



**International and African Mathematical Union
Commission
on the
History of Mathematics in Africa
(AMUCHMA)**

AMUCHMA-NEWSLETTER-32

Special Issue:

African doctorate holders in mathematics education

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Maputo (Mozambique), 31.10.2006

African doctorates in mathematics education

(compiled by Paulus Gerdes)

1. Presentation

The AMU Commission on Mathematics Education in Africa and the Tunisian Association of Mathematical Sciences host from November 6 to 9, 2006, in Hammamet (Tunisia) the first Pan-African Space on Mathematics (PASM). The specific theme of PASM 2006 is innovation in mathematics education.

On the occasion of the realization of PASM 2006, AMUCHMA publishes a special issue with a list of over 200 doctoral theses in historical order. The list is extracted from my book *African Doctorates in Mathematics. A Catalogue* (African Academy of Sciences Publishers, Nairobi, 2006, 214 pages). An additional number of 23 doctoral theses is included in the new list. Surely there are more doctoral theses in mathematics education, in particular, from North Africa.

Firstly, a country index is presented, followed by a catalogue of African doctoral theses in historical order. As several non-Africans wrote doctoral theses about mathematics education in Africa, a list of these is included as the final part of the document.

Any colleague who has additional information is invited to send it to me.

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2. Country Index of Doctorate holders in Mathematics Education

Algeria (2)

Abdelli MOULOUD (1985), Abderrezak BENSBAA (1994).

Benin (3)

Maurice A. VODOUNON (1994), Dafon Aimé SEGLA (2001), Adolphe Cossi ADIHOU (2003).

Botswana (5)

Paul CHAKALISA (1994), Dumma C. MAPOLELO (1995), Kgomotso Gertrude GAREGAE (2002), Sesutho Koketso KESIANYE (2002), Alakanani Alex NKHWALUME (2005).

Burkina Fasso (1)

Kalifa TRAORÉ (2006).

Cameroon (3)

Philip Wagala GWANYAMA (1990), John BABILA-NJINGUM (1995), Henry KANG (2005).

Cape Verde Islands (1)

Salazar FERRO (1983).

Central African Republic (1)

Nalimbi MADA (1986).

DR Congo [Zaire] (14)

Kambala MUYA (1979), Mukendi KANGOMBA (1980), Sharuba ENGOMBE WEDI (1982), Madiambu KASEKA (1982), Mbangu TSHINKENKE (1983), Corneille Wa

Mashinda KAZADI (1983), Kayembe MWIKA (1985), Imana KATENBERA (1986), Ngilambi tè AKONAMBI (1988), Narcisse VELU (1989), Bulayam KIALOBO (1989), Alexandre Bendeko MOPONDI (1986), Amboka BOLA (1992), Yéléko BANWITTIYA (1993).

Côte d'Ivoire (2)

Zakaria BERTÉ (1992), Patricia NEBOUT ARKHURST (1995).

Egypt (5)

William Tawadros EBEID (1964), Maassouma Mohamed KAZIM (1964), Mohamed Mahmoud MOUSTAFA (1979), Nady Kamal AZIZ (1986), Reda Mosad El-Said ASAR (1988).

Ethiopia (2)

Wolde-Aregai WOUBNEH (1990), Tekle AYANO (1993).

Gabon (1)

Robert ANGOUÉ NDOUTOUUME (1997).

Ghana (5)

Innocent G. AKAR (1984), Nicholas Kumih OPPONG (1992), Kofi Damian MEREKU (1995), Jonathan Arko FLETCHER (1997), Kwame Elli GLEVY (2003).

Guinea Conakry 81

Mohamed Lamine TOURÉ (2004).

Kenya (10)

George Sammy ESHIWANI (1975), Jack Green OKECH (1978), Henry Amadalo MULINDI (1979), John Nyamai MAUNDU (1986), Alego OTIENO (1987), Gerald N. KIMANI (1991), Ellam Khalagai WANJALA (1996), Simon Meru RUKANGU (2000), Penina Adhiambo Ogolla KAMINA (2005), Henry Kerre WAKHUNGU (2005).

Lesotho (5)

James Kopane TAOLE (1981), 'Mamphono KHAKETLA (1991), Nomusic MOROBE (2000), Mokaeane Victor POLAKI (2000), Thabiso NYABANYABA (2002).

Madagascar (5)

Harisson RATSIMBA-RAJOHN (1981), Farasololalao RAKOTOVOAVY (1983), Irène RAVOLOMANANA RASOLOFONIAINA (1983), Landy RAMANO HISOA RAJONSON (1988), André TOTOHASINA (1992).

Malawi (6)

Duncan M. C. NYIRENDI (1994), Willy MWAKAPENDA (2000), Elias S. KAPHESI (2001), Catherine Panji CHAMDIMBA (2002), Mercy KAZIMA (2002), William John SUSUWELE-BANDA (2005).

Mali (4)

Fatoumata Camara DIALLO (1979), Saddo Ag ALMOULOUD (1992), Sidi Bekaye SOKONA (1993), Mamadou Souleymane SANGARÉ (2000).

Morocco (10)

Habiba EL BOUAZZAOUI (1982), Said SENNARIA (1983), Benyounes BEMMOUNA (1987), Ahmed LAKRAMTI (1987), Abderrahim MIKOU (1989), Moncef ZAKI (1989), Mohammed BAHRA (1995), Hamid CHAACHOUA (1997), Omar ROUAN (2001), Latifa SEGHIR (2002).

Mozambique (8)

Marcos CHERINDA (2002), Sarifa Abdul FAGILDE (nee MAGIDE) (2002), Abdulcarimo ISMAEL (2002), Bhangy CASSY (2003), John Manuel FRANCISCO (2004), Marcelino Caetano LUÍS (2004), Evaristo Domingos UAILA (2004), Jan DRAISMA (2006).

Niger (2)

Moumouni Kane AÏSSATA (1983), Ousman RABIOU (1996).

Nigeria (28)

Grace Awani ALELE-WILLIAMS (1963), Elizabeth Eme Samson ETUK (1967), Romanus Ogbonnaya OHUCHE (1968), Sunday Adebawale AJOSE (1974), Peter Ntasiri LASSA (1975), Bukunola Mabogunje OSIBODU (1975), Abdulsalam Abubakar SAMBO (1980), Ogbeche Pius UKPELE (1984), Lawal O. ADETULA (1985), Macson Joshua AHIAKWO (1988), Longy O. ANYANWU (1989), Patrick Mathias Chukwuaku OGOMAKA (1989), Godwin Chijioke OBODO (1990), Uche N. V. AGWAGAH (1993), Mamman MUSA (1993), Umaru Alhaji SALEH (1994), Nkechi Madonna Adeleine AGWU (1995), Caleb BOLAJI (1995), Yahaya Kajuru KORAU (1995), Onwuegbu I. INEKWE (1996), Festus Onyeama ANAKWUE (1997), Alphonsus Fawap YAKUBU (1997), S. O. SANI (1998), Isa Abubakar OCHEPA (2000), Ayokunle Oladipo AWOSANYA (2001), Ada Felicitas MUONEKE (2001), Clara Idowu NOSEGBE (2001), I. Olorunfemi OSAFEHINTI.

Sierra Leone (3)

Bampia A. BANGURA (1978), Alex BOCKARIE (1980), Joscelyn Ayodele JARRETT (1980).

