorter durations, engage industry in curricula development and implement strategies from the Reform of Education Report (2021).

Analysing student errors in geometrical tasks at the primary level: A case study in Trinidad and Tobago

Presenters: Sharon Jaggernauth, Zhanna Dedovets, School of Education, The University of the West Indies, St. Augustine, Trinidad and Tobago

Geometry focuses on spatial relationships among space objects and helps us navigate the physical world. Learning geometry facilitates cognitive development through the formation of memory, perception, imagination, logical reasoning, intuitive and critical thinking, decision-making, and problem-solving. However, geometry contributes only 15.6% of the Secondary Entrance Assessment mathematics

component. Student errors in mathematical problem-solving are classified as factual (poor recall/retention of facts), procedural (recall/application of sequenced steps), and conceptual (misunderstanding of fundamental ideas). We analyzed the responses of twenty-five (25) Standard 5/Grade 6 students in one school in Trinidad, on a geometry test requiring them to classify two-dimensional shapes, create new shapes of equal perimeter and area from given ones, and equally divide rectangles. We identified, classified, explained, and evaluated their errors. We found that students struggled to use the properties of triangles and rectangles to decompose a compound shape, including when their orientations changed. They struggled to divide a rectangle into twelve (12) equal parts due to poor application of axes of symmetry to equally divide line segments. They could not abstract from numbers and calculations to decompose a given shape into constituent parts and recompose them into new shapes with the same perimeter and area using geometrical transformation. Active learning instructional strategies are critical for learning geometry. We recommend the concrete-representational-abstract (CRA) instructional sequence because it moves students through manipulating concrete objects, creating visual representations of them, and then representing them using abstract notation. This approach of moving from the concrete to the abstract develops logical thinking and intuition, which is critical in developing semiotic functioning that uses and operates on symbols that correspond with real objects.

An analysis of primary science teachers' instructional time, perceptions of inquiry-based instruction, and students' achievement on the Caribbean Primary Exit Assessment in Grenada

Presenter: Rodney Julien, T. A. Marryshow Community College, Grenada; Sharon Bramwell-Lalor, School of Education, The University of the West Indies, Mona, Jamaica

The variability in students' performance on the Caribbean Primary Exit Assessment (CPEA) in science in Grenada prompted an investigation into possible influencing factors. The study employed a quantitative correlational methodology to examine potential relationships between science teachers' perceptions of student-centered inquiry-based instruction, their time allocated to science instruction, and students' performance on the CPEA in 2022. A total of 298 teachers completed a questionnaire via Google, consisting of 27 items related to inquiry-based perceptions and science practices. The study revealed that teachers with higher perception scores allocated more time for inquiry-based instructional approaches. Kendall's tau_b computed value of 0.152 ($p = 0.01$) suggests a statistically significant association between the variables. According to the Pearson product-moment correlation coefficient ($r = .169$; $p = .003$), there were also statistically significant positive links between how teachers perceived inquiry-based instruction and their students' performance on the CPEA. Additionally, teachers' time devoted to science instruction positively correlated with students' achievement on the CPEA. However, the relationship was not statistically significant based on the Spearman rho results ($r = 0.047$; $p = 0.414$). These findings demonstrate potential value in enhancing primary school teachers' efficacy of inquiry-based learning in science, potentially increasing their use and boosting students' academic performance. The study is beneficial to science teachers who wish to improve science education in primary schools by making evidence-based decisions. It contributes insights for shaping policies and refining teaching methodologies in Grenada's primary schools.

Consciousness raising and successful curricular change: The importance of considering human factors

Presenters: Clover Jones McKenzie, R. Anthony Lewis, School of Humanities and Social Sciences, University of Technology, Jamaica

This paper employs an auto-ethnographic approach to report on the researchers' experiences in leading and seeking to influence curricular change in the BA in Communication Arts and Technology (BACAT) at the University of Technology, Jamaica. We share our experiences from two perspectives: as leaders in the recently concluded curriculum review process for the degree and as lecturers piloting a small-scale consciousness raising (CR) initiative in the writing and speaking courses among first year students. The integration of the CR approach was warranted given changes in the media/communication landscape, as well as the presence of artificial intelligence and other emerging technologies. The reactions of some colleagues to the embedding of the CR approach in these courses and the comments of some students regarding the CR tasks tested our resilience and self-confidence at times, demonstrating the importance of the relational dynamic in leading and influencing curricular change. Our experiences suggest that the process would have benefitted from an application of aspects of CR throughout the curriculum review process, including a deeper awareness of the context in which we operate, especially the human factors. We propose that utilising a CR approach, including the adoption of a habit of self-reflexivity, can serve to enhance attempts at bringing about change, whether as leaders or facilitators. This approach can, among other benefits, provide insights into power dynamics and personality issues (of self and others) that may drive or frustrate efforts to implement change.

The validity and reliability of E-portfolios for the measurement of competence: A review of the literature

Presenter: Anika Lendor, Sharon Bramwell-Lalor, School of Education, The University of the West Indies, Mona, Jamaica

E-portfolios facilitate student-centered, reflective learning allowing students and teachers to review their work and see how their learning progresses over time. A preliminary review of the literature revealed that there was an ongoing debate concerning the validity and reliability of portfolios, and the introduction of e-portfolios complicates those perspectives further. While there was sufficient literature on the psychometric qualities of traditional portfolios, there was a dearth of literature regarding the validity and reliability of e-portfolios. Consequently, this paper sought to examine the extant literature to determine the reliability and validity of e-portfolios and their effectiveness as a tool for measuring competence in education, specifically with potential applications in the Caribbean region. A content review of 40 articles was conducted using Google Scholar, UWIlinc, The UWI School of Education Journals, and the International Journal of E-portfolios. The findings indicated that the validity and reliability of e-portfolios as an assessment tool were adequate and satisfactory. Additionally, the literature revealed that e-portfolios were an effective assessment method for measuring core competencies across different disciplines. Based on the findings we recommend exploration into the validity and reliability of rubrics used to score e-portfolios measuring competence, and investigation into the effect training has on inter-rater reliability when scoring e-portfolios. In addition, based on the positive potential of e-portfolios, we recommend further exploration of their use in the Caribbean for relevant disciplines. Further studies could employ all research methodologies and specifically utilise a longitudinal approach.

Rethinking literacy training in Jamaica: Preparing literacy teachers for the next generation of learners

Presenter: Yewande Lewis-Fokum, School of Education, The University of the West Indies, Mona, Jamaica

The results of the 2022 Programme for International Student Assessment (PISA) showed that Jamaica's fifteen-year-old students ranked below many countries in the Organization for Economic Co-operation and Development (OECD). While this is a cause for concern, it is not a reason to panic. Rather, there needs to be a critical reflection on Jamaica's education system. The purpose of this conceptual paper, therefore, is to review the status of literacy within Jamaica from the post-Emancipation period to 2024 with a view to identifying what we have done right in terms of our educational attainment, and where we need to pivot to improve the quality of education that we provide at the primary level. The focus of this paper, then, is on literacy at the early childhood level (0-8 years) because once a strong foundation is set at this level in terms of reading and writing, students are better able to access the curriculum at the upper primary grades and subsequently the high school level. Using critical discourse analysis through a post-colonial lens, data for this presentation were reviewed from publicly available secondary sources, such as research articles, newspaper articles, and government documents related to literacy in Jamaica. We argue that continued efforts must be made to update how early childhood teachers are trained to teach reading. The recommendation is that course content for literacy training should focus on the science of reading, language awareness, the promotion of literature, literacy leadership and special education.

Exploring parents' views of their parenting styles and their experiences with parenting boys who display anger and aggression

Presenters: Yewande Lewis-Fokum, School of Education, The University of the West Indies, Mona, Jamaica; Shelly Ann Heron Walcott, Ministry of Education & May Day High School, Jamaica

With crime and violence escalating in recent years, particularly among adolescents, it has become a significant concern for public health and policymakers in Jamaica. Moreover, with the increased violent behaviours in schools, coupled with Jamaica's spiralling crime rate, it is imperative for stakeholders to identify how parenting styles may be contributing to aggression among adolescent males, as they are among the largest group of perpetrators and victims of violence. As such, this qualitative research study explored the contribution of parenting styles to anger and aggression among upper high school adolescent boys. This generic qualitative research design utilized interviews and focus group discussions with twelve parents to examine their parenting styles. The twelve parent participants had boys attending a co-educational high school at the fourth, fifth, or sixth form levels and had been formally notified by the school of their child being involved in incidents such as fights, displays of hostile or threatening behaviours. It was found that although parents used a variety of verbal behaviours to communicate with their children, slapping and beating were common forms of punishment utilised by parents to address repeated misbehaviours. Despite the use of corporal punishment, participants believed that their parenting styles were more helpful in controlling misbehaviours than promoting anger and aggression. These findings suggest that greater support is needed for parents to help them choose parenting styles that are less maladaptive and more beneficial for their children.

