



Learning Technologist, Educator and Scientist with experience in Higher Education, Research and NGO institutions.

Qualifications: B.Sc. (Hons) (Makerere); B.Ed., M.Sc., M.Ed. (Rhodes); PhD (Digital Media in Education, Natal); P.G.C.E. (NUL); P.G.D.E (ICT in Ed.) (Rhodes). To complete at the University of New England, Australia towards the Graduate Certificate in Higher Education.

Current Position: Dean & Associate Professor, Faculty of Science and Technology, Cavendish University Uganda, Kampala.

Contact: Emails: jzake@cavendish.ac.ug. Copy to tebiggwawo@gmail.com.

Mobile phone: +256788485749.

A. Main Skills and Work Experiences

A1. Leadership, administration and management experience (Close to 40 years)

1. Chief Editor, African Journal of Agro-Ecology, African Centre for Agro-ecology & Livelihood Systems, Uganda - **Current**.
2. Dean, Faculty of Science and Technology, Cavendish University, Kampala. - **Current**.
3. Initiator and Project Advisor, Electronic Distance Learning (eDL), Cavendish University, Kampala – **Current**.
4. Team Member of the World Bank project of African Centre of Excellence – Uganda Martyrs University- **Current**.
5. Head of the IT Department and Senior Lecturer, School of Computing and Information Technology, Kampala International University.
6. Head, ICT Department, Uganda Martyrs University, Uganda.
7. Head, Learning Technology Forum, University of Greenwich, London.
8. Chairperson, Staff and Curriculum Development, University of Greenwich.
9. Head Coach, Armidale Football Club, Armidale, New South Wales, Australia.
10. Project Manager, Research-related, Science, and ICT projects at the Centre for the Advancement of Science and Mathematics Education (CASME).
11. Acting Director (periodically), at the Centre for the Advancement of Science and Mathematics Education (CASME); Regional Manager for CASME (*Lecture, implement and evaluate ICTs & science education in schools; write funding proposals; plan and conduct workshops; manage project finance; develop, design and write materials*).
12. Vice Chairperson for the Standard Generating Body on Development at the South African Qualifications Authority.
13. Head of Division, Science, Lamplough Secondary School (*supervise & teach; manage laboratory, sports organizer, soccer coach, maintain school buildings, compound, & timetable*).
14. Head Coach, Lawn Tennis, Christ the King High School, Lesotho.
15. Assistant Coach, Soccer, Christ the King High School, Lesotho.
16. Head, Research Division, Coffee Marketing Board.
17. Head of the Coffee Research Unit, Kawanda Research Station (*also Head of soccer and player*).

A2. Learning Technology using Digital media / ICT in education/ Instructional Design (16 years)

1. Project Manager, Electronic Distance Learning (eDL), Cavendish University, Kampala.
2. Staff Development in Learning Technology (9 years) [Cavendish University Uganda; Uganda Martyrs University, University of Greenwich, UK; University of New England, Australia].

3. Learning Materials Development: Physics & Biology (CASME, University of Rhodes; University of Natal); Diploma in Information & Technology (Cavendish University Uganda).
4. Evaluating ICTs in education: In schools (South Africa); In universities [Cavendish University Uganda; Uganda Martyrs University, University of Greenwich, UK; University of New England, Australia].
5. Train computer skills to workers in industry [Tabeisa project, Walter Sisulu University of Technology (1 course)]
6. PhD thesis title: *Evaluation of Educational Computer Programmes as a Change Agent in Science Classrooms*.
 - i. Developed a comprehensive evaluation framework for learning technology tools.
 - ii. Research models include philosophies and methodologies usable in developing communities.
7. Course work at Rhodes University and the University of Natal *inter alia* included: Determining which computer and telecommunication technologies can be used to support learning; Current and influential learning theories underpinning the use of technology for enhanced learning; Analysing, designing, developing, implementing and evaluating technology enhanced programs; and Researching how information technology can support learning.

A3. Lecturing, Teaching and training Science and \Science Education (19 years)

1. Lecturing, Marking and Supervision of PhD, Masters and Bachelors students (Univ. of New England; Univ. of Greenwich; Uganda Martyrs University; Kampala International University; University of KwaZulu Natal; Cavendish University Uganda).
2. Lecturing to pre and in-service educators (16 years) - curriculum design, assessment, evaluation, educational psychology, and philosophy, biology, physical science, science education, methods of teaching, and the applications of ICT in classrooms, including evaluating ICTs for education [University of New England, Australia; Centre for The Advancement of Science & Mathematics Education (CASME) at the University of Kwazulu Natal, South Africa and Rhodes University, South Africa; Bethel College, South Africa].
3. Teaching adults for school certificate (2 years) [Department of Education, South Africa].
4. Senior school teacher (16 years) [Christ the King High School, Lesotho; Lamplough High School and Masonwabe Finishing School, South Africa].

A4. Lecturing (19 years)

1. Uganda Martyrs University
 - 1.1 Knowledge Systems for Agro-ecology (PhD students in the African Centre of Excellence,).
 - 1.2 MIS for Monitoring & Evaluation
 - 1.3 Research for Monitoring and Evaluation
2. University of Greenwich, London, UK:
 - 2.1 Managing Strategy.
 - 2.2 Professional Development.
 - 2.3 E-Logistics.
 - 2.4 Management and Information Systems.
 - 2.5 Competition and Business Risk (Course Leader).
3. University of New England, Armidale, Australia:
 - 3.1 Introduction to Teaching and Learning.
 - 3.2 Professional Electronic Portfolio.
 - 3.3 Promoting Student Learning.
 - 3.4 Computers in Education.
4. Centre for the Advancement of Science and Mathematics Education (University of Rhodes; University of Natal):
 - 4.1 Teacher Education.
 - 4.2 Physics Education.
 - 4.3 Biology Education.
5. Cavendish University Uganda:
 - 5.1 IT Project Management.
 - 5.2 Emerging Trends.
 - 5.3 Professional Issues.
 - 5.4 Research.
 - 5.5 Gender & ICT.
 - 5.6 Fundamentals of ICT
 - 5.7 Information Systems Modelling
6. Consultancies – various universities:
 - 6.1 ICT Policy & Cyber Crime (Masters), Uganda.
 - 6.2 Management Information Systems (Masters), Uganda.
 - 6.3 Systems Implementation Project (PhD), Uganda.
 - 6.4 Computer Information Systems (PhD), Uganda.
 - 6.5 IS for Professionals (PhD), Uganda.