South Africa (49)

Noah O. H. SETIDISHO (1965), H. J. DREYER (1973), D. ROOS (1976), Piet G. HUMAN (1978), Norma C. PRESMEG (1985), Cyril JULIE (1987), Christiaan Kuhn VAN WYK (1988), John David VOLMINK (1988), Makhunga Wintshi NJOBE (1989), Gerhardus P. J. PRETORIUS (1989), Michael David DE VILLIERS (1990), D. J. KRIEL (1990), Nicholas Christopher TAYLOR (1990), Stuart Donald WALLACE (1990), B. J. J. LOMBARD (1992), Mmori Benjamin MOKHABA (1993), Vimolan MUDALY (1994), Jillian Beryl ADLER (nee Smidt) (1996), Jacobus Gideon MAREE (1997), Hester Margaretha VAN NIEKERK (1997), C. BUYS (1998), Herculus David NIEUWOUDT (1998), Hermien ZAAIMAN (1998), R. VAN DER WATT (1999), Herbert Bhekumusa KHUZWAYO (2000), Reginald Cassius LUBISI (2000), Elsa MENTZ (2000), Renuka VITHAL (2000), Meria HOCKMAN (2001), Mogege David MOSIMEGE (2001), Mathume Enoka BOPAPE (2002), Mellony GRAVEN (2002), Sarah HOWIE (2002), David MOGARI (2002), Mamokgethi SETATI (2002), Margot BERGER (2003), Larry KANNEMEYER (2003), Osmond Monde MBEKWA (2003), John-Baptiste NAKIN (2003), Susanna Maria NIEUWOUDT (2003), Marc SCHAFER (2003), Tjaart M. STEYN (2003), Gert Hendrik STOLS (2003), Suriza VAN DER SANDT (2003), Leilani GOOSEN (2004), Paul F. MESSINA (2004), Manikam MOODLEY (2004), Karin Michelle BRODIE (2005), Darlene M. SWANSON (2005).

Sudan (1)

Ahmed Shams El Din EL SHEIKH (1984)

Swaziland (1)

J. Thuli NHLENGETFWA (1993).

Tanzania (6)

Geofrey R. V. MMARI (1974), Luckson Muganyizi KAINO (1994), Joyce Lazaro NDALICHAKO (1997), Paul S. D. MUSHI (1999), Joyce R. MGOMBELO (2002), Septimi KITTA (2004).

Tunisia (9)

Souad REDJEB (1977), Noureddine SASSI (1993), Hanène HATTAB ABROUGUI (1998), Mondher TANGOUR (1999), Essahbi EL AMRI (2001), Mohamed Habib MARSIT (2001), Faïza CHELLOUGUI (2004), Imed BEN KILANI (2005), Najoua HAJALI (2005).

Uganda (3)

Barnabas OTAALA (1971), Immaculate Kizito NAMUKASA (2004), Charles OPOLOT-OKURUT (2004).

Zimbabwe (3)

Elizabeth HENDRIKZ (1973), Stanley H. ERLWANGER (1974), David Kufakwami Jani MTETWA (1991).

3. African doctorates in mathematics education in chronological order

Grace Awani ALELE-WILLIAMS (Female) [Nigeria]

1963 (Ph.D.) *Dynamics of Education in the Birth of a New Nation: Case Study of Nigeria*, University of Chicago (USA).

William Tawadros EBEID (Male) [Egypt]

1964 (Ph.D.) *An experimental study of the scheduled classroom use of student self-selected materials in teaching junior high school mathematics*, University of Michigan (USA).

Maassouma Mohamed KAZIM (Female) [Egypt]

1964 (Ph.D.) *Basic assumptions for a secondary school mathematics program*, University of Kansas (USA).

Noah O. H. SETIDISHO (Male) [South Africa]

1965 (D.Ed.) *An empirical study of mathematical ability in schoolchildren*, University of South Africa (Pretoria, South Africa).

Elizabeth ETUK (Female) [Nigeria]

1967 (Ph.D.) *The development of number concepts, an examination of Piaget's theory with Yoruba Nigerian children*, Columbia University (New York, USA).

Romanus Ogbonnaya OHUCHE (1934-2006) (Male) [Nigeria]

1968 (Ph.D.) *Scholastic factors pertaining to the academic achievement of Nigerian students in the United States*, Iowa State University (Ames, USA); Advisor: Littrell.

Barnabas OTAALA [Uganda]

1971 (D.Ed.) *The development of operational thinking in primary school children: an examination of some aspects of Piaget's theory among the Iteso children in Uganda*, Columbia University (New York, USA).

H. J. DREYER [South Africa]

1973 (D.Ed.) *'n Onderzoek na die vorming van getalkonsepte by die kind: 'n Tussen-kulturele studie* [An investigation of the forming of number concepts by children: an intercultural study], University of South Africa (Pretoria, South Africa).

Elizabeth HENDRIKZ (d. 2005) (Female) [Zimbabwe]

1973 (Ph.D.) *A study of the scientific and mathematical concepts and levels of scientific thinking available to selected adolescent academic secondary school pupils and the factors influencing their development*, University of London (UK).

Sunday AJOSE (Male) [Nigeria]

1974 (Ph.D.) *A Study of the Comprehensiveness of Bloom's Taxonomy in the Domain of School Mathematics*, University of South Carolina (USA).

Stanley H. ERLWANGER (1934-2003) (Male) [Zimbabwe]

1974 (Ph.D.) *Case Studies of Children's Conceptions of Mathematics*, University of Illinois (Urbana IL, USA); Advisor: Robert B. Davis.

Geofrey R. V. MMARI (Male) [Tanzania]

1974 (Ph.D.) *A study of the understanding of mathematical ideas and concepts among Tanzania secondary school pupils*, University of Dar es Salaam (Tanzania); Advisors: J. Edward Phythian & David Cappitt.

George Sammy ESHIWANI (Male) [Kenya]

1975 (Ph.D.) *The Effectiveness of Programmed Instruction, Conventional Classroom Approach, and Integrated Programmed Instruction in the Teaching of Probability to High School Students in Kenya*, Stanford University (USA).

Peter Ntasiri LASSA (Male) [Nigeria]

1975 (Ph.D.) *A study of the mathematics programs for elementary school teachers in Nigeria*, University of Wisconsin (Madison, USA).

Bukunola Mabogunje OSIBODU (Female) [Nigeria]

1975 (Ph.D.) *The development of a model program for in-service mathematics education of primary school teachers in Western State, Nigeria*, Michigan State University (USA).

D. ROOS [South Africa]

1976 *Die verbetering van vormpersepsie by die Swartskoolbeginner* [The improvement of the perception of form by black school starters], Potchefstroomse Universiteit (South Africa).

Souad REDJEB (Female) [Tunisia]

1977 (Doctorat 3eme cycle) *Le developpement des structures logico-mathématiques élémentaires chez des enfants tunisiens de milieux sociaux différents*, Université de Bordeaux 2 (France); Advisor. de Jacques Wittwer.

Bampia A. BANGURA (Male) [Sierra Leone]

1978 (Ed.D.) *An evaluation of the mathematics phase of the academic skills enhancement program at Louisiana State University*, Louisiana State University (USA).

Jack Green OKECH (Male) [Kenya]

1978 (D.Ed.) *A comparative analysis of mathematical knowledge and mathematical attitude between urban Suburban elementary school teachers*, Texas Southern University (TX, USA).

Fatoumata Camara DIALLO (Female) [Mali]

1979 (Doctorat 3eme cycle) *Recherche des conditions de possibilite d'une didactique mathematique au Mali*, Universite de Bordeaux 2 (France); Advisor: Jacques Wittwer.

Mohamed Mahmoud MOUSTAFA (Male) [Egypt]

1979 (Ph.D.) *A study of the level of understanding of the number system by prospective Egyptian elementary school teachers and the level of understanding of arithmetic by Egyptian pupils in elementary school*, New York University (USA).

Henry Amadalo MULINDI (Male) [Kenya]

1979 (D.Ed.) *Guidelines for pure and applied modern mathematics curriculum development for secondary schools in Kenya*, Columbia University (New York, USA).

Kambala MUYA [DR of Congo]

1979 (Doctorat 3ème cycle) *Enseignement des rudiments sur les ensembles et les relations dans le cycle d'observation*, Université de Paris 7 (France).

Alex BOCKARIE (Male) [Sierra Leone]

1980 (Ph.D.) *The Effectiveness of a Unit in Teaching and Learning Of Growth Relations in the Sixth and Seventh Grades*, Michigan State University (East Lansing MI, USA).

Joscelyn Ayodele JARRETT (Male) [Sierra Leone]

1980 (Ph.D.) *A Study of the Differential Effects of Three Levels of Instruction in Estimation on Fifth and Sixth Grade Pupils*, University of Iowa (Iowa City IA, USA)

Mukendi KANGOMBA [DR of Congo]

1980 (Doctorat 3ème cycle) *Sur quelques problèmes posés par l'enseignement des nombres décimaux*, Université de Paris 7 (France).