A systematic review of instruments in Caribbean special and inclusive education research

Presenters: Erin A. Mahon, Caribbean Educational Research Centre, The University of the West Indies, Cave Hill, Barbados

The Caribbean region is increasingly focused on inclusive educational reform, resulting in the need for data-driven approaches and culturally appropriate measurement tools (Charran, Sorrells & Cooc, 2019). Measurement plays a critical role in educational research and evaluation, and the measurement tools researchers and evaluators use in their studies shape how we see the world and what we know about educational phenomena. The cultural appropriateness of these tools is particularly critical because it is common for measurement tools to be developed in one cultural context but applied within a different cultural setting. This systematic review examines instruments used in Caribbean special and inclusive education research, addressing two key questions: 1) What kinds of instruments are being used, 2) What are researchers' approaches to meeting measurement needs? 3) What is the researchers' positionality regarding students with special educational needs and disabilities? Thirty-one studies, including book chapters, dissertations, and journal articles, were included after a systematic literature search. The review found that while most studies used existing measures without changes, a significant portion adapted or developed new measures for the Caribbean context. However, validity and reliability evidence often relied on studies from different cultural contexts, challenging assumptions about measure quality. None of the reviewed articles included formal statements of researcher positionality, highlighting a need for greater transparency in Caribbean research. This review underscores the importance of culturally appropriate measurement tools, challenges assumptions about measure validity, and calls for improved research dissemination and researcher transparency in Caribbean special and inclusive education studies.

An investigation into the status of CSEC Geography Education within secondary schools in the Caribbean: Students' performance and pedagogical issues

Presenter: Susan McAllister, The University of the West Indies, Cave Hill, Barbados

This explanatory mixed-methods study investigates the status of Geography education in secondary schools in the Caribbean, aiming to determine the level of interest in Geography as a discipline, and key trends in students' performance in CSEC Geography, between 2009 and 2019. Based on quantitative data obtained and analysed for 17 Caribbean countries and over nine thousand students each year, this paper presents initial findings centred around two key research questions: 1) What is the level of interest in Geography as a discipline among students writing the CSEC examinations? 2) How have students been performing on the CSEC Geography curriculum? The findings show a declining interest in Geography, among secondary-level students, with the greatest decline observed among male students. However, over the same period, findings also show improvements in students' performance on CSEC Geography examinations, with more females than males receiving acceptable Grades I-III passes. Further investigation of students' performance on the three curriculum profiles, show that Profile 1 (practical skills) was the best performing profile for the period 2009-2019 while Profile 3 (use of knowledge) was the worst performing of the three profiles. Profile 2 (knowledge and comprehension) remained generally consistent over the period. The paper discusses the implications of these results for the current and future status of Geography as a discipline in the Caribbean, considering the emerging Climate Change agenda, the UN Sustainable Development Goals, and the concept of the Caribbean Ideal Person. The findings make a case for further research into these performance trends, specifically for expanding the research to engage additional input from teachers and curriculum officers.

Does everyone belong here? An exploration of the experiences of teachers and administrators in an inclusive secondary school setting in Jamaica

Presenter: Shereca McGowan-Hunter, School of Education, The University of the West Indies, Mona, Jamaica

The purpose of this study was to explore the experiences of teachers and administrators within an inclusive secondary school setting in urban Jamaica. The study aimed to develop a critical understanding of how teachers respond to teaching students with diagnosed special educational needs (SEN) alongside students without special educational needs in an inclusive setting and how administrators see their roles and responsibilities as leaders within the inclusive setting. The study is a qualitative case study focusing on approximately six teachers and four administrators. Participants were selected using purposeful, convenient, and unique sampling. Semi-structured interviews and an observation were conducted. The findings revealed that the inclusive classroom is fraught with challenges for both SEN students and teachers; teachers within inclusive classrooms respond differently-some positively and others negatively; collaboration is important for successful inclusion; teachers within an inclusive setting need professional development in order to meet the varying needs of SEN students; effective inclusion is hindered due to various factors on the part of the teachers and school administration, and inclusive classrooms offer short and long term benefits for SEN students and teachers. It can be concluded that greater sensitization is needed to assist teachers in understanding the implications and importance of inclusion, mentorship is needed to support teachers who are challenged, administrators need to invest in human resource by offering professional development support, administrators also need to help to foster a culture of inclusion in principle and in practice.

Urgent need for adaptive teaching in mathematics for pre-service teachers based on a substantive grounded theory of teachers' explanations for mathematics achievement at the primary school level in Trinidad and Tobago

Presenter: Sabrina Mc Millan-Solomon, School of Education, The University of the West Indies, St. Augustine, Trinidad and Tobago

Mathematics achievement is an area of concern for many stakeholders in education. Within Trinidad and Tobago large-scale assessment data provides evidence of sustained underperformance and variation in students' mathematics achievement. Two substantive grounded theories, Filtering Mathematics Pedagogical Practices and Creating Disparity in Students' Motivation to Learn Mathematics explain that teachers are mostly concerned with making pedagogical choices despite being bombarded by numerous challenges. However, students were mostly concerned with how their lack of understanding was being catered to and the repercussions of the techniques that were being used to address that lack of understanding. The theories enlighten us to a vicious underachievement cycle associated with fear of mathematics engagement which influenced mathematics anxiety and poor mathematics instructional practice. These theories were developed using Classic Grounded Theory where fifty-four teachers and fifty-six students were purposively sampled from nine public schools that vary by performance level and geographic location. Supporting student's mathematics proficiency requires teachers to continuously adapt their instruction. Using constant comparative analysis, the literature over several decades focuses on adaptive teaching in mathematics and what it means to be an adaptive teacher. The findings highlight the need for adaptive teaching and emphasize the importance of exposing preservice teachers to pedagogy that facilitates making pedagogical choices that can positively influence students' mathematics achievement.

Teachers' experiences teaching literacy at grade one during the Covid-19 Pandemic

Presenters: Inga Morrison-Forrest, Independent Researcher & Educational Consultant, Education Hub; Yewande Lewis-Fokum, School of Education, The University of the West Indies, Mona, Jamaica; Tennisha Morris, School of Education, The University of the West Indies, Cave Hill, Barbados; Joan Thomas; Caribbean Child Development Centre, The University of the West Indies, Global Campus

In a wave of chaos and mayhem, Covid-19 catapulted millions of educators and students to online teaching and learning across the globe. Despite the significant research on online teaching and learning during the Covid-19 pandemic, few studies have focused on the lower primary level. The purpose of this generic qualitative study was to explore teachers' experiences teaching grade one students literacy online during the Covid-19 pandemic. There were fifty (50) grade one teachers who participated in the research study. Data were collected from them using structured interview questions, which were self-administered via Google forms. The data analysis was executed using qualitative coding to identify patterns in the teachers' experiences. Themes emerged and assertions made based on these themes using Creswell (2014) six steps approach in the process of qualitative data analysis. The findings revealed that grade one teachers used a combination of digital tools and online resources to engage their grade one students during online literacy classes. Teachers who received internal or external training experienced minimal professional challenges and expressed feelings of confidence and comfort teaching virtually. Teachers, however, who did not receive such support indicated feeling a greater sense of anxiety, isolation, and other health related issues. The findings of this research study can be used to better inform educational stakeholders that training is useful for providing support for teachers' sense of well-being and confidence when using technology, especially in situations of emergency online learning.

Teaching eco-literacy in lower secondary schools using selected novels of Michael Anthony

Presenters: Joanne Nazir, Sharmila Harry, School of Education, The University of the West Indies, St. Augustine, Trinidad and Tobago

Environmental and sustainability education is now a main concern in current curriculum discussions. It is commonly noted that in some school disciplines, pedagogy for sustainability education is more developed than in others. English Literature is one area which is underdeveloped especially at the secondary school level. This paper seeks to address this gap by analysing two novels written by the Caribbean Presenter, Michael Anthony, which are read by lower high school students for English Literature in the anglophone Caribbean. The novels are *A Year in San Fernando* and *Green Days by the River*. These works were chosen for their longstanding popularity with the region's youth and the intrinsic, under-analyzed incorporation of the environment within them. Ecocritical analyses of both books will be done to uncover age appropriate, contextually relevant themes for teaching environmental and sustainability concepts to young people. The ecocritical methodology used in the paper will be guided by Sasha Matthewman's (2020) 3D Eco-literacy model, which conceptualizes the teaching of eco-literacy for young people in terms of three levels: the eco-operational, enviro-cultural and ecocritical. These levels, while hierarchical, are connected to each other forming a complex three-dimensional whole. Furthermore, the discussion and analyses will be couched in a specific form of eco-literacy called environmental consciousness raising (Nazir & Pedretti, 2018) which acknowledges that education can bring about changes in people's behaviours to repair existing hurts and prevent future ones; and that eco-literacy requires pedagogy which is not narrowly prescriptive but allows for different pedagogical responses to be developed by different disciplines.

