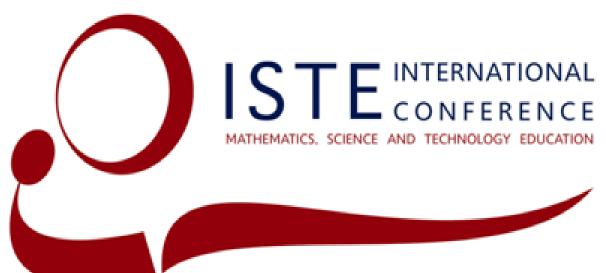


# Draft Conference Programme 2019





### 20 October 2019 (Sunday)

14h00 - 18h00: Arrival and Registration at conference venue

18h30 - 18h45: Opening Ceremony

Venue: restaurant

Introduction and overview of the conference: Prof David Mogari

18h45 – 19h45 Dinner (Restaurant)

#### 21 October 2019 (Monday)

07h30 - 08h15: Breakfast

08h30 - 9h00: Welcome

Venue: Main Hall

**Opening of Conference: Welcome: Prof Zungu** 

Chair: Prof David Mogari

9h00 - 10h30: Plenary Session 1 Prof Samson Nashon (Canada)

Title: Relevance into science learning through contextualized pedagogy

Venue: Main Hall – Chair: Prof David Mogari

10h30-11:00 Tea in Foyer

# 21 October 2019 (Monday)

MON	Venue: Main Hall	Venue 1	Venue 2	Venue 3
	Mathematics Education	Life Science Education	Digital Education	Physics education
	Chair: Ingrid Sapire	Chair: Lydia Mavuru	Chair: Jameson Goto	Chair: Prof J Kriek
11h00-	CONNECTION BETWEEN PRIOR	EDUCATION FOR SUSTAINABLE	RELATING STUDENT PERCEPTIONS OF	UNIVERSITY PHYSICS TEACHERS'
11h30	KNOWLEDGE AND STUDENT	DEVELOPMENT (ESD) AND	READINESS TO STUDENT SUCCESS:	REFLECTION ON THEIR DISCURSIVE
	ACHIEVEMENT IN ENGINEERING	INCLUSION- A CASE STUDY OF THE	Leandra van der Merwe, Madeleine	PRACTICES: Cedric Linder, Anne
	MATHEMATICS: Rina Durandt	"CASHEW" PROGRAMME: Katarina	Groenewald, Carin Venter,	Linder and Susanne Wikman
		Roncevic and Prof Esther Kibuka-	Charmaine Scrimnger-Christian and	
		Sebitosi	Mmoso Bolofo	
11h30-	TEACHING EUCLIDEAN GEOMETRY	THE CONUNDRUM OF INTEGRATING	THE INFLUENCE OF DESCRIPTIVE AND	ASSESSING THE ROLE OF IMPLICIT
12h00	WITH GEOBOARD PROMOTES	INDIGENOUS KNOWLEDGE IN	SOCIAL NORMS IN THE ACCEPTANCE	SCAFFOLDING IN FACILITATING
	PRACTICAL TEACHING: Mandlenkosi	SCIENCE CURRICULUM THEMES: A	AND USE OF ONLINE FORMATIVE	VIRTUAL PHYSICAL SCIENCES
	REVIEW OF DIFFERENT VIEWPOINTS: FEEDBACK IN AN UNDERGRADUAT		FEEDBACK IN AN UNDERGRADUATE	LEARNING: Mafor Penn
		Johané Steenkamp, Josef De Beer and	MODULE: Jameson Goto, Jacqueline	
		Neal Petersen	Batchelor and Geoffrey Lautenbach	
12h00-	CODE SWITCHING IN MULTILINGUAL	LEARNERS' PERCEPTIONS ABOUT THE	AWARENESS OF THE DARK SIDE OF	REFLECTIONS OF PROBLEM SOLVING
12h30	MATHEMATICS CLASSES: WHAT IS	INTEGRATION OF THEIR SOCIO-	TECHNOLOGY OF IT STUDENTS AND	STRATEGIES AMONGST SENIOR AND
	LOST IN TRANSLATION?: Clemence	CULTURAL BELIEFS IN LIFE SCIENCES:	THEIR TECHNOLOGY USE: Lynette	JUNIOR PHYSICS STUDENTS:
	Chikiwa	Lydia Mavuru	Drevin and Joy Dahee Kim	Leelakrishna Reddy
12h30-	FOUNDATION PHASE MATHEMATICS	INDIGENOUS KNOWLEDGE SYSTEMS:	DIGITAL EXPERIENCES OF HIGHER	LIFE SCIENCES LEARNERS'
13h00	TEACHERS' AND LEARNERS'	ITS AFFORDANCES AND RESTRAINTS	EDUCATION STUDENTS IN GHANA:	EXPERIENCES IN IMPLEMENTING
	LANGUAGE PREFERENCES GAUTENG	IN SCHOOL SCIENCE EDUCATION:	HOW DOES IT COMPARE: Justice Kofi	CASE STUDIES AS AN EXAMPLE OF A
	SCHOOLS: Ingrid Sapire	Josef De Beer	Armah and Duan van der Westhuizen	HYBRID PROBLEM-BASED LEARNING
				METHOD: Jhani Venter, Neal
				Petersen and Aubrey Golightly