Abdulsalam Abubakar SAMBO (Male) [Nigeria]

1980 (Ph.D.) *Measurement concepts in fractional number learning*, University of Alberta (Edmonton, Alberta, Canada); Advisor: T. E. Kreren.

Harisson RATSIMBA-RAJOHN (Male) [Madagascar]

1981 (Doctorat 3ème cycle) *Etude de deux méthodes de mesures rationnelles: la commensuration et le fractionnement de l'unité, en vue d'élaboration de situations didactiques*, Université Bordeaux 1 (Bordeaux, France); Advisor: Guy Brousseau.

1992 (Doctorat d'Université) *Contribution à l'étude de hiérarchie implicative. Application à l'analyse de la gestion didactique des phénomènes d'ostension et de contradictions* [Contribution to the study of implicative hierarchy. Application to the analysis of didactic management of the phenomena of exposition and of contradiction], Université Rennes 1 (Rennes, France); Advisors: Régis Gras & Guy Brousseau.

James Kopane TAOLE (Male) [Lesotho]

1981 (Ed.D.) *A study of effect on pupils' achievement of studying a selected secondary school mathematics topic in the vernacular*, Columbia University (New York, USA).

Habiba EL BOUAZZAOUI (Female) [Morocco]

1982 (Doctorat 3ème cycle) *Etude de situations scolaires des premiers enseignements du nombre et de la numération. Relations entre divers caractères de ses situations et le sens, la compréhension de l'apprentissage de ces notions* [Study of school situations of the first teaching of number and numeration. Relationships between diverse characters of these situations and the meaning, the understanding of the learning of these notions], Université Bordeaux 1 (Bordeaux, France); Advisor: Guy Brousseau.

1988 (Ph.D.) *Conceptions des élèves et des professeurs a propos de la notion de continuité d'une fonction* [Pupils' and teachers' conceptions concerning the notion of continuity of a function], Université Laval (Québec, Canada); Advisors: Claude Gaulin & Guy Brousseau.

Sharuba ENGOMBE WEDI [DR of Congo]

1982 (Doctorat 3ème cycle) *Quelques remarques sur la perception de la distinction affine-métrique par des étudiants de Deug/Sciences et des enseignants du premier cycle du second degré*, Université de Paris VII (France).

Madiambu KASEKA [DR of Congo]

1982 (Ph.D.) *La résolution de problèmes mathématiques avec données chiffrées ou littérales*, Université de Montréal (Canada).

Moumouni Kane AÏSSATA (Female) [Niger]

1983 (Doctorat 3ème cycle) *Étude de quelques problèmes pédagogiques et linguistiques concernant l'enseignement des mathématiques au Niger*, Université Paris VII (France).

Salazar F. FERRO (Male) [Cape Verde Islands]

1983 (D.Ed.) *Language influence on mathematics achievement of Capeverdean students*, Boston University (USA).

Corneille Wa Mashinda KAZADI (Male) [DR of Congo]

1983 (Doctorat 3ème cycle) *Sur quelques difficultés dans l'enseignement des entiers négatifs aux élèves du 1er cycle de l'enseignement secondaire au Zaïre* [On some difficulties of the teaching of negative numbers to pupils of the first level of the secondary school in Zaire], Université de Paris 7 (Paris, France).

2005 (Ph.D.) *Exploration des pratiques de professeurs des mathématiques du secondaire à l'égard de l'évaluation formative en mathématiques*, Université du Quebec (Montréal, Canada).

Farasololalao RAKOTOVOAVY [Madagascar]

1983 (Doctorat 3ème cycle) *Difficultés linguistiques et pédagogiques soulevées par l'emploi, dans les textes mathématiques de certains adjectifs marqueurs de variance*, Université Paris VII (France).

Irène RAVOLOMANANA RASOLOFONIAINA (Female) [Madagascar]

1983 (Doctorat) *Présentation et utilisation d'informations dans un texte, les conditions d'un apprentissage mathématique par la lecture*, Université de Strasbourg (France).

Said SENNARIA [Morocco]

1983 (Doctorat 3ème cycle) *L'influence des exercices de numération en bases diverses sur l'apprentissage de l'algorithme de l'addition et de la soustraction chez les élèves de CE1 à l'école Marocaine*, Université de Toulouse 2 (France); Advisor: Louis Not.

Mbangu TSHINKENKE [DR of Congo]

1983 (Doctorat) *Évaluation formative des niveaux de maîtrise de la notion d'ordre. Évolution du concept entre 11 et 15 ans*, Université Joseph Fourier (Grenoble, France).

Innocent G. AKAR (Male) [Ghana]

1984 (Ph.D.) *The Extent of Sequence Effects on Item Difficulty and Ability Estimates in Multiple-Choice Achievement Tests*, State University of New York (Buffalo NY, USA).

Ahmed Shams El Din EL SHEIKH (Male) [Sudan]
1984 *School mathematics in Sudan*, University of Edinburgh (UK).

Ogbeche Pius UKPELE [Nigeria]
1984 (Ph.D.) *An analysis of the mathematics curriculum and achievement in mathematics of the fifth form pupils in government secondary schools of Benue State Nigeria*, Cardiff University (UK).

Lawal O. ADETULA (Male) [Nigeria]
1985 (Ph.D.) *The effect of language and schooling on the solutions of addition and subtraction word problems by Nigerian children*, University of Wisconsin (Madison, USA); Advisors: Thomas Carpenter, Thomas Romberg & Elizabeth Fenemma.

Abdelli MOULOUD [Algeria]
1985 (Doctorat 3ème cycle) *Oralisation et apprentissage arithmétique par des élèves déficients auditifs*, Université Strasbourg (France).

Kayembe MWIKA [DR of Congo]
1985 (Doctorat 3ème cycle) *Comportements d'élèves zairois face à des expressions fractionnaires (dans le 1er cycle de l'enseignement secondaire)*, Université Paris VII (France).

Norma C. PRESMEG (Female) [South Africa]
1985 (Ph.D.) *The Role of Visually Mediated Processes in High School Mathematics: A Classroom Investigation*, University of Cambridge (UK); Advisor: Alan Bishop.

Nady Kamal AZIZ [Egypt]
1986 (Ph.D.) *Integration between mathematics and physics in secondary schools: an integrated mechanics unit for Egypt*, University of London (UK).

Imana KATENBERA (Male) [DR Congo]
1986 (Doctorat 3ème cycle) *Sur la résolution des problèmes de soustraction au cours élémentaire: étude du rôle de la grandeur des nombres et des différentes représentations de la soustraction en vue de l'élaboration des situations didactiques* [On the solution of subtraction problems in primary school: study of the role of the magnitude of numbers and different representation of subtraction with a view to the elaboration of didactic situations], Université Bordeaux 1 (France); Advisor: Guy Brousseau.

Nalimbi MADA [Central African Republic]
1986 (Doctorat 3ème cycle) *Étude de la numération dans certaines langues centrafricaines et applications dans l'enseignement élémentaire* [Study of the numeration in certain Centralafrican languages and applications in primary schools], Université Paris VII (France).

John Nyamai MAUNDU (Male) [Kenya]
1986 *Student achievement in science and mathematics: a case study of extra-provincial and harambee secondary schools in Kenya*, McGill University (Montréal, Canada).

Alexandre Bendeko MOPONDI (Male) [DR Congo]

- 1986 (Doctorat 3ème cycle) *Le rôle de l'institutionnalisation dans l'algorithme de la proportionnalité* [The role of institutionalisation in the proportionality algorithm], Université de Bordeaux 1 (France); Advisor: Guy Brousseau.
- 1992 (Doctorat d'université) *Rôle de la compréhension dans l'apprentissage: notion de proportionnalité en 5ème et en 6ème au Zaïre* [Role of comprehension in learning: notion of proportionality in the 5th and 6th grades in Zaire], Université de Bordeaux 1 (France); Advisor: Guy Brousseau.

Benyounes BEMMOUNA [Morocco]

- 1987 (Ph.D.) *Étude des conduites métacognitives d'élèves marocains du secondaire en relation avec la résolution de problèmes mathématiques*, Université Laval (Quebec, Canada).

Cyril JULIE (Male) [South Africa]

- 1987 (Ph.D.) *Effects of an integrated computer and manipulative environment on preservice elementary teachers' understanding of novel mathematical concepts*, University of Illinois (Champaign-Urbana, USA).