A5. Designing and Developing Courses (19 years)

1. Bachelor of Information Technology;
2. Bachelor of Software Engineering;
3. Master of Information Systems;
4. Master of Information Technology;
5. Master of Public Health;
6. PhD – Information Systems;
7. PhD - Agro-ecology;
8. Bachelor of Science – Education;
9. Diploma in Information Technology;
10. Physics and chemistry for on-line courses for the Department of Education, South Africa [CASME], and;

11. Staff development learning technology user guides (7 years) [University of Greenwich, UK; University of New England, Australia].

A6. Scientific Research (12 years)

1. Scientific Research – Master of Science, Rhodes University;
2. Scientific Research, Kawanda Research Station, Uganda;
3. Researching and training farmers on coffee processing (2 years), Coffee Marketing Board, and;
4. At all the universities.

A7. Qualitative Research

1. PhD – University of Natal (South Africa) and University of Georgia (USA).
2. For several academic research projects and papers.

A7. Supervising and Marking Research projects (12 years)

1. Several Bachelor's projects;
 2. Several Masters' degrees;
 3. PhDs supervised:
 - 3.1 Businge Phelix, 2017. PhD Title: A Framework for Effective Mitigation of Human Insider Threat to Institutional Data Security: Evidence from Higher Education Employees in Uganda.
 - 3.2 Magado Ronald, 2019. PhD Title: A Systemic Approach to Improve Livelihoods of the Farmers of *Manihot Esculenta Crantz* (Cassava): A Case Study About the Use of Bio-Slurry in Nakasongola District, Uganda.
 - 3.3 Salami, Afolabi Kehinde. Implementation of ICT Policies in Assuring the Information Security Standards in Some Nigerian Colleges of Education.
 - 3.4 Kamenya Ndagire Sandra. PhD Title: Germplasm Conservation of *Solanum Aethiopicum* Shum and Gilo Groups Using Transcritome Sequencing.
 - 3.5 Hussein Muhaise. A framework for Successful Implementation of District Health Information Software Version 2: Verification from the Greater Bushenyi Districts, Uganda.
 - 3.6 Mamman Salisu Jibia. 2019. PhD Title: Heuristics of Social Media Information Quality Evaluation Focus on Business Operations in Uganda - continuing.
 4. PhDs marked
 - 1.4 Manhibi, Ronald, 2019. PhD Thesis Title: Information and Communication Technologies (ICT) integration into Early Childhood Development (ECD) education in Zimbabwe: A critical analysis. Submitted in fulfilment of the requirements for the degree of Doctor of Philosophy in Computer Science Education. KwaZulu Natal University;
 - 1.5 Gumedze, Philemon Mfana, 2018. PhD Thesis Title: eLearning on Academic Performance of Distance e-Learners in a Nigerian University. Submitted in fulfilment of the requirements for the degree of Doctor of Philosophy in Computer Science Education;
 - 1.6 Olukayode Solomon Aboderin, 2018. PhD Thesis Title: A Critical Analysis of the Effect of eLearning on Academic Performance of Distance e-Learners in a Nigerian University.
- Etc.

A8. ICT Workshops, Seminars and Forums

I have experience of over fifteen years of organising workshops for staff development. For example:

1. Teacher Professional Development, Centre for the Advancement of Science and Mathematics Education, University of Natal and Rhodes University;
2. Blogging and vodcasting (creating podcasts) – University of New England (2008 – 2010);
3. Turnitin and grade mark, Share University of Greenwich;
4. E-Learning – staff development at the four universities I worked at. For example using Moodle, mElimu and ClanEd – at
 - 4.1 University of New England,
 - 4.2 University of Greenwich,
 - 4.3 Uganda Martyr's University, and
 - 4.4 Cavendish University.

B. University work, research and responsibilities

B1. Cavendish University, Uganda (Current)

1. Designed, Train staff and students: Electronic Distance Learning (eDL), Cavendish University, Kampala
2. Dean, Faculty of Science and Technology (Four Depts.: IT/ IS; Engineering; Health & Information Science).
 - i. Plan ICT integration in management, learning and teaching.
 - ii. Supervise lecturers.
 - iii. Budgeting for the Faculty.
3. Learning Technologist responsible for training staff.
4. Lecturing:
 - i. Research (Postgraduate).
 - ii. Educational Technology.
 - iii. Computer Courses (Many): E.g., Professional Issues; Emerging Trends; etc.
 - iv. Emerging Trends.
Etc.
5. Supervision of research of postgraduate students.
6. Innovation hub and FST clinics.

B2. Uganda Martyrs University

1. Head, IT Department:
 - i. Plan ICT integration in management, learning and teaching.
 - ii. Supervise lecturers.
 - iii. Budget for ICTs, and procurement of ICTs.
 - iv. Evaluation of ICTs (including ERPs and LMSs).
2. Learning Technologist responsible for training staff.
3. Lecturing:
 - i. Research (Postgraduate).
 - ii. Educational Technology.
 - iii. Agricultural Mechanisation.
 - iv. ICTs in Agriculture.
 - v. Agro-ecology (PhD).
 - vi. Knowledge Systems for Agro-Ecology (PhD).
4. Supervision of research of postgraduate students.

B3. Kampala International University, Uganda. (Part time)

1. Consultancy, IT Department:
 - i. Advise lecturers and teaching.
 - ii. Budget for Its.
2. Lecturing:

- i. Research (Postgraduate).
 - ii. IT Project Management (postgraduate).
 - iii. ICT Policy & Cyber Crime (Masters).
 - iv. Management Information Systems (Masters).
 - v. Systems Implementation Project (PhD).
 - vi. Strategic Management Systems (PhD).
 - vii. Computer Information Systems (PhD).
 - viii. IS for Professionals (PhD).
3. Supervision of research of postgraduate students.

B4. University of Greenwich, London, UK.