13h00 - 14h00: Lunch (Restaurant)

# 21 October 2019 (Monday)

MON	Venue: Main hall Mathematics Education	Venue 1 Educational Technology	Venue: 2 Technology Education	Venue 3 Engineering Education
	Chair: Dr C Chikiwa	Chair: Dr Willem Rauscher	Chair: Prof Atsumbe	Chair: Dr Mogashana
14h00- 14h30	ENHANCING ACADEMIC PERFORMANCE THROUGH FORMATIVE ASSESSMENT: AN EMPIRICAL ANALYSIS OF A MATHEMATICAL POSTGRADUATE COURSE: Usanda Monwabisi and Sipho Hlabane	STUDENTS EXPECTATIONS FOR DIGITAL CAPABILITIES DEVELOPMENT: A CASE OF GHANA: Justice Kofi Armah and Duan van der Westhuizen	EFFECTS OF FELDER-SILVERMAN AND HONEY-MUMFORD LEARNING MODEL ON STUDENTS' ACHIEVEMENT AND INTEREST IN RADIO TELEVISION AND ELECTRONICS WORK IN TECHNICAL COLLEGE: Atsumbe Bernard Numgwo, Raymond Emmanuel, Samuel Ayanda Owodunni and Rose Esse Ekpe	EXPLORING STUDENT PERSPECTIVE ON THE EXTENDED PROGRAM: Henrietta Steenkamp and Cristina Anghel
14h30- 15h00	TASK-SOLVING IN MATHEMATICS: THE SIGNIFICANCE OF VISUAL IMAGERY: Beata Dongwi and Marc Schafer	IMPACT OF COMPUTER-ASSISTED INSTRUCTIONAL STRATEGY ON SCHOOLCHILDREN'S SOCIAL SKILLS: Olugbenga Ige	STUDENT'S PERCEPTIONS OF ASSESSMENT PRACTICES IN TVET SECTOR IN SOUTH AFRICA: Sylvia Ramaligela	A REVERSE ORDER LIFE CYCLE APPROACH TO ENHANCE SYSTEMS ENGINEERING EDUCATION AT UNDERGRADUATE LEVEL: Sune von Solms and Johan Meyer
15h00- 15h30	PRE-SERVICE TEACHERS' PERCEPTIONS TOWARD TEACHING STEM IN THE INTERMEDIATE PHASE: Werner Engelbrecht	TEACHERS' COMPETENCE AND PEDAGOGICAL PRACTICES IN THE USE OF EDUCATIONAL TECHNOLOGY TOOLS IN GRADES 10 - 12 MATHEMATICS: Mathomo Moila	21ST CENTURY TEACHER SKILLS: DESIGN PRINCIPLES FOR STUDENT ENGAGEMENT AND SUCCESS: Geoffrey Lautenbach	CONCEPTUALISNG THE TRANSLITERATION OF THE VAN HIELE THEORY TO ENGINEERING GRAPHICS AND DESIGN: Vernon Candiotes, Sonja van Putten and Willem Rauscher
15h30 - 16h00	CONTEXTUALIZING E-TUTOR SUPPORT STRATEGIES AT AN OPEN DISTANCE AND E-LEARNING INSTITUTION: Mpipo Sedio and Mmankoko Ramorola	EFFECT OF MULTIMEDIA COMPUTER INSTRUCTIONAL PACKAGE ON TVET COLLEGE STUDENTS' UNDERSTANDING OF MECHANICAL PROPERTIES OF STEEL: Stanley Chinonye Maduike and Harrison Atagana	COMPLEMENTING ARTIFICIAL INTELLIGENCE IN MATERIALS ENGINEERING EDUCATION: Iyiola Otunniyi	ENGINEERING CAPSTONE PROJECTS: A CASE STUDY CONDUCTED AT UNISA: Petrus Kruger and George Nickola