Ahmed LAKRAMTI (Male) [Morocco]

- 1987 (Ph.D.) *Difficultés d'apprentissage en mathématiques, qui sont en relation avec différents aspects de la langue d'enseignement (l'Arabe) au Maroc*, Université Laval (Quebec, Canada).

Alego OTIENO [Kenya]

- 1987 (Ph.D.) *A study of junior secondary school pupils competence in selected processes of science*, Kenyatta University (Nairobi, Kenya).

Ngilambi tè AKONAMBI [DR Congo]

- 1988 (Doctorat 3^{ème} cycle) *Opérativité sémantique, schématique et algorithmique dans l'apprentissage de la notion d'application et de bijection: étude des relations avec la réussite ou l'échec chez les élèves zaïrois, 13-15 ans*, Université de Bordeaux 2 (France).

Reda Mosad El-Said ASAR [Egypt]

- 1988 (Ph.D.) *A critical appraisal of mathematics education research carried out in Egypt, with special reference to techniques of research methodology and statistical analysis*, University of Cardiff (UK).

Christiaan Kuhn VAN WYK (Male) [South Africa]

- 1988 (Ph.D.) *Die voorspelling van derdevlak-wiskundeprestasie aan 'n universiteit* [The prediction of third level mathematics achievement at a university], Potchefstroomse Universiteit (South Africa).

John David VOLMINK (Male) [South Africa]

- 1988 (Ph.D.) *Acquisition of Concepts and Constructions of Meaning in Geometry*, Cornell University (Ithaca NY, USA); Advisor: David Henderson.

Longy O. ANYANWU [Nigeria]

- 1989 (Ed.D.) *A Study of Selected Predictors of Achievement in the Computer Science Programs in the Nigerian University*, Morgan State University (Baltimore, USA); Advisor: Paul D. McElroy.

Bulayam KIALOBO [DR of Congo]

1989 (Doctorat) *L'analyse des résultats en mathématiques à l'examen d'État du Zaïre en 1978, section scientifique* [Analysis of the mathematics results in the state exam in Zaire in 1978, scientific section], Université de Paris 7 (France).

Abderrahim MIKOU [Morocco]

1989 (Ph.D.) *Historique de la formation des enseignants de mathématiques dans les Centres Pedagogiques Regionaux (C.P.R.) au Maroc de 1970 à 1982*, Université de Montréal (Canada).

Makhunga Wintshi NJOBE (Male) [South Africa]

1989 (Ph.D.) *Effects of method of instruction, ability and sex, with covariates previous mathematics learning, motivation, home socio-economic status, and attitude on mathematics achievement of Zambian students in two secondary schools*, University of Zambia (Lusaka, Zambia).

Patrick Mathias Chukwuaku OGOMAKA (Male) [Nigeria]

1989 (Ph.D.) *Projects in Junior Secondary School Mathematics: Implications for Teaching, Learning and Continuous Assessment*, University of Nigeria (Nsukka, Nigeria).

G. P. J. PRETORIUS [South Africa]

1989 (Ph.D.) *Die verband tussen affektiewe stabiliteit en effektiwe wiskunde-onderrig en leer in die sekondêre skool* [The relationship between affective stability and effective mathematics teaching and learning in the secondary school], University of Pretoria (South Africa).

Narcisse VELU (Male) [DR Congo]

1989 (Doctorat 3ème cycle) *Conditions d'apparition et de disparition d'un concept mathématique dans les programmes: la relation d'équivalence* [Conditions for the appearance and disappearance of a mathematical concept in the programme: the equivalence relationship], Université Bordeaux 1 (France); Advisor: Guy Brousseau.

Moncef ZAKI [Morocco]

1989 (Doctorat 3ème cycle) *Traitements de problèmes de probabilités en situation de simulation*, Université Strasbourg (France).

Philip Wagala GWANYAMA (Male) [Cameroon]

1990 (Ph.D.) *A Model of Human Mathematics Problem-Resolution in Analysis*, University of Wisconsin (Madison, USA); Advisor: John Harvey, III

D. J. KRIEL [South Africa]

1990 (D.Ed.) *Die verskillende fasette van wiskunde as determinant vir kurrikulumontwerp* [The different facets of mathematics as determinant for curriculum design], University of Port Elisabeth (South Africa).

Godwin Chijioke OBODO (Male) [Nigeria]

1990 (Ph.D.) *Differential effect of three teaching approaches in some algebraic concepts in secondary schools*, University of Nigeria (Nsukka, Nigeria); Advisor: Violet Fine Harbor-Peters.

Nicholas Christopher TAYLOR (Male) [South Africa]

1990 (Ph.D.) *Making sense of children making sense: Imagery, educational television and mathematical knowledge*, University of the Witwatersrand (Johannesburg, South Africa).

Michael David DE VILLIERS (Male) [South Africa]

1990 (D.Ed.) *Leerlinge se betekenisgewing aan bewysvoering en verwante wiskundige prosesse* [Students' construction of meaning for proof and related mathematical processes], University of Stellenbosch (South Africa); Advisor: Piet Human

Stuart Donald WALLACE (Male) [South Africa]

1990 (Ph.D.) *The development of a multilevel problem-solving programme in mathematics for the primary school*, University of Natal (Pietermaritzburg, South Africa); Advisors: Robert Muir & Norma Presmeg.

Wolde-Aregai WOUBNEH [Ethiopia]

1990 Ed.D.) *The Effect of Test Format and Arrangement of Topics-Of-Study in Calculus Achievement Tests under Partial Credit and Right/Wrong Scoring*, Rutgers University (New Brunswick, NJ, USA); Advisor: Jeffrey K. Smith.

'Mamphono KHAKETLA (Female) [Lesotho]

1991 (Ph.D.) *An Analysis of the Lesotho Junior Certificate Mathematics Examination and its Impact on Instruction (Mathematics Examination)*, University of Wisconsin (Madison WI, USA); Advisor: Thomas A. Romberg.

Gerald N. KIMANI (Male) [Kenya]

1991 (Ph.D.) *A study of factors influencing achievement in mathematics among primary school in-service student teachers in Kenya*, Kenyatta University (Nairobi, Kenya).

David Kufakwami Jani MTETWA (Male) [Zimbabwe]

1991 (Ph.D.) *An investigation of Zimbabwean secondary school students' mathematical beliefs and classroom contexts*, University of Virginia, (Charlottesville, Virginia, USA); Advisor: Joseph Garofalo.

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1992 (Doctorat d'université) *L'ordinateur, outil d'aide à la démonstration et au traitement de données didactiques*, Université Rennes I (France).

Zakaria BERTÉ (Male) [Côte d'Ivoire]

1992 (Ph.D.) *L'apprentissage de contenus logico-mathématiques opératoires formels chez des élèves du secondaire de Côte d'Ivoire*, Université de Montréal (Canada).

Amboka BOLA (Male) [DR of Congo]

1992 (Doctorat d'université) *Le sens dans le contrat didactique; institutionnalisation d'un algorithme: application à la soustraction* [Meaning in a didactic contract; institutionalisation of an algorithm: application to subtraction], Université Bordeaux 1 (France); Advisor: Guy Brousseau.

B. J. J. LOMBARD [South Africa]

1992 (D.Ed.) *Modellering in die opleiding van onderwysstudente aan die Universiteit Vista* [Modelling in the training of teachers at the Vista University], Randse Afrikaanse Universiteit (Johannesburg, South Africa).

Nicholas Kumih OPPONG (Male) [Ghana]

1992 (Ph.D.) *Mathematics Generalizations Made by High School Students in Mathematics Problem Solving Sessions*, University of Georgia (Athens GA, USA); Advisor: Jim Wilson.

André TOTOHASINA (Male) [Madagascar]

1992 (Doctorat d'université) *Méthode implicative en analyse de données et application à l'analyse de conceptions d'étudiants sur la notion de probabilité conditionnelle*, Université Rennes I (France).

Uche N. V. AGWAGAH (Female) [Nigeria]

1993 (Ph.D.) *Instruction in mathematics reading as a factor in students' achievement and interest in word problem solving*, University of Nigeria (Nsukka, Nigeria).