1. Learning Technologist responsible for training staff.
2. Managing the Learning Technology Support Forum.
3. Lecturing:
 - i. Management and Information Systems.
 - ii. Competition and Business Risk (Course Leader).
 - iii. Personal and Professional Development / Career Development.
 - iv. Personal and Professional Development / Consultancy Project.
 - v. Managing Strategy.
 - vi. Supervision of postgraduate students.

B5. University of New England, Australia

1. Learning Technologist responsible for training staff.
2. Managing the Learning Technology Support Forum.
3. Supervision of postgraduate students.
4. Evaluation of ICTs.
5. Lecturing.
 - i. Personal and Professional Development / Career Development.
 - ii. Personal and Professional Development / Consultancy Project.
 - iii. Managing Strategy.
 - iv. Supervision of postgraduate students.
 - v. Educational Technology.

C School work and responsibilities

C1. Sinebhongo Finishing School, East London – South Africa

1. Acting Head of Science Department
2. Teach Physical Science, Mathematics, and Biology
3. Supervise Science and Mathematics
4. Responsible for School Timetable
5. Other duties:
 - Member, Curriculum and Policy Development – Biology Department of Education and Culture, Province of the Eastern Cape, Bisho, South Africa. (Appointed – 17th July 1995)
 - Textbook Reviewer, Biology, Department of Education and Culture, Province of the Eastern Cape, Bisho, South Africa. (Appointed 22nd April 1996: Reference 0401/93251)

C2. Lamplough High School, Butterworth – South Africa

1. **Head of the Science Department**
2. Supervise the teaching of Physical Science, Mathematics, Biology and Agriculture
3. Manage the School Laboratory
4. Teaching Physical Science, Biology and Mathematics

5. *Other Duties:*
- i. Maintenance of the School Laboratory
 - ii. Coached Soccer for 6 Years
 - iii. Sports Organizer for 4 Years
 - iv. Maintained School Buildings
 - v. Maintained School Compound
 - vi. Responsible for school timetable

D. Research Interests

1. Discourse in research.
2. Research Paradigms and philosophy.
3. Indigenous Knowledge Systems.
4. Models of professional development for Learning Technology.
5. ICT adoption in contexts of developing countries.
6. Systems Approach.
7. Evaluation.
8. Learning Management Systems.
9. Entomology.
10. Genetics.
11. Agro-Ecology.
12. Analytics.

E. Affiliations

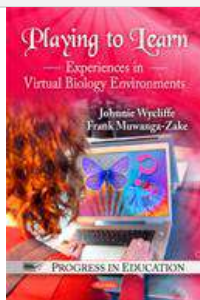
1. Editorial Advisory Board Member for Impact of E-Business Technologies on Public and Private Organizations: Industry Comparisons and Perspectives.
2. Reviewer for Higher Education Research & Development.
3. Reviewer for Springer journal: Journal of Science Teacher Education.
4. Reviewer for International Journal of Education and Development Using Information and Communications Technology.
5. Reviewer Informing Science Institute - <http://www.informingscience.us/icarus/conferences/insite2012/thanks>.
6. Member of the New South Wales Computer Education Group.

F. Publications and conferences

F1. PhD Thesis

Muwanga-Zake, J. W. F. 2004. Evaluation of Educational Computer Programmes as a Change Agent in Science Classrooms. University of Natal.

F2. Book publication



F3. Books in process (2018):

1. Muwanga-Zake, JWF (Since 2016). Learning in Virtual Environments: Cases.
2. Muwanga-Zake JWF & Ssemakula JB. (Since 2018). A Guide for eLearning Design and Adoption in Higher Education: Cases in a Developing Country.

F4. Book Chapters published

1. Muwanga-Zake, JWF (2018). Whose Education Is It? The Exclusion of African Values from Higher Education in *Identity and Development: Interrogating the Implications of Images of Africa*. Centre for African Studies, SASS. ISBN: 978-9970-09-009-9. Pages 89 – 154.
2. Muwanga-Zake, JWF (2018). Towards Validating Research Discourses among Bantu in Africa: *Obuntubulamu* as a Possible Transforming Agent in *Identity and Development: Interrogating the Implications of Images of Africa*. Centre for African Studies, SASS. Centre for African Studies, SASS. ISBN: 978-9970-09-009-9. Pages 189 – 239.
3. Mwine, J. & Muwanga-Zake, JWF. (2018). A systems Approach in Agro-ecology: Towards Achievement of Sustainable Livelihoods in Africa. In *Higher Education for African Challenges of the 21st Century* (ISBN: 978-9970-09-013-6). Pages 279 – 314.
4. Muwanga-Zake, JWF. (2018). Renegotiating Public Confidence in Higher Education? Challenges and Possible Innovations of the 21st Century. In *Higher Education for African Challenges of the 21st Century* (ISBN: 978-9970-09-013-6) Pages 19 – 68.

F5. Book Chapters in Progress

1. Book Chapter (Since 2018): Muwanga-Zake, JWF. (2018). Traversing Critical ICT Humps and Dumps in Higher Education: a Case in a Developing Country, Uganda (Delayed because it is Action Research).

F6. Refereed recent publications

F6.1 Accepted for publication

1. Muwanga-Zake JWF. (October, 2019). The enigma of ICTs and learning theories: Challenges and Possible Solutions. *Proceedings of the National Conference on Communications, Makerere University*
2. Salisu MJ, Muwanga-Zake JWF, Kareo, M. and Ajiji, Y. (2019). Impact of Service Quality on Electronic Technology: A Performance of Elections in Nigeria. *International Journal of Innovative Science and Research Technology*. Volume 4 - 2019 - Issue 11 – November

3. Salisu, MJ, Muwanga Zake JWF, Ajiji, Y. and Kareyo, M. (2019). Electronic Technology Literacy and Performance of Elections in Selected States in Nigeria. *International Journal of Information Technology and Management Information Systems (IJITMIS)*, Volume 10, Issue 3, (September-December 2019)