To be or not to be: Barriers to inclusive education

Presenter: Norrisa Newton, University of the Bahamas, The Bahamas

Researchers concur that Inclusive Education is an effective practice for maximizing the academic success of students with a learning disability. The philosophical basis of Inclusive Education maintains that all children, regardless of their physical, mental, emotional, psychological, cognitive, ethnic, or socioeconomic disposition, should receive access to education in the Least Restrictive Environment (LRE) alongside their non-disabled peers. Current research revealed that education stakeholders are often challenged with successfully implementing Inclusion due to the many barriers faced. Addressing barriers to Inclusion is critical to the enhancement of the quality of education provided and educators' efficacy. The purpose of this qualitative study was to identify the apparent barriers to Inclusive Education in Bahamian public schools. This was achieved by exploring the contributing factors discouraging educators from supporting the idea of inclusion. Fifty public educators (5 special educators, 5 reading specialists, 20 primary and 20 high school educators) from a major city were randomly selected to participate in semi-structured interviews. Data were analyzed via open coding. Field theory was used as a lens through which to understand how educators' decisions and behaviors are determined by the strength of conflicting 'field forces' in their organizations. Key findings revealed that (a) lack of specialized training, (b) lack of resources, (c) large classroom sizes, and (d) teachers' attitudes posed significant hindrance to the possibility of successful inclusive education programs. Education policy makers must consider the needs and challenges of all stakeholders (educators, administrators, students, and parents) if inclusion is expected to be a future success.

Can bibliotherapy be utilized in helping students deal with social-emotional challenges? A pedagogical enquiry

Presenter: Melissa Parchment-Hutchinson, School of Education, The University of the West Indies, Mona, Jamaica

This conceptual paper aims to explore the potential of teaching West Indian Literature as a pedagogical tool to assist grade nine students in addressing social-emotional challenges. The Caribbean Public Health Agency has highlighted the increasing prevalence of mental health conditions in the region, often exacerbated by stigma, lack of professional intervention, and economic constraints. Globally, children's mental health needs remain a pressing concern, with a significant portion of mental health disorders emerging before age 14. Rooted in the complex histories and identities of the Caribbean region, West Indian literature serves as a medium for exploring issues such as identity, family relationships, and perseverance, against the backdrop of colonialism, slavery, and cultural resilience. West Indian literature captures social and cultural nuances, reflecting the realities faced by students. By examining how literature from this context can engage students and provide coping strategies relevant to their social-emotional well-being, this research aims to contribute to effective educational interventions for adolescent mental health support. Teachers of Literature can deliberately use pedagogical strategies to help students navigate the range of concerns that students face at the high school level. Curriculum planners in the Ministry of Education can possibly partner with the Ministry of Health to offer in-school intervention to address the concerns of adolescents who have social-emotional challenges. This study explores possible relations between Cultural Identity Theory that asserts that the study of cultural identities offers rich insights into both self-perception and understanding of others; Resilience Theory which is concerned with the capacity to rebound from challenges, setbacks, and adversity; and Critical Pedagogy Theory that emphasises that education is a transformative tool as well as a social critique. Undergirded by these theories, it is hoped that this study on how West Indian Literature can be utilised by educators to help adolescents navigate challenges faced.

Looking back to move ahead: A historical portrait of mathematics teacher education in Jamaica

Presenters: Venessa Powell, Lois George, School of Education, The University of the West Indies, Mona, Jamaica

The longstanding problem of unsatisfactory mathematics performance among Jamaican students is well-documented. Deficiencies in primary school teachers' knowledge have been identified as a key contributory factor to this problem. Research on improving teachers' competencies emphasizes the importance of investigating the historical context and background of identified issues to understand and address them effectively. Hence, we conducted an exploratory literature review of thirty (30) documents including theses, books, government documents and journal articles dating from the 1800s to 2024 to gain insights into the ongoing process of developing Jamaican in-service primary school teachers' knowledge of mathematics for teaching. This research-in-progress examined common themes among the evaluation reports of mathematics teaching in primary schools over the years. Furthermore, it investigated the nature and outcomes of professional development (PD) efforts targeting Jamaican in-service primary school teachers. The data were analysed using thematic analysis as per the research questions. Preliminary findings revealed that a central challenge teachers experienced across grades and years was teaching critical mathematical content in a manner that helped students develop conceptual understanding. Furthermore, PD initiatives primarily consisted of short-term workshops facilitated by external content experts. These workshops did not appear to result in improvements in teacher knowledge and student performance. These findings suggest that past approaches to PD for in-service primary school teachers have not been as effective as intended. Hence, there is a need for a comprehensive overhaul of in-service teacher PD to employ strategies that emphasize alternative methods of improving teacher knowledge.

Online education during the COVID-19 pandemic: Challenges and opportunities from the perspectives of Belizean students and teachers

Presenter: Jeremias Reina, The Department of Youth Services, Belize Youth Counselling and Wellbeing Services, Belize City, Belize; Abede Jawara Mack, Gerald Schwartz School of Business, Department of Management, St Francis Xavier University, Canada; Ayanna Stephens, ³College of Graduate Studies and Research, University of the Commonwealth Caribbean, Jamaica; Rasheda Moody-Marshall, The University of the West Indies Global Campus, Cave Hill, Barbados

The perspectives that both teachers and students hold about teaching and learning during the pandemic are vital in understanding their intricate experiences, inherent in the shift from face-to-face to online learning. Accordingly, this phenomenological study aimed to first identify the challenges that came with the new mode of educating, and second, to identify how teachers and students adapted to online teaching and learning. One-on-one interview sessions were conducted among students and teachers from a reputable secondary school in Belize. The sample consisted of fifteen participants—seven teachers and eight students. This study analyzed and interpreted themes, which were used to generate a framework. The perceived challenges and opportunities, aligned with the new roles required for current and future educational trends were highlighted. Themes that emerged centered around (1) personal values; (2) capacity building; (3) technology use; (4) resilience; (5) quality and mode of communication, and (6) online readiness in Belize. The results of the study revealed that both students and teachers at the secondary school struggled to find a balance in adjusting to online learning and teaching; however, through collaboration and resiliency, they managed to adapt to the new educational modality. Several recommendations were forwarded, including the need for standardized training across the nation and extended studies in this area, within Caribbean spaces.

Remote learning: An exploration of parents' coping strategies with Jamaican children diagnosed with ADHD

Presenter: Samantha Richards, School of Education, The University of the West Indies, Mona, Jamaica

The uncertainty of the unrelenting COVID-19 pandemic has placed urgent focus on evaluating parents' coping strategies, with their children diagnosed with attention deficit hyperactivity disorder (ADHD) related to remote learning. This study explored ways in which parents are impacted by the experience while seeking to appreciate how they cope with the remote learning process amidst the uniquely challenging circumstances. Additionally, this study garnered multiple views of Eight (8) parents of school age children (6-17) diagnosed with ADHD, in region 1, to gain in-depth understanding of their experiences. Guided by social constructivism, a qualitative interview study was used to conduct this project. Participants were purposively selected to participate in semi-structured interviews. It was found that faith played a major role in most of the parents' ability to cope. Additionally, seeking help to deal with the emotional impact of their situation was not something most of the participants did, which compounded their issues. Moreover, the financial implications associated with remote learning, was prohibitive for most parents and they had to make sacrifices to ensure their child was able to learn remotely. These had implications for their emotional wellbeing and parent-child relationship. Likewise, it was found that parents should seek assistance to further understand ADHD and their child's temperament, in order to be better able to navigate their online learning. Some recommendations made were: (a) parents should spend more time bonding with their child, (b) bonding allows parents to better understand how their child function in different environments, (c) understanding their child's needs will allow them to be less worried and stressed whenever their child is out of their sight and (d) parents need support systems, whether family, guidance counsellor and government intervention (Counselling and resources). Understanding the coping strategies of parents of children with ADHD is crucial to providing interventions to assist struggling families.

Curriculum as the lived experience in revolutionizing Caribbean education

Presenters: Carmel Rooffe, Michael Maxwell, Tamara Scott McFarlane, Olivia McFarlane, School of Education, The University of the West Indies, Mona, Jamaica

Curriculum is understood as complex transmitting various meanings as education systems evolve. It is often agreed by curriculum scholars that curriculum's complexity is derived from the varying sociocultural contexts within which curriculum exist. However, among some of those who operate outside of the field of curriculum studies the mention of curriculum often conjures meanings of documents such as curriculum guides and syllabus. Thus, assuming singularity in the meaning of curriculum. This singularity we argue limits the possibilities that exist within curriculum as a complicated conversation and its potential to aid in revolutionizing education. Therefore, in this presentation we seek to convey a broader meaning of curriculum by arguing for curriculum as the lived experience. To do this we draw on three qualitative studies being conducted in Jamaica. The first study focuses on curriculum as lived through curriculum implementation politics of teachers, the second focuses on curriculum as lived through the experiences of students in second chance programmes, and the third focuses on curriculum as lived through youths not in employment, education, or training. The composite findings of these studies suggest that curriculum as the lived experience embodies perceptions, beliefs, frustrations, and expectations, that shape the actions of various education stakeholders. Such actions give education stakeholders in any context their identity and convey what is important in a context. As such we argue that curriculum as the lived experience must be understood and responded to as a critical aspect of curriculum. Further we posit that increased and deliberate actions to support an understanding of curriculum as the lived experience is one of the key strategies for revolutionizing Caribbean education.