Tekle AYANO [Ethiopia]

1993 (Ph.D.) *Effects of training on teachers' acquisition of complex teaching strategies and student achievement: evaluation of grade 10 mathematics teaching in Addis Ababa*, University of Toronto (Canada); Advisor: M. W. Wahlstrom.

Yéléko BANWITTIYA (Male) [DR of Congo]

1993 (Doctorat d'université) *L'ingénierie du sens en mathématiques: la division dans N, Q et D à l'école primaire* [Construction of meaning in mathematics: Division in N, Q and D in primary school], Université Bordeaux 1 (France); Advisor: Guy Brousseau.

Mmori Benjamin MOKHABA (Male) [South Africa]

1993 (D.Ed.) *The application of the activity principle in mathematics teaching: a strategy for teacher training*, University of South Africa (Pretoria); Advisor: D. Wessels & M. Dreckmeyr.

2005 (Ph.D.) *Outcomes-based education in South Africa since 1994: Policy objectives and implementation complexities*, University of Pretoria (South Africa).

Mamman MUSA [Nigeria]

1993 (Ph.D.) *A 3 - Level screening procedures for the identification of mathematically gifted children in four selected states in Nigeria*, Ahmadu Bello University (Zaria, Nigeria); Advisors: Lawal Adetula & Idris V. Jahun.

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1993 (Ph.D.) *The impact of mathematics/science inservice teacher education programs on the Manzini region (Swaziland) elementary schools*, Ohio University (USA).

Noureddine SASSI (Male) [Tunisia]

1993 (Doctorat d'état) *Représentation de l'autre et de soi par rapport à la langue maternelle et aux mathématiques dans le premier cycle de l'enseignement secondaire tunisien* [Representation of the other and of the self in relationship to the mother tongue and mathematics in the first level of the Tunisian secondary school], Université de Nantes (Nantes, France).

Sidi Bekaye SOKONA [Mali]

1993 (Doctorat) *À propos de la proportionnalité: avatars d'une situation didactique dans sa transmission à un enseignant et son insertion dans un curriculum existant*, Université Joseph Fourier (Grenoble, France).

Paul CHAKALISA (Male) [Botswana]

1994 (Ph.D.) *Relationships of student gender, teacher experience and setting to students achievement and attitudes toward mathematics in Botswana junior secondary schools*, Ohio University (Athens, Ohio, USA.); Advisor: Bonnie Beach.

Luckson Muganyizi KAINO (Male) [Tanzania]

1994 (Dr.rer.nat.) *Curriculum and Modelling in numerical analysis at high school and undergraduate levels with reference to Tanzania*, University of Salzburg (Austria); Advisor: Karl Parisot.

Vimolan MUDALY (Male) [South Africa]

1994 (Ph.D.) *The Role and Use of Sketchpad as a Modeling Tool in Secondary School*, University of KwaZulu-Natal (Westville, South Africa); Advisor: Michael de Villiers.

Duncan M.C. NYIRENDZA (Male) [Malawi]

1994 (Ph.D.) *An evaluation of the implementation of national curriculum changes in science and mathematics in Malawi with reference to parallel changes in England and Wales*, University of Nottingham (UK).

Umaru Alhaji SALEH [Nigeria]

1994 (Ph.D.) *Motivational Orientation and Understanding of Limits And Continuity of First Year Calculus Students (Motivation)*, The University of Oklahoma (Norman OK, USA); Advisor: Jayne M. Fleener.

Maurice A. VODOUNON (Male) [Benin]

1994 (D.Ed.) *The Use of Computer Software and Cooperative Learning in Algebra*, Columbia University (New York, USA); Advisor: Bruce Vogeli.

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1995 (Ph.D.) *Using a Computer Laboratory Setting to Teach College Calculus*, Syracuse University (NY, USA); Advisor: Howard Johnson.

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1995 (Ph.D.) *Perceptions of first-cycle secondary school mathematics in Anglophone Cameroon and the potential for change*, University of Reading (UK).

Mohammed BAHRA (Male) [Morocco]

1995 (Doctorat d'Université). *Problèmes de didactique de la numération; échecs et succès de la re-mathématisation* [Problems of the didactics of numeration; failures and successes of re-mathematisation], Université Bordeaux 1 (France); Advisor: Guy Brousseau.

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1995 (Ph.D.) *The effect of three instructional strategies on students mathematics problem solving behaviour*, Ahmadu Bello University (Zaria, Nigeria); Advisors: Lawal O. Adetula & Idris V. Jahun.

Yahaya Kajuru KORAU [Nigeria]

1995 (Ph.D.) *Assessment of the effective of the Teachers' guide on the teaching of geometry in the junior secondary school*, Ahmadu Bello University (Zaria, Nigeria); Advisors: Lawal Adetula & Idris Jahun.

- Dumma C. MAPOLELO (Male) [Botswana]
 1995 (Ph.D.) *Botswana Preservice Primary Teachers' Beliefs About and Attitudes Towards Mathematics*, University of Georgia (Athens GA, USA); Advisor: Jim Wilson.
- Kofi Damian MEREKU (Male) [Ghana]
 1995 (Ph.D.) *A comparison of the official primary mathematics curriculum in Ghana with the way in which it is implemented by teachers*, University of Leeds (UK).
- Patricia NEBOUT ARKHURST (Female) [Côte d'Ivoire]
 1995 (Doctorat) *La signification contextuelle dans les processus de transposition didactique: l'exemple de l'enseignement de la géométrie au niveau du collège en Côte d'Ivoire*, Université de Paris 5 (France).
- Jillian Beryl ADLER (nee Smidt) (Female) [South Africa]
 1996 (Ph.D.) *Secondary School Teachers' Knowledge of the Dynamics of Teaching and Learning mathematics in Multilingual Classrooms*, University of the Witwatersrand (Johannesburg, South Africa).
- Onwuegbu I. INEKWE [Nigeria]
 1996 (Ph.D.) *The effect of cognitive and affective factors on performance on geometry problems*, Ahmadu Bello University (Zaria, Nigeria); Advisors: Lawal Adetula & Idris V. Jahun.
- Ousman RABIOU (Male) [Niger]
 1996 (Doctorat unique) *Contribution à l'enseignement de l'algèbre linéaire en première année d'Université*, Université de Rennes 1 (France); Advisor: Giorgintti Italo.
- Ellam Khalagai WANJALA [Kenya]
 1996 (Ph.D.) *Secondary school pupils errors in algebra and teacher strategies in identifying and counteracting the errors*, University of Leeds (UK).
- Festus Onyeama ANAKWUE (Male) [Nigeria]
 1997 (Ph.D.) *A study of training programmes for mathematics teachers in Nigeria*, University of London (UK).
- Robert ANGOUÉ NDOUTOUME (Male) [Gabon]
 1997 (Doctorat) *Genèse du nombre et conservation numérique chez l'enfant Fang du Nord-Gabon* [Genesis of number and number conservation among the Fang children of north Gabon], Université de Montpellier 3 (France); Advisor: Henri Lehalle.
- Hamid CHAACHOUA [Morocco]
 1997 (Doctorat) *Fonctions du dessin dans l'enseignement de la géométrie dans l'espace. Etude d'un cas : la vie des problèmes de construction et rapports des enseignants à ces problèmes*, Université Joseph Fourier (Grenoble, France); Advisor: Colette Laborde.
- Jonathan Arko FLETCHER (Male) [Ghana]
 1997 (Ph.D.) *A study of the appraisal of mathematics teachers in Ghana*, University of London (UK).

Jacobus Gideon MAREE (Male) [South Africa]

1997 (Ph.D.) *The development and evaluation of a study questionnaire in mathematics*, University of Pretoria (South Africa).

Joyce Lazaro NDALICHAKO (Female) [Tanzania]

1997 (Ph.D.) *Comparison of number right item response and finite state approaches to scoring multiple choice items*, University of Alberta (Edmonton, Canada).

Hester Margaretha VAN NIEKERK (Female) [South Africa]

1997 (Ph.D.) *A subject didactical analysis of the development of the spatial knowledge of young children through a problem-centred approach to mathematics teaching and learning*, Potchefstroom Universiteit (South Africa); Advisors: Herculus D. Nieuwoudt & Dirk C.J. Wessels.