18h00 – 19h00: Dinner in Restaurant

## 22 October 2019 (Tuesday)

07h45 - 08h30: Breakfast

#### 08h30-10h00: Plenary session 2 Prof Punya Mishra (USA)

Title: Bringing design to technology & education: Going from Artifacts and processes to Systems and Culture

Venue: Main Hall – Chair: Prof Jeanne Kriek.

#### 10h00 - 10h30 Official photo of conference

10h00 - 10h30: Tea (Foyer)

TUES	Venue: Main hall Mathematics Chair: Dr Sello Makgakga	Venue 1 ICT Education Chair: Prof K Padayachee	Venue 2 Science Education Chair: Dr Maria Tsakeni	Venue 3 Technology Education Chair: Prof G Lautenbach
10h30- 11h00	WHO IS ACTUALLY DRIVING? A TRANS-THEORETICAL VIEW OF MATHEMATICS ANXIETY: Nardia Randell and Geoffrey Lautenbach	IT GRADUATES' FIRST YEAR OF EMPLOYMENT: EXPERIENCE AND RECOMMENDATIONS FOR THE CURRICULUM: Annelee Panday and Marthie Schoeman	DEVELOPING PRE-SERVICE SCIENCE TEACHERS' PEDAGOGY IN AN INQUIRY-BASED CLASSROOM: EXAMINING THEIR REPRESENTATIONAL COMPETENCE AND FLUENCY: Nazeem Edwards and Lize Maree	CONSTRUCTING KEY CONCEPTS IN TECHNOLOGY EDUCATION FOR TEACHERS IN THE ILEMBE DISTRICT: Richard Naidoo and Roy Rambrij
11h00- 11h30	GRADE 6 TEACHERS BELIFES ABOUT MATHEMATICS AS A SUBJECT AND TEACHING AND LEARNING: Batseba Mofolo-Mbokane and Rosina Ngoako	RURAL LEARNERS' PATTERNS OF ENGAGEMENT IN SYNCHRONOUS ONLINE MENTORING MOBILE GROUP CHATS TO ADVANCE CONCEPTIONS OF CAREER DEVELOPMENT: Linford Molaodi and Jacqueline Batchelor	PRESERVICE TEACHERS' REFLECTIONS ON TEACHING SCIENCE WITH PRACTICAL WORK IN MULTIPLE-DEPRIVED CLASSROOMS: Maria Tsakeni	UNDERSTANDING THE INFLUENCE OF PEDAGOGICAL BELIEFS ON ADOPTION OF TECHNOLOGY IN TEACHING: Carmen Miséria and Clement Simuja