Moodling along with virtual learning: The experiences of lecturers and students

Presenter: Shanomae Rose, Faculty of Earth and Environmental Sciences, University of Guyana, Guyana

Research has indicated that interaction is necessary for the achievement of tertiary education learning outcomes in the virtual learning environment. Interaction has been found to stimulate cognitive ability and the development of higher order thinking skills in students. This research utilised the action research design to explore the use of Moodle among lecturers and students in three cycles. The qualitative and mixed methods methodologies used in cycle 0 and 1 respectively, revealed that students' use was influenced by how lecturers used the platform. A concurrent mixed methods approach was therefore used in cycle 2 to address three objectives. Firstly, the extent to which lecturers used Moodle to foster interaction between learner-content, learner-instructor, and learner-learner. Secondly, students' perceptions regarding learner-content, learner-instructor, and learner-learner interaction via Moodle and thirdly, whether relationships exist between student satisfaction and the interactions a) learner-content, b) learner-instructor, and c) learner-learner. Nine lecturers and 86 students participated in cycle 2 which revealed that lecturers found Moodle useful for interaction but were challenged to effectively foster engagement with students, contents, their peers, at all times. Positive significant relationships were found between the interactions and student satisfaction suggesting that interaction was important to students via Moodle. Lecturers had several recommendations for how the virtual environment could be improved inclusive of the addition of instructional designers to the cadre of support staff and the need for a blended learning policy. This study provides useful data that may be used to guide decision making at the University of Guyana.

Promoting financial literacy awareness through the integration of thematic-based learning with 4-year-olds at a University ECCE Centre in Trinidad

Presenters: Natalie Suepaul, Murella Sambucharan-Mohammed, Mr. Pradeep Mathura, School of Education, The University of the West Indies, St. Augustine, Trinidad and Tobago

This qualitative exploratory case study investigates the introduction of financial literacy awareness to 4-year-olds through thematic-based learning at a university-run preschool laboratory in Trinidad through a pilot programme. Although thematic-based learning is established in the early childhood curriculum, financial literacy education is a novel addition targeting multifaceted, developmentally appropriate skill development. The study spanned two years with two cohorts of 4-year-olds. Six teaching and learning sessions were conducted with each cohort. Data were gathered through child and instructor observations, children's work artifacts, and semi-structured instructor interviews. Braun and Clarke's (2006) thematic approach to data analysis was employed in this study. After the initial year of the pilot, findings highlighted the necessity for a more authentic learning medium to foster meaningful financial literacy experiences. Consequently, in the second year, the study incorporated a nature theme which stemmed from the centre's garden to enrich the learning environment. Preliminary results indicate students' keen interest in learning about prudent money management. Additional findings have shown greater parental interest to promote financial literacy; students' heightened awareness to save and spend wisely; and a sense of responsibility by the instructors to instil these values in 4-year-olds. This research underscores that 4-year-olds can grasp financial literacy concepts through authentic learning activities. Moreover, it demonstrates the potential for young children to cultivate entrepreneurial skills and adopt saving habits that align with their developmental stage. The study's implications extend to curriculum design and enactment, suggesting ways to enhance financial literacy education in early childhood settings.

Driving student autonomy: The role of digital learning logs in fostering self-regulated learning through project-based learning

Presenter: Sharryl Spence, School of Education, The University of the West Indies, Mona, Jamaica

As the education landscape continues to shift to prepare learners for the increasingly self-regulated nature of twenty-first-century careers, teachers are encouraged to develop the resiliency and self-efficacy of learners. For teachers unfamiliar with self-regulated learning (SRL), at first glance, it can easily be written off as another buzzword emerging from the studies of educational researchers who are often cited as disconnected from the classroom. However, arguably, the effects of students' embryonic SRL skills unfold in our classroom daily when learners struggle to manage intrusive emotions and waning motivation or adapt strategies to foster success. Although the literature posits that learners stand to gain significantly from SRL, the question of how teachers can practically support learners' mastery of the associated skills has been raised. This paper reports the findings of a study that evaluated the utility of digital learning logs (DLL) in supporting SRL among high school students engaged in project-based learning. A sequential mixed method design was employed to: (i) create a SRL profile for a mixed-grade Honors Integrated Science class, using the results of descriptive analyses of goal orientation and self-efficacy scores; and (ii) ascertain students' opinions about the log's capability for planning, performance management and self-reflection. The perspectives of these learners, with differentiated SRL competencies, suggest that the DLL is a useful resource that allows them to better self-regulate their learning. In schools with an active BYOD policy and the appropriate technological infrastructure, DLLs are a viable instructional tool to develop students' SRL skills.

Moodle is not a word; it's a sentence: Faculty views of their LMS and implications for faculty development activities

Presenter: Michelle Stewart-McKoy, Centre for Excellence in Teaching and Learning, The University of the West Indies, Mona, Jamaica

In the rapidly evolving landscape of educational technology, the learning management system (LMS) in higher education has become an integral tool in facilitating online learning or in complementing face-to-face classes. As with any educational tool, its success depends largely on how it is used by faculty with their learners. This research (work in progress) explores facilitators' use and views of Moodle, the LMS adopted at their institution with the aim of informing effective faculty development activities. The results of the study are based on data collected from full time and adjunct facilitators via a questionnaire which comprised both closed and opened ended items. The survey examined educators' familiarity with Moodle features, their professional development activities, and the LMS' impact on their teaching. Preliminary findings reveal varying views on lecturers' self-reported LMS usage, training opportunities, comfort levels, and levels of expertise in navigating the Moodle LMS. Additionally, a significant number of adjunct faculty cited severe challenges in executing basic functions on the platform. Based on this feedback, their interaction with Moodle may be described as a punitive experience. Implications for faculty development initiatives include the creation of more tailor-made training, user-friendly resources, and the establishment of more inclusive practices. The findings should contribute to the ongoing discourse on the effective integration of LMS despite the instructional modality employed and ensuring that faculty development activities align with the diverse needs and experiences of the wide spectrum of educators who are expected to efficiently use the Moodle platform.

The relationship between the reading habits, performance in academic literacy modules and overall academic success among Jamaican university students

Presenter: Daidrah Telfer, Faculty of Education and Liberal Studies, University of Technology, Jamaica; Quinton Yearde, Portmore Community College and University of Technology, Jamaica

Reading, a fundamental skill, is the gateway to knowledge acquisition and critical thinking. Its significance in academic settings is unparalleled, serving as the cornerstone of literacy and cognitive development. Nevertheless, despite the recognized significance of reading, a common complaint of educators at all levels of the Jamaican education system, as well as those in other countries, is that students do not read. Added to this, undergraduates often complain when they are tasked with reading any text that is longer than two paragraphs. In the academic setting, the interplay between students' reading habits, their performance in academic literacy modules and their overall academic success is a complex and dynamic phenomenon and is an area that requires further exploration. While international studies have delved into the correlation between reading habits and academic success, the Jamaican perspective remains underexplored. This study, through its quantitative design, aims to investigate the relationship among the reading habits of Jamaican university students, their success in academic literacy modules and, ultimately, their overall academic success. A survey, administered to a targeted sample of students forms the backbone of this inquiry. The survey is complemented by performance data from academic literacy modules as well as other modules. By way of frequency and correlational statistical analyses, the study provides a nuanced understanding of the factors influencing educational attainment in the Jamaican context. The findings are anticipated to contribute to educational strategies, fostering a more tailored and effective approach to literacy development and academic success among Jamaican university students.

Exploring principals' well-being: Perceptions, practices, and reflections

Presenter: Canute Thompson, Ann-Marie Wilmot, , School of Education, The University of the West Indies, Mona, Jamaica

The issue of principals' well-being has been the subject of extensive study recently. One question which naturally arises is: What might account for the heightened interest in this subject in recent times? Beusaert, Froehlich, and Gallant (2021) in examining the role of social capital in principals' well-being, argue that there are three factors which affect principals' well-being and which we suggest may account for this heightened interest. The first is the increasing complexity of the job, according to Matthews et al. (2008), while the second is the increased demands for accountability of leaders, according to Phillips and Sen (2011), and yet a third could be the threats to personal health and, in some cases, safety, which are now part of the occupational hazards of being a school leader, as posited by Riley and Langan-Fox (2013) and Riley (2015). This paper aims to examine Jamaican principals' perceptions of their well-being, their practices in attaining and maintaining well-being, and their reflections on their perceptions and practices. Data for the study, which employs a sequential mixed methods exploratory approach, will be collected through a survey and focus group discussion drawn from the target population, ensuring a comprehensive understanding of the principals' well-being.

