



NSTF Discussion Forum

Language and STEM education at school – policy and research

A discussion forum led by the proSET (Professionals in science, engineering and technology) sector to the NSTF, representing Professional Bodies and Learned Societies

Programme – #LangInEd

Day 1: 3 October - Morning Session: 09:00-13:00

Item	Topic	Speaker/ Organisation
08:30-09:00	Arrival and registration	NSTF Registration Desk
09:00-09:30	Welcome to participants Outline of the purpose of the meeting and its intended outcomes	Ms Jansie Niehaus , Executive Director: NSTF
09:30-10:15	Language policy for Basic Education, and overview of performance in the STEM subjects	Mr B Monyaki (Languages, Chief Education Specialist) Department of Basic Education (DBE)
10:15-11:00	Discussion	All
11:00-11:15	Tea	
11:15-12:00	Mathematics Education and Language Diversity: From Language-as-Problem to Language-as-ResourceEstablishing	Prof Mamokgethi Phakeng , Deputy Vice-Chancellor: Research and Internationalisation, University of Cape Town (UCT)
12:00-12:30	Establishing a culture of STEM discourse in township and rural high schools	Mr Mpho Madisha , Chairperson, Black Science, Technology and Engineering Programme (BSTEP)

12:30-13:00	Discussion, wrap-up for the morning, and direction for afternoon activities	Ms Jansie Niehaus
13:00-13:45	Lunch	

Day 1: Afternoon Session - 13:45-16:00 Breakaway groups

Track A: Language in Early Childhood Development (ECD) phase and primary school level

Item	Topic	Speaker/Organisation
13:45-14:10	Changing how the story ends: the role of early reading in South Africa	Ms Jade Jacobsohn , Managing Director, Nal'ibali Programme
14:10-14:30	Multilingualism in Foundation Phase Mathematics	Ms Ingrid Sapire , University of the Witwatersrand (Wits)
14:30-14:55	Acquiring new languages	Mrs Wendy Shihlamariso Chauke , Lecturer, University of Limpopo (UL)
14:55-15:25	Integrated Studies of Learning Language, Science and Mathematics in the Primary School	Prof Elizabeth Henning , University of Johannesburg(UJ)
15:25-15:50	Discussion	
15:50-16:00	Recommendations for – ECD and Primary school Wrap-up for the day, and notice on discussions for next day	

Track B: Language in secondary school (high school) and tertiary level

Item	Topic	Speaker
13:45-14:05	Teacher training for secondary school (for language in science teaching): just because two-thirds of all talk in most science classrooms is by the teacher	Prof Samuel Oyoo , Director: Institutional Language, Wits
14:05-14:25	Students' linguistic (un)preparedness for tertiary education: some causes, effects and suggested solutions (looking at primary, secondary and tertiary education).	Mr Johan Blaauw , Director: Institutional Language, North West University (NWU)
14:25-14:45	Language and the STEM subjects in secondary school – issues of learning & teaching, self-study, gender and attitudes	Prof Satsome Maoto , University of Limpopo (UL)

14:45-15:05	Nurturing Indigenous Languages	Ms Khethiwe Marais , Masihlangane
15:05-15:25	The reality of post-grade twelve learners' language proficiency	Ms Carina Coetzer , University of Stellenbosch (SU)
15:25-15:50	Discussion	
15:50-16:00	Recommendations for – Language in secondary school (high school) and tertiary level Wrap-up for the day, and notice on panel discussions for next day	

Day 2: 4 October. 09:00 – 13:00

Item	Topic	Speaker/Organisation
09:00-09:05	Welcome	Ms Jansie Niehaus , NSTF
09:05-09:30	Non-verbal methods of teaching in Tertiary Education	Mr David Benjamin Botha , Executive Committee Member, South African Academy of Engineering (SAAE)
09:30-9:55	Comment on policies	Dr Lebs Mphahlele , DDG, Limpopo Department of Education
09:55-10:20	Roles of language in forming mathematical knowledge	Prof Piet Human , Ukuqonda
10:20-11:05	Reducing Inequities in STEM Education on Two Continents - SA and USA with specific reference to Language in the Primary (SA) and Middle (USA) Schools subjects	Mr Dirk van Schalk Wyk , Educator
11:05-11:20	Tea	
11:20-12:00	Track A Report-back and discussion	Tbc
12:00-12:40	Track B Report-back and discussion	Tbc
Discussion: <ul style="list-style-type: none"> • What does research say about the medium of instruction? • What does research say about language and identity? What about multi-cultural societies? What about gender? • What does research say about the medium of instruction for mastering the STEM subjects? 		Facilitator: Jansie Niehaus, NSTF Executive Director

	<ul style="list-style-type: none"> • How can we fast-track our people’s education whilst preserving and growing the rich cultural heritage of a variety of language groups? • What does government policy say (both nationally and provincially) about medium of instruction as well as the learning of languages? Are these policies adequate? • Why are these issues still so unresolved? Where does implementation of policy fall short? 	
12:40-13:15	<p>Wrap up of the meeting. Outline of follow-up actions and responsible parties.</p> <p>Thank you’s and closing the conference.</p>	Conference organisers and chairperson

Presentations will be made available on

<http://www.nstf.org.za/discussion-forum/language-in-education-of-stem/>

Remember to tweet #LangInEd @NSTF_SA

Thank You!