#### 22 October 2019 (Tuesday)

TUES	Venue: Main hall	Venue 1	Venue 2	Venue 3
	Mathematics	ICT Education	Science Education	Technology Education
	Chair: Dr Sello Makgakga	Chair: Prof K Padayachee	Chair: Dr Maria Tsakeni	Chair: Prof G Lautenbach
11h30-	TWINNING TWO GRADE 11	REFLECTING ON THE USE OF PBL FOR	THE EXPERIENCES OF THE	PRE-SERVICE TEACHER'S
12h00	MATHEMATICS TEACHERS	21ST CENTURY COMPETENCIES IN	FOUNDATION PHASE TEACHERS IN	ACCEPTANCE AND USE OF A
	INTEGRATING INFORMATION	AN IT EXTENDED PROGRAMME: J.T.	IMPLEMENTING CURRICULUM AND	SYNCHRONOUS AND
	COMMUNICATION AND	Janse van Rensburg and Roelien	ASSESSMENT POLICY STATEMENT:	COLLABORATIVE ONLINE TOOL TO
	TECHNOLOGY IN TEACHING	Goede	Mohlakola Mathiba and Mmankoko	SUPPORT TEACHING AND LEARNING
	ALGEBRA: <i>Dr Sello Makgakga</i>		Ramorola	AT A PRIVATE HIGHER EDUCATIONAL
				INSTITUTE: Alfred Machingambi and
				Jacqueline Batchelor
12h00-	VISUALISATION PROCESSES IN	UNDERSTANDING THE INFLUENCE	TEACHERS' CONCERNS ON	INFORMAL MATHEMATICAL
12h30	NAMIBIAN MATHEMATICS	OF PEDAGOGICAL BELIEFS ON	INTEGRATING INFORMATION AND	KNOWLEDGE DIFFUSION AMONG
	CLASSROOMS: Clemence Chikiwa	ADOPTION OF TECHNOLOGY IN	COMMUNICATION TECHNOLOGIES	RURAL SECONDARY SCHOOL
	and Marc Schäfer	TEACHING: Carmen Miséria and	INTO PHYSICAL SCIENCE IN	LEARNERS USING WHATSAPP:
		Clement Simuja	LESOTHO: Lucia Lisene, Loyiso Jita	Lindiwe Mthethwa and Mmankoko
			and Thuthukile Jita	Ramorola
12h30-	AN EXPLORATORY STUDY ON THE	TEACHERS' REFLECTIONS IN THE USE	USE OF TARGETED WEB-BASED	TRENDS OF EMERGING
13h00	MINDSETS AND MOTIVATION OF	OF LEARNING TECHNOLOGIES IN	INSTRUCTION TO ENHANCE	TECHNOLOGIES IN ONLINE
	MATHEMATICS TEACHERS: Erica	INCLUSIVE EDUCATION: Rabaitse	LEARNERS' UNDERSTANDING OF	LEARNING: THE NEXT FIVE YEARS:
	Spangenberg	Diseko and Precious Pule Sechaba	ASTRONOMY CONCEPTS: Koketso	Ngaka Mosia
			Nthimbane and Monde Kazeni	

13h00 - 14h00: Lunch (Restaurant)

14h00 - 16h30

**WORKSHOP: Quantitative Research analysis** 

Mr Hennie Gerber Venue: Main Hall

16h00 - 18h00: Time off for self-game-drive in the Kruger National Park

18H00 - 19:00: DINNER (RESTAURANT)
TO CELEBRATE THE 10TH ANNIVERSARY OF THE CONFERENCE

Tuesday dinner is a fancy dress, cultural dress or

WHEREVER YOUR CREATIVITY TAKES YOU

## 23 October 2019(Wednesday)

07h45 - 08h30: Breakfast

# 08h30 - 10h00: Plenary Session 3 Dr James Keevy (Joint Education Trust)

Title: Digital interoperability: the new frontier for academic integrity in education

Venue: Main Hall – Chair: Prof Keshnee Padayachee

10h00 - 10h30: Tea (foyer)

WED	Venue: Main hall	Venue 2	Venue 3
	Mathematics Education	Modelling and Statistics Education	Science Education
	Chair: Prof K Luneta	Chair: Prof L Drevin	Chair: Prof E Kibuka Sebitosi
10h30-	IMPLEMENTING PBL IN A FOUNDATION	THE CORRELATION BETWEEN GRADE 11	IMPLEMENTATION OF ESD IN SOUTH AFRICA: LIFE
11h00	PROGRAMME MATHEMATICS CLASSROOM:	LEARNERS' FUNCTIONAL UNDERSTANDING OF	SCIENCES: Prof Esther Kibuka-Sebitosi
	EXAMPLES OF PROBLEMS: Mdu Ndlovu	PROOF AND ARGUMENTATION: Benjamin	
		Shongwe	
11h00-	ESSENTIAL EDUCATIONAL NEUROSCIENCE	ASSESSMENT OF TERTIARY STUDENTS' LEARNING	A WHOLESCHOOL APPROACH TO EDUCATION FOR
11h30	KNOWLEDGE FOR MATHEMATICS TEACHERS:	OF STATISTICAL MODELLING: Vaughan van Appel and Rina Durandt	SUSTAINABLE DEVELOPMENT IN SOUTH AFRICA
	Kakoma Luneta	ana Kina Daranat	AND GERMANY: Prof Esther Kibuka-Sebitosi and
			Katarina Roncevic
11h30-	THE PRACTICALITY OF TEACHING MATHEMATICS	PERFECTION THROUGH REFLECTION: VALIDATION	EFFECTIVENESS OF RECONCEPTUALISED
12h00	IN SHONA IN THE ZIMBABWEAN PRIMARY	OF THE ASSIST INVENTORY FOR LEARNING	NATURAL SCIENCES INTERVENTIONS IN MPUMALANGA: Sikhulile B. Msezane
	SCHOOLS: Chipo Makamure	STATISTICS: Thea Corbett	THE OF INCHARGE OF THE SECURE
12h00-	TEACHING STRATEGIES USED BY SPECIAL NEEDS	TWO PERSPECTIVES ON THE GRADUATE	ENVIRONMENTAL ENRICHMENT FOR TEACHING
12h30	TEACHERS IN MATHEMATICS CLASSROOMS:	ATTRIBUTES OF IT STUDENTS AFTER WORK-	AND LEARNING EDUCATION FOR SUSTAINABLE
	Batseba Mofolo-Mbokane and Elizma Louw	INTEGRATED LEARNING: Linda Redelinghuys and Lynette Drevin	DEVELOPMENT: ZOOCLUBS: Parks Leshaba and
		Lynette Breviii	Prof Esther Kibuka-Sebitosi
12h30 -	A COMPARISON OF STRATEGIES USED IN	TOUCHTUTOR®: A 21ST-CENTURY OFFLINE TOOL	ACTIVE LEARNING STRATEGIES AS DETERMINANTS
13h00	SINGAPORE ANDSOUTH AFRICA IN GRADE 9	TO ENHANCE THE SELF-DIRECTED LEARNING OF	OF PRE-SERVICE BIOLOGY TEACHERS: Olayemi
	MATHEMATICS CURRICULA: Raphael Soda and	FET MATHEMATICS LEARNERS: Tom Mosiane and	Asaaju
	France Machaba	Werner Olivier	