Cognitive load management in documentary videos: An examination of the effect on students' working memory and retrieval

Presenter: Joseph P. Valley, The University of Trinidad and Tobago, Trinidad and Tobago

In a 21st century education system, documentary videos form an integral part of the teaching and learning process to enhance students' performance. However, these documentary videos were originally produced

for television audiences. Using these documentaries in teaching and learning may cause the intrinsic and extraneous processing generated in working memory to increase, which may adversely affect the encoding and retrieval of semantic information in long-term memory. The main focus of this study was to explore the issue of cognitive load management in documentary videos by examining its effect on students' working memory and retrieval. This study employed a true experimental design, collecting electroencephalogram (EEG) data from 16 participants in the experimental group and 16 participants in the control group. These data were statistically analysed using Simple Linear Regression and one-way ANOVA. The results revealed that participants who used the integrated segmented documentary videos ($M = 99.38$, $SD = 2.50$) performed significantly better on the post-assessment than participants who watched an entire documentary video ($M = 79.18$, $SD = 12.84$), ($p < .001$, $\eta^2 p = .560$). However, there was no statistically significant difference in the amount of multimedia mental effort used to retrieve the information from long-term memory ($p = .431$, $\eta^2 p = .021$). This study highlights the need to carefully assess the complex effects of cognitive load management strategies in multimedia presentations, as an increase in intrinsic processing generated in working memory seemed to impede the formation of schemas in long-term memory, ultimately reducing semantic information retrieval.

The experiences of faculty during their transition from face-to-face to online learning environments at a regional university

Presenters: Paula Valley-Thom, University of the Southern Caribbean, Trinidad and Tobago; Roger Nesbeth, The University of the West Indies, Global Campus

This presentation examines the experiences of faculty as they transitioned from face-to-face to online learning environments and the strategies, they employed to obtain self-efficacy in online learning. Administrators at a university within the Caribbean region implemented a professional development initiative to prepare faculty to transition from face-to-face classes to emergency remote online learning during the COVID-19 pandemic. However, initial reports identified several challenges faced by faculty. Consistent with a constructivist/interpretative paradigm, the researchers used a qualitative design with a hermeneutic phenomenological approach. Fifteen faculty members and four administrations were interviewed using semi-structured questions via the Zoom Webinar Conference application. The researchers used thematic analysis with an inductive approach. Four major themes emerged: "the impact, nature and context of the training", "administrative role and institutional support", "faculty and online teaching", and "faculty challenges, coping strategies and opportunities". Participants had several challenges adapting to online teaching, such as limited teaching tools, balancing professional and personal roles, technological issues, students' problems and psychosocial issues. However, they used informal learning communities and several external and internal coping strategies to gain self-efficacy in online teaching. Persons who had prior training were better able to adapt to the rapid transition from face-to-face to emergency online learning than participants with limited or no experience teaching in online environments. Therefore, administrators should build human capacity and enhance the university's resilience through continuous training and faculty involvement in leadership opportunities in professional development.

Developing socio-culturally relevant approaches for family engagement with early number learning in everyday life

Presenters: Chronoula Voutsina, University of Southampton, England; Lois George, , School of Education, The University of the West Indies, Mona, Jamaica

Family engagement with early number learning at home is a predictor of later mathematics achievement. However, research indicates that many parents are reluctant to engage in mathematics-related activities

with their children and many would benefit from support in recognising the potential of mathematics in everyday activities. Although family engagement involves developmental as well as sociocultural and community dimensions, the latter two dimensions are often overlooked. We will present the conceptual framework that underpins the 'Numbers in Everyday Life' project that aims to fill the previously mentioned gaps and impact positively on family engagement and family confidence to talk about the multiple meanings and uses of written numbers in everyday life. The project involves the use of the research-based 'Written Numbers in Everyday Life' programme of activities by families of culturally diverse backgrounds, within two different national contexts (England and Jamaica). The project also includes the co-development and trial, with Preschool partners, of an adaptable, context-relevant programme of preschool-based activities that will create coherent connections between the family-used resources outside preschool, and classroom-based learning. The project adopts a 'strengths-based' methodology for family involvement in learning, acknowledging the varied "Funds of knowledge", that is, diverse families' existing knowledge base and everyday experiences, as valuable resources. These resources can be harnessed to enhance mathematics learning opportunities for children and increase their frequency within everyday activities at home as well as in community environments.

Exploring the teaching and learning experiences of chemistry teachers based on visual imagery ability

Presenters: Keisha Walker-Dawkins, Marcia Rainford, Sharon Bramwell-Lalor, School of Education, The University of the West Indies, Mona, Jamaica

Visual imagery, which involves forming mental images in the mind, plays a crucial role in understanding complex scientific concepts. However, there is a spectrum of visual imagery abilities, with some individuals able to form lifelike mental images and others incapable of generating mental images altogether. By taking a proactive approach, this case study explores the teaching and learning experiences of individuals, examining them through the lens of their visual imagery abilities. To achieve this, purposive sampling will be used to identify cases for comparison. The Vividness of Visual Imagery Questionnaire (VVIQ), an established tool in visual imagery research, developed by Marks (1973) and having a split-half reliability of 0.85, will be administered to volunteers enrolled in a university science teacher-training programme to determine their visual imagery ability. One-on-one semi-structured interviews will be used to compare the teaching and learning experiences of the four highest and four lowest scorers on the VVIQ. Thematic analysis will be used to analyse the interview data. The findings of this research will serve as an initial reference point for further exploration of the distribution of individuals with different visual imagery capabilities, and the implications for teaching and learning within the Jamaican context. Additionally, it proposes a shift in science pedagogy to cater to the needs of students with different visual imagery abilities, ensuring an environment where they receive optimal opportunities for learning science.

Effective social and emotional provision in the Jamaican education system

Presenters: Michael Wigelsworth, Manchester Institute of Education, The University of Manchester, England; Loraine Cook, Sharline Cole, Therese Ferguson-Murray, School of Education, The University of the West Indies, Mona, Jamaica; Rohan McCalla, Sheridan College, Ontario, Canada; Pastor Bruce Fletcher, Operation Save Jamaica, Jamaica

Anti-social behaviours continue to be a challenge in some Jamaican schools. This problem negatively impacts the social, emotional, and cognitive development of students. Skills in Social and Emotional Learning (SEL) can reduce anti-social behaviour and the incidences of violence in school. Jamaica has instituted different initiatives, some of which have components of SEL. However, there is not a comprehensive and structured SEL programme in schools. This research therefore examined teachers' perspectives on the embedding of SEL in the curriculum in Jamaican primary schools. In conducting the

research, a sequential explanatory mixed methods were utilized. The quantitative phase had 280 teachers drawn from 170 schools and the qualitative phase had 28 teachers selected from five schools. Online surveys were used to collect the quantitative data while focus group discussions via Zoom were used to collect the qualitative data. All ethical guidelines were adhered to, and the Ministry of Education and Youth disseminated the survey to the schools. The findings revealed that SEL should be prioritized, and specialist training is required to institute the programme in schools. The limited time allotted in the curriculum, lack of specialist knowledge and finances are some barriers to instituting a comprehensive SEL programme in primary schools. This therefore requires financial investment, ongoing professional development of teachers and allotting time in the curriculum to implement a comprehensive SEL programme.

Exploring early-career academics' experiences with mentoring at a higher education institution in Jamaica

Presenters: Ann-Marie Wilmot, Therese Ferguson-Murray, School of Education, The University of the West Indies, Mona, Jamaica

Early-career academics face numerous challenges in navigating the demanding academic landscape. Therefore, exposure to professional nurture through continuous development remains a critical early-career need. Mentorship is established as an effective avenue for providing this support. Despite its importance, mentorship as a developmental tool is not maximized because many faculties and departments within tertiary institutions do not have active formal mentorship programmes to support early-career academics' flourishing. This remains a problem because academic faculty members are positioned to play an integral role in shaping policies and programs to transform their respective countries but have not fully materialised this role. However, academic leaders can develop mentorship structures to augment support for their early-career staff. One way of learning how to best assist them is to have early-career academic staff members themselves share their experiences with mentorship. The purpose of this generic qualitative research study is to explore early-career scholars' experiences with mentorship within a faculty at one higher educational institution through one-to-one semi-structured interviews. This presentation will draw on the emergent findings of one research question from that more extensive study. It will share an analysis of the implications of the findings for leadership and management and insights to support early-career faculty career development. It will also make salient connections to mentoring as one of the critical competencies Higher Education Institutions' department and faculty leaders can leverage to materialise their agenda to refashion the Caribbean educational landscape.