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1997 (Ph.D.) *An investigation of the effectiveness of mathematics teaching to students with visual impairment in Nigeria: attitudes, beliefs, and resources*, University of Birmingham (UK).

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1998 (D.Ed.) *Koöperatiewe leer in wiskunde-onderrig vir oriënteringstudente aan 'n tegniese kologie* [Co-operative teaching in mathematics education for orienting students at a technical college], Randse Afrikaanse Universiteit (Johannesburg, South Africa).

Hanène HATTAB ABROUGUI (Female) [Tunisia]

1998 (Doctorat 3ème cycle) *La démonstration en géométrie dans l'enseignement secondaire tunisien: exigences d'enseignants et difficultés d'élèves de 4ème relativement à un problème de démonstration* [Proof in geometry in the Tunisian secondary school: teachers' demands and 4th grade pupils difficulties concerning a type of proof], Université de Grenoble 1 (France); Advisor: Colette Laborde.

Herculus David NIEUWOUDT (Male) [South Africa]

1998 (Ph.D.) *Beskouings oor onderrig: implikasies vir die didaktiese skoling van wiskundeonderwysers* [Views on teaching: implications for the didactic training of mathematics teachers], Potchefstroomse Universiteit (South Africa); Advisors: Izak N. Steyn & Christiaan K. van Wyk.

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1998 (Ph.D.) *Effect of continuous Assessment Instrument on Students performance in Statistics*, Abubakar Tafawa Balewa University (Bauchi, Nigeria); Advisors: Sam O. Ale & R. D. Olarinoye.

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1998 (Ph.D.) *Selecting students for mathematics and science: the challenge facing higher education in South Africa*, Vrije Universiteit (Amsterdam, Netherlands).

Paul S. D. MUSHI (Male) [Tanzania]

1999 (Ph.D.) *Training engineers in Tanzania: the relationship between formal industry and the Faculty of Engineering at the University of Dar es Salaam*, The Centre for Studies in Science and Mathematics Education, University of Leeds (UK); Advisor: Jim Donnelly.

Mondher TANGOUR (Male) [Tunisia]

1999 (Doctorat 3ème cycle) *Analyse des acquisitions des élèves en mathématiques et en sciences en première année de collège tunisien* [Analysis of the acquisitions in mathematics and science by the pupils of the first year of the Tunisian high school], Université de Bourgogne (France); Advisor: Jean-Pierre Jarousse.

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1999 (D.Ed.) *Evaluering en assessering in wiskunde-onderrig* [Evaluation and assessment in mathematics education], Randse Afrikaanse Universiteit (Johannesburg, South Africa).

Herbert Bhekumusa KHUZWAYO (Male) [South Africa]

2000 (Ph.D.) *Selected views and critical perspectives: An account of mathematics education in South Africa from 1948 to 1994*, Aalborg University (Denmark); Advisor: Ole Skovsmose.

Reginald Cassius LUBISI (Male) [South Africa]

2000 (Ph.D.) *An investigation into mathematics teachers' perceptions and practices of classroom assessment in South African lower secondary schools*, University of Nottingham (UK).

Elsa MENTZ (Female) [South Africa]

2000 (Ph.D.) *Rekenaartegnologie-opleiding vir onderwysers: 'n uitkomsgebaseerde beandering* [Computer technology training for teachers: an outcomes-based approach] Potchefstroom Universiteit (South Africa); Advisors: Jan J. A. Smit, Emmanuel J. Spamer, Herculus D. Nieuwoudt & Tjaart Steyn.

Nomusic MOROBE (Female) [Lesotho]

2000 (Ph.D.) *Lesotho pre-service teachers' understanding of function and the effect of instruction with a graphing calculator on pre-service teachers' understanding of function*, University of Iowa (USA); Advisor: Rose Mary Zbiek.

Willy MWAKAPENDA (Male) [Malawi]

2000 (Ph.D.) *On using everyday experiences in teaching secondary mathematics in Malawi: Possibilities and constraints for change*, Deakin University (Melbourne, Australia); Advisors: Susie Groves & Elizabeth Buckingham.

Isa Abubakar OCHEPA (Male) [Nigeria]

2000 (Ph.D.) *Effect of Practical Mathematics on Students Achievement in Mathematics*, Abubakar Tafawa Balewa University (Bauchi, Nigeria); Advisors: Sam O. Ale & R. D. Olarinoye.

Mokaeane Victor POLAKI (Male) [Lesotho]

2000 (Ph.D.) *Using instruction to trace the development of Basotho elementary students' growth in probabilistic thinking*, Illinois State University (Normal, Illinois, USA); Advisor: Graham A. Jones.

Mamadou Souleymane SANGARÉ (Male) [Mali]

2000 (Doctorat d'université) *La Rotation – Approche Cognitive et Didactique: Une Étude de Cas au Mali*, Institut Supérieur de Formation et de Recherche Appliquée (I.S.F.R.A.) Université de Bamako (Mali); Advisors: Gaoussou Traoré & Nicolas Balacheff (France).

Simon Meru RUKANGU (Male) [Kenya]

2000 (Ph.D.) *Pupils' development of spatial ability in mathematics: an issue of learning environment in selected secondary schools*, Kenyatta University (Nairobi, Kenya).

Renuka VITHAL (Female) [South Africa]

2000 (Ph.D.) *In Search of a Pedagogy of Conflict and Dialogue for Mathematics Education*, Aalborg University (Denmark); Advisor: Ole Skovmose.

Essahbi EL AMRI (Male) [Tunisia]

2001 (Doctorat 3ème cycle) *Implicite et évidence dans l'enseignement et l'apprentissage de la démonstration en géométrie euclidienne plane au collège* [Implicit and evidence in the teaching and learning of the proof in Euclidian plane geometry in high school], Université Claude Bernard - Lyon I (France); Advisor: Claude Tisseron.

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2001 (Ph.D.) *Using History in the Teaching of Mathematics*, Florida State University (USA); Advisor: Elizabeth Jakubowski.

Meria HOCKMAN (Female) [South Africa]

2001 (Ph.D.) *The development of levels of awareness of senior mathematics students through direct engagement with the mathematical subject and pedagogical matter*, University of the Witwatersrand (Johannesburg, South Africa); Advisor: Paul Laridon.

Abdulcarimo ISMAEL (Male) [Mozambique]

2001 (Ph.D.) *An ethnomathematical study of Tchadji – about a Mancala type board game played in Mozambique and possibilities for its use in Mathematics Education*, University of the Witwatersrand (Johannesburg, South Africa); Advisors: Paul Laridon (South Africa) & Paulus Gerdes (Mozambique).

Elias S. KAPHESI (Male) [Malawi]

2001 (Ph.D.) *The use of language in mathematics teaching in primary schools in Malawi: bringing language to the surface as an explicit feature in the teaching of mathematics*, University of Nottingham (UK).

Mohamed Habib MARSIT (Male) [Tunisia]

2001 (Doctorat d'état) *Approche psychocognitive diagnostique des difficultés d'apprentissage des mathématiques* [Diagnostic psycho-cognitive approach to learning difficulties in mathematics], Université de Tunis (Tunisia); Advisor: Noureddine Sassi.

Mogege David MOSIMEGE (Male) [South Africa]

2001 (Ph.D.) *The potential of the use of cultural specific games in school mathematics*, University of the Western Cape (Bellville, South Africa); Advisor: Cyril Julie.

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2001 (Ph.D.) *The Effects of a Question and Action Strategy on the Mathematical Word Problem-Solving Skills of Students with Learning Problems in Mathematics*, University of Texas (Austin TX, USA); Advisor: Diane Bryant.

Clara Idowu NOSEGBE (Female) [Nigeria]

2001 (Ph.D.) *Middle school students' sense-making of their solutions to mathematical word problems*, Indiana University (USA); Advisor: Frank K. Lester Jr.

Omar ROUAN (Male) [Morocco]

2001 (Doctorat) *Lecture et Interprétation des représentations graphiques des données statistiques chez les élèves et les enseignants du secondaire* [Secondary school students and teachers' reading and interpretation of statistical data graphical representations], Université Mohamed V (Rabat, Morocco); Advisor: Driss Lamrabet.

Dafon Aimé SEGLA [Benin]

2001 (Doctorat) *Appropriation des mathématiques dans une langue africaine: le yoruba*, Université de Paris 7 (France).