F6.2 Published

1. Hussein Muhaise, Kareyo, M. and Muwanga-Zake, JWF. (2019). [Factors Influencing the Adoption of Electronic Health Record Systems in Developing Countries: A Case of Uganda](https://asrjetsjournal.org/index.php/American_Scientific_Journal/article/view/5269). Vol. 61 No. 1. Available - https://asrjetsjournal.org/index.php/American_Scientific_Journal/article/view/5269 (3rd Dec. 2019)
2. Muhaise, H., Muwanga-Zake, JWF. and Kareyo, M. (November, 2019). Assessment Model for Electronic Health Management Information Systems Success in a Developing Country Context: A Case of the Greater Bushenyi Districts in Uganda. [American Scientific Research Journal for Engineering, Technology, and Sciences \(ASRJETS\)](https://asrjetsjournal.org/index.php/American_Scientific_Journal). Vol 61 No 1 (2019). Available https://asrjetsjournal.org/index.php/American_Scientific_Journal (3rd December 2019)
3. Businge, P. M., Jehopio, P. and Muwanga-Zake, J. W. F. (May, 2017). Unintentional human insider threats mitigation measures in universities in Uganda. www.allsubjectjournal.com Volume 3, Issue 5. Pages 59 – 66.
4. Businge, P. M., Jehopio, P. and Muwanga-Zake, J. W. F. (2016). Assessing Intentional Human Insider Threat Mitigation in Ugandan Universities. *Global Journal of Engineering Science and Researches*. 3 (5): May, 2016. Also available: <http://gjesr.com/Issues%20PDF/Archive-2016/May-2016/10.pdf>.
5. Muwanga-Zake, J. W. F. (August, 2010). Narrative Research across Cultures: Dimensions of Concern in Africa. *Narratives*, August 2010 *(also available - <http://ro.uow.edu.au/currentnarratives/vol1/iss2/7/>).
6. Muwanga-Zake, J. W. F., Parkes, M. & Gregory, S. (2010). Blogging at university as a case study in instructional design: Challenges and suggestions towards professional development. *International Journal of Education and Development Using ICT* Vol 6, No. 1 (2010).
7. Muwanga-Zake, J. W. F. (2009). Building bridges across knowledge systems: Ubuntu and participative research paradigms in Bantu communities. *Discourse: Studies in the Cultural Politics of Education* Vol. 30, Issue. 4, 2009 Pages 413 – 411.
8. Muwanga-Zake, J. W. F. (2008). Framing Professional Development in Information and Communications Technologies: University Perspectives. *Journal of Information Technology Education*. Volume 7. Available: <http://jite.org/documents/Vol7/JITEv7p293-306Muwanga387.pdf>.
9. Muwanga-Zake, J. W. F. (December, 2007). Evaluation of an Educational Computer Programme as a Change Agent in Science Classrooms. *Journal of Science Education and Technology*. Volume 16, Number 6. Pages 473-490 (also <http://link.springer.com/article/10.1007%2Fs10956-007-9078-y>).
10. Muwanga-Zake, J. W. F. (December, 2007). The Digital Gap in the Dinaledi Schools and Implications for Teachers' Work and Learning. *Conference Proceedings. Researching Work and Learning*, Cape Town. South Africa Pages 630 – 636.
11. Muwanga-Zake, J. W. F. (December, 2007). Inclusiveness, Development and Ubuntu: Re-thinking Educational Research Processes for Development in Bantu Communities. *Conference Proceedings. Researching Work and Learning*, Cape Town. South Africa Pages 637 – 643.
12. Muwanga-Zake, J. W. F. (2007). Introducing Educational Computer Programmes Through Evaluation: A case in South African Disadvantaged Schools. *International Journal of*

Education and Development Using Information and Communications Technology, 2007, Vol. 3, Issue 3. Available: <http://ijedict.dec.uwi.edu/viewissue.php>.

13. Muwanga-Zake, J. W. F. (2006). Applications of Computer-Aided Assessment in the Diagnosis of Science Learning & Teaching. *International Journal of Education and Development Using ICT* Vol. 2, No. 4 (2006). Available: <http://ijedict.dec.uwi.edu/viewarticle.php?id=226&layout=html>.
14. Muwanga-Zake, J. W. F. (2001). Is Science Education In a Crisis? Some of the Problems in South Africa. *Journal of the South African Association for Research in Mathematics, Technology, and Science Education*. Vol. 4, No. 1, 1-11. [Online] Available: <http://www.scienceinafrica.co.za/scicrisis.htm> [2001, MARCH 15].
15. Muwanga-Zake, J. W. F. (September, 2000). Experiences of the Power of Discourse in Educational Research: A Need for Transformation in Research. Available <http://www2.ncsu.edu/ncsu/aern/muwangap.html>.

F8 Submitted for review

Muwanga-Zake, JWF. (2019). A Struggle of Discourses Attempting to Transform a Peripatetic Mind of a Black African Academic: Is there a Valid Disquiet about Research and Education in Black Africa? Submitted for review in African Education Review journal.

F9. Ongoing publications

- A. Muwanga-Zake JWF & Ssemakula, JB. (2019). A Model for ICT Adoption in Higher Education in a Developing Country: A Conceptual Framework for Higher Education Derived from Ugandan Universities.
- B. Muwanga-Zake JWF & Ssemakula, JB. (2019). Students' Experiences of eLearning at Institutions of Higher Education in a Developing Country.

F10. Popular non-refereed publications

1. Muwanga-Zake, JWF. (2019). Excellence in the Context of Students' Learning.
2. Muwanga-Zake, JWF. (2018). Traversing Critical ICT Humps and Dumps in Higher Education: A Case in A Developing Country. *Academia*.
3. Muwanga-Zake, J. W. F. (2006). What kind of science do educators present to learners in South African classes?
<http://www.scienceinafrica.co.za/2006/september/classroom.doc>.
4. Muwanga-Zake, J. W. F. (August, 2002). What do you mean $\text{pH} = -1$: super acids. *Science in Africa*. Available: <http://www.scienceinafrica.co.za/2002/august/ph.htm>.
5. Muwanga-Zake, J. W. F. (1997/98). M. Ed.(Science Education) Research Portfolio Available: <http://eprints.ru.ac.za/2316/1/MUWANGA-ZAKE-MEd-TR99-62.pdf>
Contents:
 - i. I do not know what my problem is: Identifying science: Identifying teacher's needs;
 - ii. Teacher learning processes during workshops on acids and bases;
 - iii. Transformation in South Africa with particular reference to science education: possibilities and problems, and;
 - iv. Reflections on Research: My experiences with research: A social event that involves discourse and power relations.