Conceptualizing a culturally relevant integrated STEM framework in Jamaica

Presenters: Hopegay Williams, Sharon Bramwell-Lalor, School of Education, The University of the West Indies, Mona, Jamaica; Aldrin Sweeney, Ross University School of Medicine, Barbados

Jamaica's Ministry of Education and Youth has been promoting STEM (Science, Technology, Engineering and Mathematics) education as one of the two pedagogical approaches for equipping the nation's children to be global citizens. As a developing country, a framework is needed to guide the implementation of integrated STEM education. The various frameworks that guide integrated STEM education in developed countries cannot be readily adopted and implemented within the Jamaican context due to potential cultural clashes. Therefore, the intent of this paper is to propose a conceptual framework for integrated STEM education in Jamaica. The suggested framework will have dimensions embedded in the social, cultural, and experiential knowledge of learners. Since learning is situated, and learning contexts vary, it is imperative that integrated STEM curricula are designed to be relatable to the

learners. This may be achieved by considering the cultural background of the learners, the available local resources, and the present and future needs of society. The strategy being proposed towards developing a viable framework for integrated STEM education in Jamaica include an adaptation of the multidisciplinary approach to integration instead of treating STEM disciplines as silos. Within the multidisciplinary framework, the engineering design process, guided research, and experimentation may be used to facilitate integration across disciplines by creating linkages through common themes. The development of an integrated STEM framework in Jamaica will support students in becoming STEM literate and to develop competence in the 21st century skills.

PANEL DISCUSSIONS

Harnessing artificial intelligence to inform gender-based violence research for public education in Jamaica

Presenters: Helen Atkins, Ruth Howard, Institute for Gender and Development Studies, The University of the West Indies

WMW Jamaica, a women's rights organisation in Kingston, is implementing a five-year project, "WE-Talk: for the Reduction of Gender-Based Violence" (GBV) with CariMAN. WE-Talk delivers public education through feminist research, evidence-based programming, multi-stakeholder collaboration, and decolonial evaluation. As part of this initiative, a quantitative study was conducted by consultant Quilt.AI, using artificial intelligence (AI) to interrogate the language, themes and trends on GBV in Jamaican search data and social media posts. We will share our experiences of (1) navigating the algorithm-driven research process in search of valid and reliable findings, as black, feminist activist-researchers; (2) maintaining the pedagogical integrity of participatory methodologies - developed by WMW over decades for diverse learners across Jamaican society - in the face of AI controversies and challenges, in order to (3) create effective and sustainable advocacy, research and training in an ever-shifting contemporary landscape for GBV prevention and movement-building in Jamaica. Nearly a quarter of a million Google searches and over 16,000 social media posts across four major social media platforms were analysed. Classification instruments, including an original sentiment analysis tool, identified institutional and individual norms and descriptive and prescriptive stereotypes. Findings uncovered eleven harmful narratives, categorised as emerging, growing, stable, or receding, to inform interventions. This unprecedented study is being used to inform WE-Talk project delivery of behavioural change communications and strengthening capacity, with wider implications for Jamaica's GBV sector, regional feminist advocacy, and global rights-based research. Further applications and future adaptations will be explored in discussion with panel participants.

Learning communities in education: Implications for professionals

Presenters: Phillip Clarke, Ruth-Ann Edwards, Yolanda Henry, Tamara Scott McFarlane, Elaine Williams, School of Education, The University of the West Indies, Mona, Jamaica

The gradual paradigm change in education has motivated professionals to engage in greater collaboration, through practice-based professional learning, to effectively meet the needs of students. Professional learning communities represent practitioners voluntarily converging to support each other and investigate their practice to improve student outcomes. Professional learning communities have become models that serve two broad purposes, namely, improving the knowledge of educators through professional dialogue and cultivating the educational aspirations of students through strengthened teacher leadership. Learning communities facilitate targeted professional development, knowledge sharing and teacher support that will enhance their ability to prepare students to take their places as

global citizens. Participation in professional learning communities has helped educators refine their pedagogy, reflect on their instructional practices as well as adjust through shared ideas. This qualitative case study, supported by the social network theory, captures the experience of five graduate students and educators who are members of various international, regional, and local professional learning communities. Preliminary findings suggest that learning communities do not only facilitate knowledge sharing, pedagogical support, and resource utilization, they also help to enhance mental well-being and keep members abreast of technological innovations such as artificial intelligence (AI). Additionally, professional learning communities are most effective when all members are clear about their roles and there is a mix of different skill sets and experiences. From the findings, it is recommended that educational administrators take deliberate steps to encourage members to either form or become a part of existing learning communities, including financial and technological support.

Revolutionising teacher preparation in Jamaica: A critical discussion

Presenters: Dian McCallum, Carol Hordatt Gentles, Tashane Haynes-Brown, Lois George, School of Education, The University of the West Indies, Mona, Jamaica

The landscape of teacher preparation (TP) in Jamaica is changing rapidly as it tries to keep up with a myriad of local, regional and international factors that influence both the theoretical discourse on teacher preparation and its practice. A primary concern is challenges with teacher preparation and teacher quality, as identified in the 2021 Report of the Jamaica Education Transformation Commission. The report recommended major changes to teacher preparation curricula and governance. Another critical issue is the recruitment and retention of teachers due to falling numbers of recruits to teacher education institutions and teacher attrition. In response to these issues and with a view to revolutionising TP in Jamaica, the School of Education is undertaking a radical transformation of its Bachelor's in Education teacher preparation programmes. The aim of this panel is to present a critical discussion of these issues. The panel will comprise four discussants who will speak to the current landscape of teacher preparation in Jamaica within the local, regional and global contexts. We will explore the historical contexts from which this TP landscape has evolved, the challenges and tensions impacting our curriculum reform and the opportunities for creating a future-oriented teacher preparation programme.

Education for sustainable development in Small Island States at the University of Aruba: Practice and evaluation

Presenters: Eric Mijts, Tobia de Scisciolo, Maarten Eppinga, Patrick Arens, Gerani Cheuk A Lam, Diego Acevedo, Anouk Mertens, Nigel John, University of Aruba, Aruba

This panel will focus on different approaches at the University of Aruba for capacity building for internal resilience of small island states and the way in which the creation of a critical mass of local higher educated experts that can create contextually relevant and locally accepted solutions will highly contribute to the resilience of these states. Building upon three papers that will be presented by the panel participants, we will demonstrate that it is necessary and possible to develop and implement impactful programs for Education for Sustainable Development in Small Island States, going beyond the focus on cognitive skills and knowledge. The panellists will present approaches to education in Aruba that stimulate critical sustainability thinking (the Academic Foundation Year, and the Sustainable Island Solutions through Science, Technology, Engineering, and Mathematics programs (SISSTEM)). Second, they will demonstrate how the modules within these programs address and affect sustainability thinking and student attitudes toward sustainability. They will also elaborate on the founding principles and evaluation of these programs utilising the EU GreenComp framework. Altogether, the panel aims to

demonstrate that despite the global nature of the challenges we face, contextual embeddedness and recognition of local characteristics and local adoption of sustainability thinking are key to building resilient societies.

Critical reflections: Exploring the implementation of the Sixth Form Pathway Programme in Jamaica - challenges and opportunities

Presenters: Danielle E.T. Williams, Jordan K. Williams, Trench Town Polytechnic College, Jamaica

In 2022, the Ministry of Education and Youth (MOEY) implemented the Sixth Form Pathways Programme (K-13 strategy) as a method of revolutionising secondary education in Jamaica. The objective of the MOEY was to optimise education and make Jamaicans more competitive in the global community. The approach constituted the integration of the Career Advancement Program (CAP) and Associate Degrees in Occupational Studies into the traditional sixth form programmes in local secondary schools. Prior to this shift, the provision of sixth form programmes in Jamaica was not mandatory, nor were they mandatory for students to attend. This qualitative study explores the experiences of affected stakeholders in this model (specifically teachers/lecturers, administrators, and students). The study examines the lived realities of social actors in both urban and rural educational institutions. The phenomenological thrust of this exploration demands the use of interviews, and narratives to better understand the effective implementation of this programme in the year following its inception. This paper highlights the failure of the “K-13” strategy to adequately respond to the systemic barriers faced by vulnerable students and under-resourced institutions. However, it presents a unique opportunity to mitigate the current certification crisis faced by the Jamaican labour market and for equitable education for all Jamaican school-leavers.

ROUNDTABLE DISCUSSIONS

Teacher retention in Jamaican schools: What motivates them to stay?

Presenter: Victoria Bedford, University of Alberta, Canada

Like many schools worldwide, schools in Jamaica continue to experience challenges retaining teachers. For instance, in Jamaica, it has been reported that over 800 teachers resigned between January and September 2023. The frequent turnover of teachers can have detrimental effects on student academic achievement and affect the economic development of the country. While the drivers of attrition are known, it is not clear what motivates teachers to stay. The research question guiding this study is: What considerations do teachers currently serving in schools in Jamaica perceive as contributing to their decision to stay as teachers in Jamaican schools? By using a qualitative study approach, this study seeks to gain a deeper insight into the motivations of teachers to continue in their teaching roles in Jamaica based on the perceptions of currently serving teachers. The method of data collection will be semi-structured interviews with teachers who have been teaching in Jamaican schools for at least three years. The study will explore themes related to personal, school community, and organizational context and examine how they interplay to influence teachers’ decisions to remain in the profession in Jamaica. This research contributes to the existing body of literature on teacher retention by offering a nuanced understanding of retention factors in the Caribbean context. The findings of this study have the potential to inform the development of targeted strategies and policies to enhance teacher retention in Jamaica, thereby fostering improved educational outcomes and national development.