13h00 - 14h00: Lunch (Restaurant)

# 23 October 2019(Wednesday)

WED	Venue: Main hall	Venue 1	Venue 2
	Mathematics Education	ICT	Technology Education
	Chair: Dr F Machaba	Chair: Prof R Naidoo	Chair: Dr L Goosen
14h00-	EXPLORING GRADE 7 LEARNERS' PERCEPTIONS ON	THE CRITICAL ROLE OF PROFESSIONAL	APPLICATION OF DIGITAL GAME BASED LEARNING
14h30	AWFS IN MULTIPLICATIVE WORD PROBLEM-	DEVELOPMENT FOR SCIENCE TEACHERS IN A	IN INDUSTRIAL ENGINEERING TEACHING AND
	SOLVING WORDS: Nothile Kunene	SOUTH AFRICAN CONTEXT: Thasmai Dhurumraj	LEARNING IN AN ONLINE DISTANCE LEARNING
			INSTITUTION: Ngaka Mosia
14h30-	CORPORATIVE LEARNING AS A "FORM" THAN A	DIAGNOSTIC ANALYTICS OF ALGEBRA IN A	TOWARDS INNOVATIVE BEHAVIOR FOR
15h00	"SUBSTANCE" AS AN ATTEMPT TO DEVELOP	MATHEMATICS BLENDED LEARNING COURSE AT A	TECHNOLOGY STUDENTS: James K. Ngugi and Leila
	CONCEPTUAL THAN PROCEDURAL KNOWLEDGE IN	UNIVERSITY OF TECHNOLOGY: Richard Naidoo	Goosen
	SOLVING ALGEBRAIC EQUATIONS: A CASE OF		
	GRADE 11 MATHEMATICS LEARNERS: Fourie		
	Malatjie and France Machaba		

15h00 – 16h00 Viva Sessions Chair: Professor Mogari



16h00 – 18h00 Sunset drive and bush braai

#### 24 October 2019 (Thursday)

07h45 - 08h30: Breakfast

08h30 - 10h00: Plenary Session 4

Prof Rob O' Donoghue

Title: Working towards future sustainability in more socially just ways that include indigenous heritage practices and the Sustainable

**Development Goals (SDGs)** 

Venue: Main Hall Chair: Prof H Atagana

10h00 - 10h30: Tea (Foyer)

10h30 - 11h30: Workshop

**Prof Max Braun** 

Title: What to look out for when writing your dissertation or thesis

Venue: Main Hall

WED	Venue: Main hall	Venue 1	Venue 2
	Mathematics Education	Science Education	Mathematics Education
	Chair:	Chair:	Chair:
11h30-			
12h00			

13h00 - 14h00: Lunch (Restaurant) and closing of conference

#### Time off for self-game-drive in the Kruger National Park 18h00 - 20h00: Dinner (Restaurant)

# 25 October 2019 (Friday)

08h00 - 11h00: Departure

SUBJECT TO CHANGE

Updated: 17/10/2019 09:40