F9. Conference presentations

1. Muwanga-Zake, JWF (Nov. 2019). Monitoring and Evaluation (M&E) of Public Health – Can We Stretch the Boundaries? 2ND International Conference on Public Health. 26th – 28th November 2019. Africana Hotel, Kampala Uganda
2. Muwanga-Zake, JWF. (Oct. 2019). The Enigma of ICTs and Learning Theories: Challenges and Possible Solutions in Developing Countries. *National Conference on Communications* 17th – 18th October 2019. Makerere University, Kampala. Uganda.
3. Imoter, Muwanga-Zake JWF & Balirwa, M. - Monitoring and Accessing the Facilities of Health Care Operations: An Application to Access Health Facilities.
4. Muhereza, KB, Muwanga-Zake JWF & Ofoyuru, E - A Mobile Motor Vehicle Identification Application: Possibilities of Location and Route of Public Vehicles to Mitigate Criminal Activities on Ugandan Roads.
5. Imoter, Tijah & Muwanga-Zake JWF. (28th August 2019). ‘Monitoring and Accessing the Facilities of Healthcare Operations: Challenges in Uganda ‘Golf Course Hotel, Kampala – Uganda. *Symposium on Partnerships, Policy and Systems Development for Universal Health Coverage*.
6. Muwanga-Zake, JWF. Things Fall Apart in Ugandan Higher Education – Despite Encouraging Internet Provision and Funding in Uganda. *Africa Internet Summit ’19*. 9th – 21st June 2019.
7. Muwanga-Zake JWF & Ssemakula, JB. (May, 2019). A Model for eLearning Adoption in Higher Education. . *International Conference and Workshop. Governance, Entrepreneurship & ICT for Africa*. “7th – 28th May 2019.
8. Muwanga-Zake JWF & Ssemakula, JB. (May, 2019). Students’ Experiences of eLearning at Institutions of Higher Education in a Developing Country. *International Conference and Workshop. Governance, Entrepreneurship & ICT for Africa*. “7th – 28th May 2019.
9. Tijah Igbazenda Imoter, Muwanga-Zake, JWF & Balirwa M. (May, 2019). Monitoring and Accessing the Facilities of Health Care Operations: Challenges in Uganda. *International Conference and Workshop. Governance, Entrepreneurship & ICT for Africa*. “7th – 28th May 2019.
10. Muhereza, KB, Muwanga-Zake, JWF & Ofoyuru Emmanuel. (May, 2019). Towards solving vehicle and driver route identification. . *International Conference and Workshop. Governance, Entrepreneurship & ICT for Africa*. “7th – 28th May 2019.
11. Muwanga-Zake JWF & Ssemakula, JB. (20th March, 2019). A Model for ICT Adoption in Higher Education in a Developing Country: A Conceptual Framework for Higher Education Derived from Ugandan Universities (at the National Council for Higher Education, Uganda). March 2019.
12. Muwanga-Zake, J. W. F. (June 2017). Whose Education Is It? The Exclusion of African Values from Higher Education. *International Conference on Re-Learning to be Human for Global Times: Philosophy, Information Technologies and Changes of the African Life Worlds*.
13. Muwanga-Zake, J. W. F. (June 1st – 2nd, 2017). Towards Validating Research Discourses among Bantu in Africa: Obuntubulamu as a Possible Transforming Agent. *International Conference on Re-Learning to be Human for Global Times: Philosophy, Information Technologies and Changes of the African Life Worlds, Council for Research in Values and Philosophy, Makerere University*.
14. Muwanga-Zake, J. W. F. (September 2015). Developing a Model for Educational ICT Adoption in Tertiary Institutions in a Developing Country: A Conceptual Framework at the Uganda Martyrs University as a Case. *Uganda Martyrs International Conference*.

15. Muwanga-Zake, J. W. F. (June 2015). Whose Education Is It? Developing Communities Left Out in Framing Higher Education. *World Academy of Science, Engineering and Technology Educational and Pedagogical Sciences*, London. UK.
16. Muwanga-Zake, J. W. F. (7th July, 2010). Globalisation – challenges in designing culturally appropriate curricula and research. *Annual Teaching & Learning Conference 2010*. University of Greenwich.
17. Muwanga-Zake, J. W. F & Dickins, J. (6th -9th April, 2010). Using ICT to Improve Engagement: A Case of Year 11 Students Learning Modern History. *Australian Computers in Education Conference*, Melbourne, Australia.
18. Muwanga-Zake, J. W. F. (26th -27th September, 2009). Preparing Teachers for ePedagogy. *25th Annual State Conference (U & Web 2.0)*. St. Marks Catholic College, Sydney. Australia.
19. Muwanga-Zake, J. W. F. (12th - 13th July, 2009). Narrative Research Across Cultures: Dimensions of Concern in Africa. *2nd Australasian Narrative Conference, University of New England, Armidale. Australia*.
20. *eLearning Africa 2009. Dakar, Senegal*.
21. Muwanga-Zake, J. W. F. (November, 2008). Blogging: Challenge to Instructional Design for Tertiary Education. E-Asia Conference, Kuala Lumpur, Malaysia.
22. Muwanga-Zake, J. W. F. (July, 2008). E-Learning and Implications for Educators in African Developing Communities. *E-India Conference*. New Delhi, India.
23. Muwanga-Zake J. W. F., Parkes, M. & Gregory, S. (2008). Blogging at University as a Case Study in Instructional Design: Challenges and Suggestions towards Professional Development. *Proceedings of the 2nd African Council for Distance Education Conference and General Assembly, July 2008*. Theme: Open and Distance Learning for Sustainable Development. Pages 457 - 468. Available: http://www.nou.edu.ng/noun/acde2008/acde_en/papers.pdf/PUBLICATION%20Conference%20Proceedings.pdf.
24. Muwanga-Zake, J. W. F. (December, 2007). Inclusiveness, Development and Ubuntu. Re-thinking Educational Research processes for Development in Bantu Communities. *Researching Work and Learning International Conference, Capetown, South Africa*.
25. Muwanga-Zake, J. W. F. (December, 2006). What Kind of Science do Educators Present to Learners in South African Classes? *Presented at the South African Association of Science & Technology Centres (SAASTEC) Conference, Richards Bay, South Africa*.
26. Muwanga-Zake, J. W. F. (November, 2000). Is Science Education in a Crisis? Some of the Problems in South Africa. Presented at *The 3rd National Conference on the Public Understanding of Science, Engineering, and Technology, Institute of Technology, University Of Fort Hare, King Williams Town, South Africa*.
27. The Assessment of Higher Degrees With A Particular Focus on Research: There Might Be a Need for Its Evaluation. Presented at a *SASE Conference* at Polokwane, 7th September, 2001.