Mathume Enoka BOPAPE (Male) [South Africa]

2002 (Ph.D.) *Mathematics school based in-service training (SBINSET): A study of factors contributing towards success or failure of SBINSET in the South African schools context*, Aalborg University (Denmark); Advisor: Ole Skovmose.

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2002 (Ph.D.) *Co-operative learning and gender in mathematics education: A case study in a Malawian secondary school*, University of Waikato (New Zealand).

Marcos CHERINDA (Male) [Mozambique]

2002 (Ph.D.) *The use of a cultural activity in the teaching and learning of mathematics: The exploration of twill weaving in Mozambican classrooms*, University of the Witwatersrand (Johannesburg, South Africa), Advisors: Paul Laridon (South Africa) & Paulus Gerdes (Mozambique).

Sarifa Abdul FAGILDE (nee MAGIDE) (Female) [Mozambique]

2002 (Ph.D.) *Towards a characterisation of communication and gender patterns in secondary mathematics classrooms in Mozambique*, University of the Western Cape (Bellville, South Africa); Advisors: Cyril Julie (South Africa) & Maria Luiza Cestari (Norway).

Kgomotso Gertrude GAREGAE (Female) [Botswana]

2002 (Ph.D.) *Teachers' beliefs about mathematics, its teaching and learning and the communication of these beliefs to students: A case study in Botswana*, University of Manitoba (Winnipeg, Manitoba, Canada); Advisor: Lars Jansson.

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2002 (Ph.D.) *An investigation of teachers learning to become professionalized mathematics teachers: The centrality of confidence*, University of the Witwatersrand (Johannesburg, South Africa); Advisor: Jill Adler.

Sarah HOWIE (Female) [South Africa]

2002 (Ph.D.) *English language proficiency and contextual factors influencing mathematics achievement of secondary school pupils in South Africa*, Universiteit Twente (Enschede, Netherlands).

- Mercy KAZIMA (Female) [Malawi]
 2002 (Ph.D.) *Malawian students' understanding of probability*, University of Leeds (UK);
 Advisors: Tom Roper & Melissa Rodd.
- Sesutho Koketso KESIANYE (Female) [Botswana]
 2002 (Ed.D.) *Teachers learning to assess students' mathematics: an investigation with Botswana preservice teachers*, University of Leeds (UK).
- Joyce R. MGOMBELO (Female) [Tanzania]
 2002 (Ph.D.) *Mathematics content-pedagogy knowledge: a psychoanalytic and enactivist approach*, University of Alberta (Canada); Advisor: Terry Carson.
- David MOGARI (Male) [South Africa]
 2002 (Ph.D.) *An ethnomathematical approach to the teaching and learning of some geometrical concepts*, University of the Witwatersrand (Johannesburg, South Africa);
 Advisor: Paul Laridon.
- Thabiso NYABANYABA (Male) [Lesotho]
 2002 (Ph.D.) *The ordinary level (O level) mathematics examination in Lesotho and the impact of recent trends on Basotho students' epistemological access*, University of the Witwatersrand (Johannesburg, South Africa); Advisor: Jill Adler.
- Latifa SEGHIR [Morocco]
 2002 (Doctorat) *Projet d'apprendre et réussite en mathématiques au collège: le cas d'élèves marocains de collège à Casablanca*, Université Pierre Mendes France (Grenoble, France).
- Mamokgethi SETATI (Female) [South Africa]
 2002 (Ph.D.) *Language practices in intermediate multilingual mathematics classroom*, University of the Witwatersrand (Johannesburg, South Africa); Advisor: Jill Adler.
- Adolphe Cossi ADIHOU (Male) [Benin]
 2003 (Doctorat) *Étude des phénomènes didactiques liés à la méthode de résolution de problèmes arithmétiques par la mise en équations en 9ème secondaire* [Study of didactic phenomena related to the solution of arithmetical problems by equations in grade 9], Université de Genève (Geneva, Switzerland); Advisors: François Conne & Jean Brun.
- Margot BERGER (Female) [South Africa]
 2003 (Ph.D.) *The appropriation of mathematical objects by undergraduate mathematics students: a case study*, University of the Witwatersrand (Johannesburg, South Africa);
 Advisor: Jill Adler.
- Bhangy CASSY (Male) [Mozambique]
 2003 (Ph.D.) *Effect of classroom interaction and gender on mathematics performance and attitudes toward mathematics of secondary pupils in Mozambique*, University of the Witwatersrand (Johannesburg, South Africa), Advisor: Peter Fridjhon.
- Kwame Elli GLEVEY (Male) [Ghana]
 2003 (Ph.D.) *The Development of Thinking in Education*, University of London (UK);
 Advisor: John White.

Larry KANNEMEYER (Male) [South Africa]

2003 (Ph.D.) *The Development of a Reference Framework for Measuring Students' Understanding in a First Year Calculus Class*, University of the Western Cape (South Africa); Advisors: Tyrgve Breiteig, Jan Persens & Ole Einar Torkildsen.

Osmond Monde MBEKWA (Male) [South Africa]

2003 (Ph.D.) *Social science pre-service teachers' mathematical activity in a technology intensive mathematics classroom*, University of the Western Cape (Bellville, South Africa); Advisors: Cyril Julie & O. E. Torkildsen.

John-Baptiste NAKIN (Male) [South Africa]

2003 (Ph.D.) *The influence of creativity and divergent thinking on the performance of grade 7 geometry learners*, University of South Africa (Pretoria, South Africa); Advisor: Dirk C. J. Wessels.

Susanna Maria NIEUWOUDT (Female) [South Africa]

2003 (Ph.D.) *Strategiese onderrig en leer van skoolwiskunde in 'n videoklasstelsel* [Strategic teaching and learning of school mathematics in a video class system.] Potchefstroomse Universiteit (South Africa); Advisors: Jan L. de K. Monteith & Hercules D. Nieuwoudt.

Marc SCHAFER (Male) [South Africa]

2003 (Ph.D.) *The impact of learners' spatial capacity and world views on their spatial conceptualisation: a case study*, Curtin University (Perth, Australia); Advisor: John Malone.

Tjaart M. STEYN [South Africa]

2003 (Ph.D.) *A learning facilitation strategy for mathematics in a support course for first year engineering students at the University of Pretoria*, University of Pretoria (South Africa).

Gert Hendrik STOLS (Male) [South Africa]

2003 (Ph.D.) *Kegelsnedes as integrerende faktor in skoolwiskunde* [Conical sections as integrating factor in school mathematics], University of South Africa (Pretoria, South Africa); Advisors: Johannes Heidema & Dirk C. J. Wessels.

Suriza VAN DER SANDT (Female) [South Africa]

2003 (Ph.D.) *The relationship between teachers' knowledge of geometry and the teaching and learning of geometry*, Potchefstroomse Universiteit (South Africa); Advisor: Hercules D. Nieuwoudt.

Faïza CHELLOUGUI (Female) [Tunisia]

2004 (Doctorat) *L'utilisation des quantificateurs universel et existentiel en première année universitaire, entre l'explicite et l'implicite* [Using universal and existential quantifications in first year university, switching between explicit and implicit usages], co-tutelle: Université de Tunis (Tunis, Tunisia) & Université Claude Bernard - Lyon I (France); Advisors: Mahdi Abdeljaouad & Claude Tisseron.

John Manuel FRANCISCO (Male) [Mozambique]

2004 (Ph.D.) *Students' reflections on mathematical learning: results from a longitudinal study*, Rutgers University (New Brunswick, NJ, USA); Advisor: Carolyn A. Maher.

Leilani GOOSEN (Female) [South Africa]

2004 (Ph.D.) *Criteria and guidelines for the selection and implementation of a first programming language in high schools*, Potchefstroomse Universiteit (South Africa); Advisors: Hercules D. Niewoudt & Elsa Mentz.

Septimi KITTA [Tanzania]

2004 (Ph.D.) *Enhancing mathematics teachers' pedagogical content knowledge and skills in Tanzania*, University of Twente (Enschede, Netherlands); Advisor: Jan van den Akker.