Learning experiences during COVID-19 pandemic: A cross-cultural study of university students' motivation and self-efficacy in Barbados and Nigeria

Presenters: Grace Fayombo, Stacey Blackman, Grace-Ann Jackman, School of Education, The University of the West Indies, Cave Hill, Barbados; Yemisi L. Olaleye, University of Ibadan, Nigeria; Jimoh Wale Owoyele, Tai Solarin University of Education, Nigeria; Ayodele Kolawole, Babcock University, Nigeria

Since the outbreak of the COVID-19 pandemic, many studies have reported students' challenges when learning online including poor internet connection, lack of access to online platforms, lack of equipment and teachers' lack of online teaching skills. However, no study was conducted to investigate if students' motivation and self-efficacy may influence online learning among university students cross-culturally, despite the importance of these two critical factors to students' achievement. This cross-cultural quantitative study therefore examines the university students' achievement motivation and self-efficacy when learning online in the COVID-19 environment to find out the probable differences in the students' motivation and self-efficacy. An overarching research question for this study is: Is there a statistically significant difference between the levels of motivation and self-efficacy of Barbadian and Nigerian students when learning online during the COVID-19 pandemic? The sample consists of 145 university students, (N=75, UWI Barbados; N=70, Nigeria). The students responded to an online survey which assesses students' academic self-efficacy, achievement motivation and learning online. The independent t-test was conducted to find out the differences between the two groups of students' motivation and self-efficacy. The findings revealed there was a significant difference in the students' scores for motivation with Nigerian students having higher level of achievement motivation ($M=51.30$, $SD=8.77$) when compared with their Barbados counterparts ($M=45.76$, $SD=7.18$), $t(143)=1.47$, $p=0.00$), however, no significant difference was found in their self-efficacy. The implications of these findings for students' learning online during pandemic in the different environments are discussed and recommendations made for further study.

Finding skills and competencies to adapt to changing complex worlds

Presenters: Janice B Fournillier, Dihema Longman, Charles Hampton; Georgia State University, USA

Students, teachers, and leaders are increasingly expected and forced to utilize online learning resources post-COVID-19. As schools and universities embrace more complex digital and artificial intelligence resources, these groups are facing a burgeoning crisis of developing technology skills, digital literacy, and embracing lifelong learning earlier and more quickly than ever before. Consequently, liberation psychology elements like resilience, openness, determination, and pride are increasingly necessary to mitigate this "technostress" (Weil & Rosen, 1997). As people of the African Diaspora, we feel compelled to employ the healing principles of Ma'at. It is within this context that two self-identified Caribbean women professors and one African American male educational technologist, all with earned doctorates from North American universities, dialogue with each other and share their experiences of having to adapt to challenging geographic, professional, and educational spaces, constituting crises. Each created a necessary 'third space' (Homi Bhabha, 1994), allowing for our continuing growth and development as learners/teachers/mentors/leaders. We use autoethnographic narrative and an African-centered philosophical frame, Sankofa, to critically examine how we were forced to develop these critical competencies, to succeed and evolve through crises. By exploring, abstracting, and conceptualizing our experiences, we model how learners can develop and deploy these same survival tools for modern excessively digitized instructional spaces. This paper posits the importance for all educators to examine: (i) where we turn in times of crisis like the ones we experienced as immigrants and native/others and (ii) what are the limits we must breakthrough to overcome these challenges while maintaining or increasing our wellness.

POSTER PRESENTATIONS

Trends in the home literacy environment of primary school children in the Caribbean

Presenters: Ms. Jonielle Alleyne and Allison DaSantos, Caribbean Educational Research Centre, The University of the West Indies, Cave Hill, Barbados

According to Melhuish et al., (2008) and Sammons et al., (2015) the "home literacy environment" (HLE) refers to parental attitudes towards learning, the availability of home learning tools and devices, and the quality and quantity of home learning experiences. Burgess et.al., (2022) build on the previous point noting that the HLE has been identified as an important literacy variable in the enhancement of several educational and developmental outcomes. Although the importance of the HLE has been documented, Cheung, et al., (2021) highlight that to date, the "majority of studies and frameworks that inform our understanding of home literacy environments have been conducted in Western societies". Consequently, this study sought to determine the percentage of students who had access to electronic devices in their HLE, and the home learning experiences students engaged in. The data analysed for this study was collected by the Caribbean Educational Research Centre via surveys, from a larger study on school climate in the Caribbean. The researchers used the Statistical Package for Social Sciences software to examine the data and results showed that, in their HLEs, 23% of students had access to the internet, 18.6% had access to smartphones, 18.7% had access to tablets, and 14.8% had access to a laptop. Further analyses showed that participants engaged in parent-child reading. Moreover, there were statistically significant associations between parents who read to their children and the types of literature children read. These results are of great importance to the current education policy makers who are addressing the falling literacy rates across the Caribbean.

Nuh wait till drum beat before yuh grine yuh axe: Retaining teachers through strategies other than supply and demand

Presenter: Kimberling Yasmine Davis, School of Education, The University of the West Indies, Mona, Jamaica

Teacher migration has become a major concern in Jamaica, as teachers are leaving the country and profession for reasons such as better opportunities, higher salaries, and improved working conditions abroad. Teacher migration negatively impacts both the education sector and the country's economy. Jamaica employs a supply and demand approach, claiming it trains enough teachers to replace those who leave its classrooms. Yet teacher migration rates continue to increase and teacher shortages remain a critical issue. This is unfortunate as teachers are vital for teaching future generations and supporting national growth. Research on teacher migration and retention in Jamaica suggest one factor that has not been considered is the lack of effective retention strategies. This conceptual paper argues that effective strategies to retain teachers in Jamaica must be prioritized. Guided by the social exchange theory which embodies notions of equitable remuneration, fostering relationships, offering assistance, and demonstrating respect and gratitude for teachers' efforts, this paper examines strategies to decrease teacher migration and evaluates their effectiveness in Jamaica. Using databases like Google Scholar, JSTOR, and ERIC, the study considers (1) why is it important to retain teachers in the profession? (2) what are the primary strategies used to retain teachers in their home country and (3) which strategies can be altered and adapted to fit the Jamaican context? Findings and conclusions suggest that factors such as low pay, poor resources, poor support, and weak leadership play a part in teacher migration. The paper discusses the viability of retention strategies such as competitive pay, comprehensive induction programs, supportive leadership, strong induction programs, leadership training, and financial incentives such as housing benefits.

Social competence and academic achievement in children

Presenter: Kimarla Fagon, School of Education, The University of the West Indies, Mona, Jamaica

This study aims to investigate the relationship between social competence and academic achievement in children. Drawing upon a narrative review approach, the study examines empirical, conceptual, and theoretical papers to identify key variables associated with this phenomenon. Additionally, a model design was employed to identify novel connections between constructs, integrating literature from various disciplines to pinpoint key variables associated with the phenomenon. The study delves into various dimensions of social competence, such as communication, self-control, resilience, and responsibility, to uncover their specific impacts on academic achievement. Preliminary review revealed a strong positive relationship between social competence and academic outcomes, with higher social competence levels being associated with better academic performance. The study also revealed that unfavourable behavioural characteristics, such as aggression and social isolation, are found to hinder academic achievement. The study highlights the importance of promoting social competence in educational settings, as it not only directly and indirectly influences academic achievement, but also impacts the necessary preparation behaviours for effective learning. The study also found that effective interventions targeting social skills development can improve academic performance and foster socio-emotional growth. These findings have significant implications for educational practices and policies, emphasizing the need to prioritize social competence for enhancing children's educational experiences and long-term outcomes.

Unlocking pathways to positive attitude: Examining the dimensions of high school students' attitude toward mathematics

Presenters: Alethia Martin, Thompson Town High School, Clarendon, Jamaica; Lois George, School of Education, The University of the West Indies

In recent years, Jamaica has witnessed a shift towards student-centred methodologies in teaching and learning, with increasing recognition among researchers of the importance of understanding not only the cognitive but also the affective dimensions of students' learning experiences. Among these, a pivotal aspect within the affective domain of mathematics education is students' attitude towards mathematics (ATM), which profoundly influences their academic achievements, engagement in math-related activities, and future career decisions. While previous studies have assessed students' ATM, there remains a scarcity of research demonstrating how educators can leverage these findings to enhance students' attitude effectively. This research aims to address this gap by presenting insights from a quantitative study that utilized a cross-sectional survey design to measure students' ATM across its three key sub-components: affective, behavioural, and cognitive. Additionally, the study sought to develop individual profiles for students to identify specific areas within their ATM that require attention and reinforcement. The research will highlight the three most prevalent profiles identified through data analysis and offer practical recommendations for enhancing students' ATM based on these profiles. The study sample comprises 100 students (aged 12-17), drawn from Grades 8-10 in a co-educational school in Jamaica. The data will be collected using a validated scale designed to measure various dimensions of students' ATM, with subsequent analysis conducted using descriptive statistics. The study's findings are poised to provide valuable insights for educational stakeholders seeking to understand students' ATM better and devise targeted interventions aimed at bolstering this crucial affective sub-construct.