F10. Muwanga-Zake Blogs

1. Research in an African Context - <https://africanresearcher.blogspot ug/>.
2. IT Project Management - <https://itkiu.blogspot ug/>.
3. ICT for Development - <https://developmentandict.blogspot ug/>.
4. Cyber Law and ICT Policy - <https://cyberlawandpolicy.blogspot ug/>.

F11. Media interview

1. Radio: Potential for e-Learning Africa:
<http://www.rnw.nl/africa/radioshow/potential-e-learning-africa>.
2. Newspaper: *Daily Monitor*, Friday, September 26th, 2014. University don calls for promotion of e-Learning in Uganda. Hosted by Yoweri Maganda.

F12. Evaluation reports:

1. 23rd April 2009. An evaluation of a book chapter titled 'Diversity and Design: an emergent model of matching curricula design to student need' in *Impact of E-Business Technologies on Public and Private Organizations: Industry Comparisons and Perspectives* by Ozlem Bak & Nola Stair.
2. Muwanga-Zake, J. W. F. (2004 – 2005). Evaluation of Micro-Science Equipment in Dinaledi Schools, Somerset Educational. South Africa.
3. Muwanga-Zake, W. F. & Brooks, D. (2001a). Evaluation Report Part I: Planning and Understanding the Goals and Responsibilities of Programme 3 (Improvement of Mathematics, Science and English), Kgatelopele District Improvement Project. CASME, University of Natal, Durban.
4. Muwanga-Zake, W. F. & Brooks, D. (2001b). Evaluation Report Part II: Planning and Understanding the Goals and Responsibilities of Programme 3 (Improvement of Mathematics, Science and English), Kgatelopele District Improvement Project. CASME, University of Natal, Durban.
5. Muwanga-Zake, J. W.F. (2018). Evaluating e-learning platforms (mElimu, ClanEd and Moodle).

F13. Keynote Speeches:

1. Challenges of a Changing Curriculum. IEEE Day Celebrations, 8th October 2019
2. Student Professional Awareness in Uganda - IEEE Conference (SPAC19) on student awareness, 3rd September 2019, Kyambogo University Uganda.
3. More Needs to be Done to Harness ICTs in Ugandan Higher Education – Despite Encouraging Internet Provision and Funding - IEEE Distinguished Lecture, 14th August 2019.

G. Major Grants/Funded Projects

- F1 Writing Study Materials for DIT, Cavendish University, Uganda (2017).
- F2 Agency: The World Bank. Year (2016). African Centre of Excellence Phase II. Uganda Martyrs University, Nkozi, Uganda. Value US\$ 6,000,000)
- F3 Agency: University of New England (2007-2008). Teaching Development Grant: Project: Opportunities for Improving Communication and Student Feedback: Blogging as a Pedagogical Tool (Value: A\$9,526).
- F4 Writing Study Materials for Sommerset East Micro-science Equipment, South Africa (2006).
- F5 Bid For Consultancy Services To Conduct Study On Status Of The East Africa Community (EAC) Higher Education Information Management System - IUCEA/Pro/Cons/18-19/005, 26th July 2019.

H. Summary of Job titles and Work Places**H1. Full time work experience**

Year	Job title & place
2016 - current	Dean, Faculty of Science and Technology, Cavendish University
2014 - 2016	Associate Professor and Head of the ICT Department, Uganda Martyrs University, Nkozi
2010 -2013	Senior Lecturer, Systems Management & Strategy, Business Management, University of Greenwich, London. UK.
2007 - 2010	Lecturer, School of Education, University of New England, Armidale. Australia.
2001 - 2007	Project Manager, CASME, University of KwaZulu Natal, Durban, KwaZulu Natal Province, South Africa.
1997 – 2001	Regional Manager & Lecturer, CASME-Eastern Cape Province, Rhodes University, East London, South Africa.
1983 – 1996	Head of the Science Department, Lamplough High School, Butterworth – South Africa Acting Head of Science Department, Masonwabe Finishing School – South Africa.
1981 – 1983	Science Teacher, Christ The King High School, Roma – Lesotho.
1980 – 1981	Technical Officer and Head of Research, Coffee Marketing Board, Kampala – Uganda.
1977 – 1980	Scientific Officer/Acting Head, Coffee Research Unit, Kawanda Research Station, Uganda.

H2. Part time experience

Period	Job title & place	Duties
2014	Lecturing: Kampala International University; Uganda Marty's University.	IT Project Management (Bachelors); MIS (Masters); Systems Implementation Project (PhD); Computer Information Systems(PhD); ICT policy and Cyber Laws (Masters)
2005	Internal Examiner: PhD thesis on Digital media in Education, University of KwaZulu Natal	Assessment of theses
2000 - 2003	Vice-Chair: Standard Generating Body for Development Practitioners (NSB 05) – Education, Training and Development	Chair, design and develop standards
1999 - 2007	Consultant, Somerset Educational, Eastern Cape Province, South Africa	Demonstrate & market Micro Science Kits
1998	Lecturer: ORT-STEP, East London – South Africa	Technology Education for Teachers
1995 – 1996	Teacher for Adults: Dalukhanyo, East London – South Africa	Teaching Biology
1994	Book Evaluator: Department of Education, Eastern Cape Province, Bisho – South Africa	Evaluating Biology Textbooks for High Schools

1991-1993	Marker and Senior Marker: Department of Education and Training, Pretoria – South Africa	Physical Science Paper I (Higher Grade)
1990 – 1991	Lecturer: Bethel College, Butterworth, Eastern Cape Province – South Africa	Lecture in Biology and Biology Teaching Methods
1977 – 1980	Soccer Player: Second Division, Uganda Transport Corporation, Kampala - Uganda	Playing soccer

H3. Volunteer experience/community involvement

2008 - 2009	Soccer coach. North Armidale Team, Armidale. Australia.
2007	Teacher training in ICT in Education, Armidale High School, Armidale Australia
2006	Reviewer of Papers ' Journal of Science Teacher Education
2006	Panel of Judges: South African Science Teacher of the Year
1999-2003	Vice Chairperson, The Standards Generating Body for Development Practitioners (Adult Learning Subfield) – Education, Training & Development, South African Qualifications Authority, Pretoria – South Africa: Designing standards and qualifications for development.