Marcelino Caetano LUÍS (Male) [Mozambique]

2004 (D.Ed.) *Por um currículo de formação do professor de matemática na perspectiva de construção do conhecimento* [Towards a curriculum of mathematics teacher education in the perspective of knowledge construction], Pontifícia Universidade Católica de São Paulo (Brazil); Advisor: Fernando José de Almeida.

Paul F. MESSINA (Male) [South Africa]

2004 (Ph.D.) *Evaluation of the utility of the American College Testing Program. Examination in predicting the probability of success in calculus I in the state of Texas*, University of South Africa (Pretoria, South Africa); Advisors: Francois Steffens, James S. Stamey & Andile Mji.

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2004 (Ph.D.) *Problem Solving in the Mathematics Classroom: A Reflective Approach*, Aalborg University (Denmark); Advisor: Ole Skovmose.

Immaculate Kizito NAMUKASA (Female) [Uganda]

2004 (Ph.D.) *Attending in Mathematics: A Dynamic View about Students' Thinking*, University of Alberta (Edmonton, Alberta, Canada); Advisor: Elaine Simmt.

Charles OPOLOT-OKURUT (Male) [Uganda]

2004 (Ph.D.) *Attitudes towards Mathematics, achievement in Mathematics Aptitude Problems and Concomitant Teacher practices in Ugandan Secondary Schools*, University of the Western Cape (Bellville, South Africa); Advisor: Cyril Julie.

Mohamed Lamine TOURÉ (Male) [Guinea Konakry]

2004 (Ph.D.) *L'enseignement des identités remarquables: Un dispositif de formation initiale des maitres*, Université de Montréal (Canada); Advisor: Jean Portugais.

Evaristo Domingos UAILA (Male) [Mozambique]

2004 (D.Ed.) *Geometria e autonomia: um estudo dos programas, dos discursos dos professores e das práticas curriculares na Cidade da Beira, Moçambique* [Geometry and autonomy: a study of programmes, of teachers' discourses and of curricular practices in the city of Beira, Mozambique], Pontifícia Universidade Católica de São Paulo (Brazil); Advisors: Fernando José de Almeida (Brazil) & Rachael E. Thompson (Mozambique).

Imed BEN KILANI (Male) [Tunisia]

2005 (Doctorat) *Les effets didactiques des différences de fonctionnement de la négation dans la langue arabe, la langue française et le langage mathématique*, ISEFC (Le Bardo, Tunisia) & Université Claude Bernard (Lyon, France); Advisors: Mahdi Abdeljaouad (Université de Tunis) & Viviane Durand-Guerrier (Université de Lyon I).

Karin Michelle BRODIE (Female) [South Africa]

2005 (Ph.D.) *Classroom interaction and the development of mathematical thinking*, Stanford University (CA, USA); Advisor: Jo Boaler.

Najoua HAJALI (Female) [Tunisia]

2005 (Doctorat) *Quelles mathématiques enseigner dans une école supérieure d'économie ? Une étude de cas en Tunisie*, ISEFC (Le Bardo, Tunisia) & Université Claude Bernard (Lyon, France); Advisors: Mahdi Abdeljaouad (Université de Tunis) & Jean-Luc Dorier (Université de Lyon I).

Penina Adhiambo Ogolla KAMINA (Female) [Kenya]

2005 (Ph.D.) *Teachers' Perceptions and Practices of Inquiry-based Instruction: A Case Study of Fifth Grade Investigations Curriculum in an Urban School*, Syracuse University (NY, USA); Advisor: Patricia P. Tinto

Henry KANG (Male) [Cameroon]

2005 (Ph.D.) *Stakeholders' receptiveness to an ethnomathematics curriculum foundation: The case of Cameroon*, University of British Columbia (Canada); Advisor: Susan Pirie.

Alakanani Alex NKHWALUME (Male) [Botswana]

2005 (Ph.D.) *A study of the motivational orientations of six girls towards mathematics as directed by their social context: a sociological and critical dimension of gender differentials in mathematics education in Botswana*, University of Nottingham (UK).

William John SUSUWELE-BANDA (Male) [Malawi]

2005 (Ph.D.) *Classroom assessment in Malawi: Teachers' perceptions and practices in mathematics*, Virginia Polytechnic Institute and State University (USA).

Dalene M. SWANSON (Female) [South Africa]

2005 (Ph.D.) *Voices in the silence: Narratives of disadvantage, social context and school mathematics in post-apartheid South Africa*, University of British Columbia (Canada).

Henry Kerre WAKHUNGU (Male) [Kenya]

2005 (Ph.D.) *Pre-service elementary teachers' beliefs and conceptions about the nature of mathematics and mathematics learning*, Indiana university (Bloomington, USA); Advisor: Peter W. Kloosterman.

Jan DRAISMA (Male) [Mozambique]

2006 (Ph.D.) *Teaching gesture and oral computation in Mozambique: four case studies*, Monash University (Clayton, Victoria, Australia); Advisors: Alan Bishop & Barbara Clarke.

Kalifa TRAORÉ (Male) [Burkina Faso]

2006 (Ph.D.) *Étude des pratiques mathématiques développées en contexte par les Siamous au Burkina Faso*, Université de Québec (Montréal, Canada); Advisors: Nadine Bednarz & Philippe Jonnaert.

4. Non-Africans with doctoral theses about mathematics education in Africa

Andrea PETITTO (Female) [USA]

1978 (Ph.D.) *Knowledge of arithmetic among schooled and unschooled tailors and cloth merchants in Ivory Coast*, Cornell University (Ithaca NY, USA).

- Jill K. POSNER (Female) [USA]
 1978 (Ph.D.) *The development of mathematical knowledge among Baoulé and Dioula children in Ivory Coast*, Cornell University (Ithaca NY, USA).
- Anne-Marie GARROUSTE-BERTE (Female) [France]
 1981 (Doctorat 3ème cycle) *Observation dans les classes sur le développement de l'activité mathématique chez les élèves (1er cycle de l'enseignement secondaire au Niger)*, Université Paris VII (France).
- Nancy M. OHUCHE (Female) [USA]
 1982 (Ph.D.) *The Development of the Horizontal-Vertical Co-ordinate Reference System by some Nigerian (Igbo) Children and Young Adults*, University of Nigeria (Nsukka, Nigeria).
- Dominique VELLARD (Female) [France]
 1982 (Doctorat 3ème cycle) *Pratiques de calcul et opérations logiques en milieu traditionnel africain (exemples maliens et rwandais)*, Université de Paris VII (France).
- Lawrence SHIRLEY (Male) [USA]
 1984 (Ph.D.) *Teacher Participation in Mathematics Curriculum Development and Implementation in Three Northern States of Nigeria*, Ahmadu Bello University (Zaria, Nigeria).
- Alberta A. HENRY-CARMICHAEL (Female) [USA]
 1986 (Ph.D.) *The Understanding of Mathematics Concepts and Skills among Unschooled Nupe Children of Niger State, Nigeria*, Ahmadu Bello University (Zaria, Nigeria).
- Robert S. PROUTY (Male) [USA]
 1987 (Ph.D.) *Mathematics Achievement and Self-Esteem at Secondary Schools in Zaire: The Effects of Principals' Emphasis on Instructional Leadership*, Michigan State University (USA).
- Erich Daniel VOGELI (Male) [USA]
 1992 (Ed.D.) *The ethnomathematics of southern Africa: Application in the middle school mathematics classroom*, Columbia University (New York, USA); Advisor: J. Philip Smith.
- Felicity Grace BREET (Female) [UK]
 1993 (Ph.D.) *Verbal interaction in mathematics lessons in Anglophone Cameroon*, University of Durham (UK).
- Catherine-Marie CHIOCCHA (Female) [France]
 1995 (Doctorat) *Analyse du discours de l'enseignant de mathématiques en classe de mathématiques-représentations des lycéens sénégalais*, Université Paris VII (France).
- Jolene Urquhart SCHILLINGER (Female) [USA]
 1996 (Ph.D.) *The ethnomathematics of the Senoufo women of Mali, West Africa*, The Union Institute (USA); Advisor: Jean Griffin.
- Stacy Megan CHE (Female) [USA]
 2005 (Ph.D.) *Cameroonian teachers' perceptions of culture, education, and mathematics*, University of Oklahoma (USA); Advisors: Jayne Fleener & Neil Houser.