Teachers' Techno-pedagogical competence in the digital age

Presenter: Sasha Goodridge, School of Education, The University of the West Indies, Mona, Jamaica

The 21st century, characterized as the digital age, has seen a shift in the skills required in the workplace due to the introduction of Information and Communication Technology (ICT). In this era, advanced digital literacy skills are essential for both students and educators to effectively navigate the evolving educational landscape, especially since the COVID-19 pandemic. Guided by the Technological Pedagogical Content Knowledge (TPACK) framework, the aim of this conceptual study is to explore the required skills and competencies of teachers that would aid in developing digital skills of students and subsequently, develop a techno-pedagogical model for the Caribbean. This study utilized a systematized review that drew on four databases and 37 studies. Using thematic analysis, the selected studies highlighted professional, technology, techno-pedagogy, and ethical competences that teachers need to develop the digital skills of students. The conclusion highlighted the need to adapt the TPACK framework to include socio-cognitive competences and training. This ensures that socio-cognitive techno-pedagogical competences for the digital age are adequately developed. The necessary professional support should be integrated into teacher training, teacher evaluation, teacher professional development and classroom practice. Master Teachers, classroom educators, college instructors and policy makers would all find value in the modified TPACK model. Furthermore, policymakers can utilize the adapted model to shape educational policy regarding teacher evaluation and training.

Connecting conservation and inquiry science to tradition ecological knowledge (TEK): An overview of an environmental education unit for STD3 Trinidadian primary students.

Presenter: Rowena Kalloo, School of Education, The University of the West Indies, St. Augustine, Trinidad and Tobago

COVID-19 and the climate crisis have deepened the environmental challenges of Caribbean countries. Conservation requires hard interventions at mitigation and restoration as well as deepening public consciousness to promote behavioural change and positive environmental attitudes. In this regard quality environmental education (EE), beginning at the earliest age, is critical. Such education should be grounded in local knowledge often retained within First People's populations. In Trinidad and Tobago (TT) this cultural knowledge has not been systematically incorporated into environmental science programmes. This presentation will describe an environmental science unit integrated with traditional ecological knowledge (TEK). The first draft of the unit was evaluated by a panel of EE teachers, evaluation experts and First People's representatives. The revised unit consisted of three modules based on the themes of the First Peoples as scientists, technologists, and conservationists. It was piloted in an informal education setting (day camp) for 6–14-year-olds. An analysis of facilitators observations of campers' engagement, worksheets and journal drawings was carried out. Results suggested the need for a more structured setting (school) and a focus on the Std level – as this age group was most engaged and successful in the completion of the activities. The module is due to be piloted in September 2024 with a Std 3 class. Learning outcomes will be assessed through focus group interviews, journals, pre and post-tests, and Likert questionnaires of students' engagement and environmental attitudes. Results of statistical and qualitative analyses will be used for further refinement and development of the module.

Frying pan versus fire: Cultural dissonance and the Jamaican migrant teacher

Presenter: Nyree T. McLean-McDonald, School of Education, The University of the West Indies, Mona, Jamaica

This conceptual study examines the professional and social challenges faced by migrant Jamaican teachers in the United States and the United Kingdom. A record number of Jamaican teachers migrated for work between 2022 and 2023, seeking better financial opportunities abroad. To be successful, they must overcome cultural dissonance, both professionally and socially. Collating evidence gathered from peer-reviewed journal articles, dissertations, conference presentations, and statistical reports, this extended literature review reveals that Jamaican migrant teachers, like their counterparts from other countries, experience a typical set of challenges. These challenges involve tension between professional and social norms in the teacher's home country and those of their adopted one. An example of this tension is the perceived questioning of their competence by students, parents, and colleagues in their host community. Other instances are the perception of a lower value placed on education, a rigorous re-qualification process leading to professional insecurity, and feelings of isolation. An exploration of the cultural competence theory, which outlines the stages of reconciliation between home and host culture, suggests the need for sensitization to the laws and expectations of destination countries before and upon arrival. Creating a body of knowledge about the experience of migrant teachers abroad could reduce the hasty exits of Jamaican teachers from local schools and encourage systems of accountability for migrant teacher well-being in the recruiting country.

The intersection of climate change, vegetable gardens and students' environmental stewardship at an early childhood institution in Northern Trelawny, Jamaica

Presenters: Alleysha Radcliff, Shaniela Natty, Shenika McFarlane-Morris, School of Education, The University of the West Indies, Mona, Jamaica

With the growing concerns about the adverse effects of climate change on small island developing states (SIDs) and other nations of the world, UNESCO has made serious calls for the greening of schools as part of the long-term solution to the climate crisis. Not only does the increase of green spaces such as gardens help to combat the climate crisis, but it also builds environmental responsibility amongst students. The broad aim of the study was to explore the perceptions of teachers at an early childhood institution located in Northern Trelawny on how gardening influences the environmental stewardship of students from ages three to six. Scoping of the literature revealed that there is a paucity of recent and context-relevant studies regarding this topic within Jamaica. Kolb's Experiential Learning Theory and Howard Gardner's Theories of Multiple Intelligences guided this study, which was conducted within a qualitative, phenomenological framework. Three of the six teachers were conveniently and purposively sampled and interviewed. The study found that the garden is essential to the authentic learning of topics such as the parts of plants, soil and how plants grow. The teachers believe that the children have become more conscious of their natural environment and its value, displaying a strong interest in taking responsibility for watering and fertilizing the crops as they grow. It was also noted that the students have developed a sense of care and tenderness towards the plants. The students' engagement with the garden also involves the composting of organic waste from the school's kitchen, which contributes to sustainable practices and knowledge that they share with their families.

i-STEM vs STEM-I: A study to evaluate integrated STEM education and STEM innovation in Jamaican secondary schools

Presenter: Elaine Williams, School of Education, The University of the West Indies, Mona, Jamaica

STEM education was introduced into the Jamaican school curriculum in 2015 as part of the restructuring programme to properly prepare students to become 21st century citizens. STEM is an acronym for Science, Technology, Engineering and Math education. STEM education generally includes these four disciplines mainly through student-centred learning. Integrated STEM education is an interdisciplinary educational approach that involves the process of assimilation of knowledge, abilities, skills, and activities through inquiry into real-world scenarios. On the other hand, STEM innovation is initiated by a real-world challenge that utilizes knowledge of the disciplines for experimentation, exploration and creativity to achieve success. This concurrent mixed-method research underpinned by Dewey's progressivism theory and seen through the lens of dialectical pragmatism seeks to determine if the predominant ways in which science, technology, engineering and mathematics are incorporated in science lessons in Jamaica secondary schools are mainly classified as integration or innovation. The STEM-related practices of Jamaican beginning and experienced teachers from different secondary schools in Jamaica will be explored using responses to the researcher-developed STEMQuest instrument, focus-group interviews, and lesson plan evaluations. The findings from this study will add to the body of work on STEM Education in Jamaica, as well as potentially highlight strategies to promote genuine entrepreneurship which can play a role in the country's development.

The systems theory: A framework for understanding mindfulness

Presenter: Tiffany Reid-Bailey, School of Education, The University of the West Indies, Mona, Jamaica

This model design conceptual research intends to provide a clear framework for understanding the effects of mindfulness on the overall wellbeing of students. Social emotional competence has been linked to children's overall wellbeing. This is particularly relevant in the Jamaican context, where high levels of student antisocial behaviour, low academic performance and high drop-out rates are observed. Mindfulness, the practice of nonjudgemental awareness, has proven to develop social-emotional skills through the integration of mindfulness in social-emotional learning (SEL) programs. Twenty-five scholarly sources about student's mindfulness, SEL and wellness were reviewed for recurring themes, the Collaborative for Academic, Social and Emotional Learning (CASEL) and the systems theory. CASEL is a framework for understanding social-emotional skills. Similarly, the systems theory presents wellness as a complex construct of internal dimensions. The well-documented relationship between mindfulness and SEL will be investigated. The findings will be conceptually analysed and synthesised in the context of systems theory, which suggests that the whole is greater than the sum of its parts. The systems theory hypothesises that the positive effects of mindfulness on student social emotional skills will have corresponding improvements to overall wellbeing. This study seeks to contribute to the growing body of research on mindfulness and its potential to improve the wellbeing of students. Findings will inform the utilisation of mindfulness in schools.