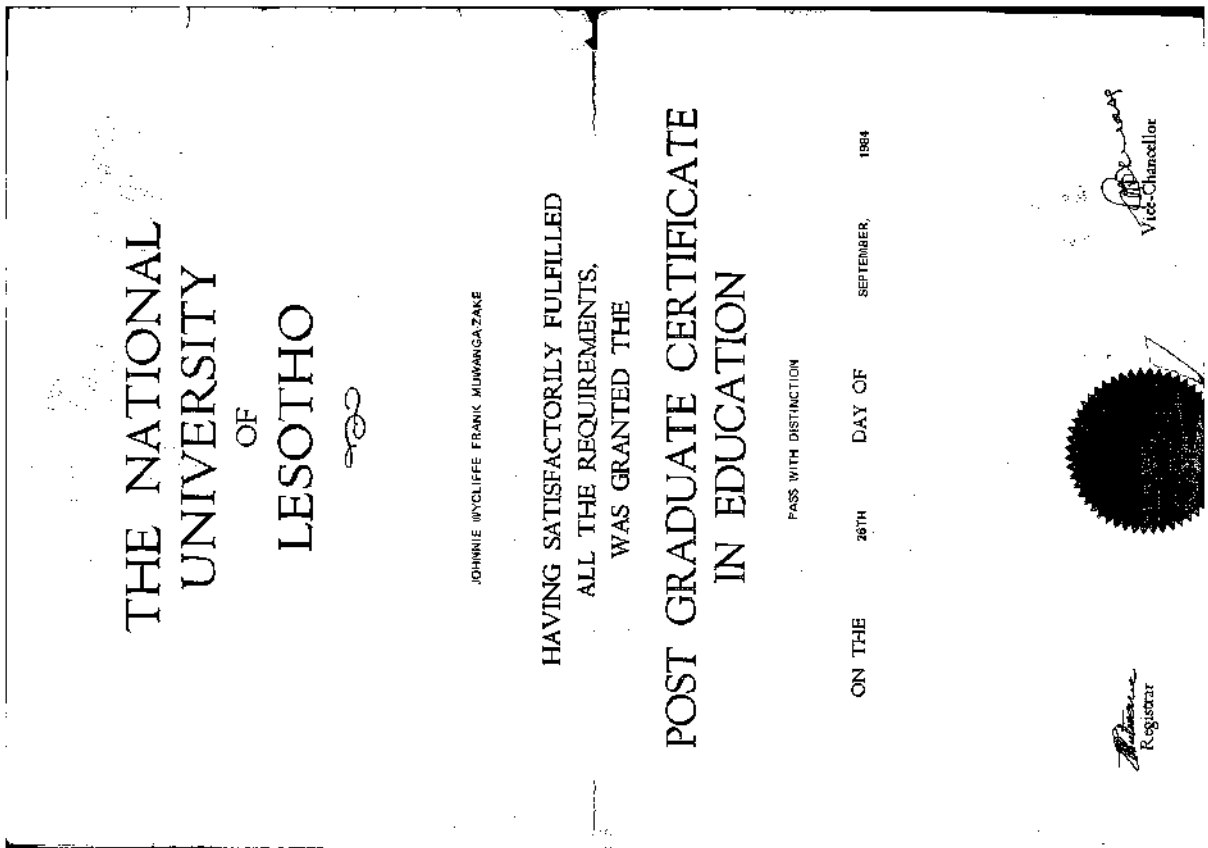
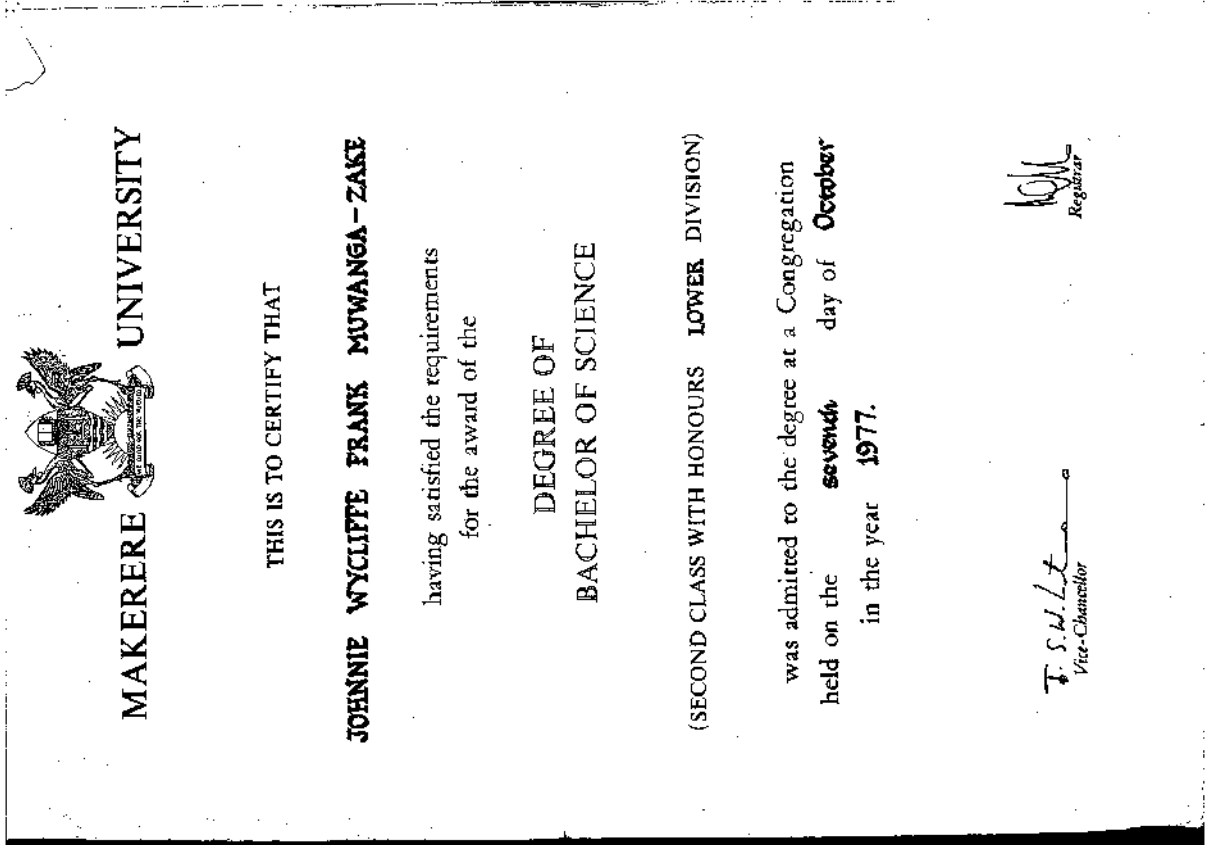
I Committees

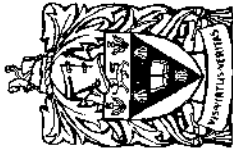
1. Irregularities Committee – Cavendish University.
2. Academic Board – Cavendish University.
3. Senate – Uganda Martyrs University, Cavendish University.
4. E- Portfolio – University of Greenwich.
5. Student experience of e-learning (covering impact, curriculum development, gender issues, evaluation) - 2010-11 e-Centre launch at the University of Greenwich

J Referees

J1. Name of referee	<i>Dr. Petros Ieromonachou</i>	Capacity	<i>Head of Department, Systems and Management Strategy, University of Greenwich</i>
Address	<i>SMS, Greenwich University, SE10 9LS London. United Kingdom.</i>		
Telephone number	<i>+44 20 8331 9000</i>	Email	<i>p.ieromonachou@gre.ac.uk</i>
J2. Name of referee	<i>Dr. Cynthia A' Becket</i>	Capacity	<i>Senior Lecturer, Early Childhood, University of Notre Dame</i>
Address	<i>140 Broadway (PO Box 944), Broadway NSW 2007</i>		
Telephone number	<i>+61 2 8204 4420</i>	Email	<i>Cynthia.aBeckett@nd.edu.au</i>
J3. Name of referee	<i>Associate Professor Julius Mwine</i>	Capacity	<i>Dean, Faculty of Agriculture, Uganda Martyrs University</i>
Address	<i>P.O. Box 5498 Kampala – Uganda</i>		
Telephone number	<i>+256 772 648 863</i>	Email	<i>jumwi@umu.ac.ug</i>

Copies of Certificates





RHODES UNIVERSITY
DEGREE
OF
MASTER OF SCIENCE

THIS IS TO CERTIFY THAT

JOHNNIE WYCLIFFE FRANK MUWANGA-ZAKE

WAS THIS DAY AT A CONGREGATION OF THE UNIVERSITY
ADMITTED TO THE DEGREE OF

MASTER OF SCIENCE

IN

ENTOMOLOGY

Derek S. Henderson
VICE-CHANCELLOR

[Signature]
DEAN OF THE FACULTY OF SCIENCE

[Signature]
REGISTRAR

GRAHAMSTOWN,

21 APRIL 1995

DATA BANK



RHODES UNIVERSITY
DEGREE
OF
BACHELOR OF EDUCATION

THIS IS TO CERTIFY THAT

JOHNNIE WYCLIFFE FRANK MUWANGA-ZAKE

WAS THIS DAY AT A CONGREGATION OF THE UNIVERSITY
ADMITTED TO THE DEGREE OF

BACHELOR OF EDUCATION

WITH DISTINCTIONS IN

EDUCATIONAL SCIENTIFIC

PSYCHOLOGY IN EDUCATION

Derek S. Henderson
VICE-CHANCELLOR

[Signature]
DEAN OF THE FACULTY OF EDUCATION

[Signature]
REGISTRAR

EAST LONDON,

8 MAY 1998



RHODES UNIVERSITY

THIS IS TO CERTIFY THAT

JOHNNIE WYCLIFFE FRANK MUWANGA-ZAKE

HAS COMPLETED THE REQUIREMENTS FOR THE

POSTGRADUATE DIPLOMA IN EDUCATION

David Lybrand
VICE CHANCELLOR

John E. East
DEAN OF THE FACULTY OF EDUCATION
John E. East
REGISTRAR

EAST LONDON
10 MAY 2003



RHODES UNIVERSITY

DEGREE

OF

MASTER OF EDUCATION

THIS IS TO CERTIFY THAT

JOHNNIE WYCLIFFE FRANK MUWANGA-ZAKE

WAS THIS DAY AT A CONGREGATION OF THE UNIVERSITY
ADMITTED TO THE DEGREE OF

MASTER OF EDUCATION

IN

SCIENCE EDUCATION

David Lybrand
VICE CHANCELLOR

John E. East
DEAN OF THE FACULTY OF EDUCATION
John E. East
REGISTRAR

EAST LONDON,
7 MAY 1999



**UNIVERSITY OF
KWAZULU-NATAL**

The Universities of Durban-Westville and Natal merged
to become the University of Kwazulu-Natal on 1 January 2009


This is to certify that

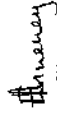
Johnnie Wycliffe Muwanga-Zake

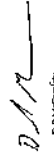
was admitted this day
at a congregation of the University
to the degree of

**Doctor of Philosophy
Digital Media**

having satisfied the conditions prescribed for the degree.


Johnnie Wycliffe
Vice-Chancellor


E. Maseko
Registrar


D. P. Mkhize
Dean

20 April 2005

Prior to the said merger, the person named in this certificate was initially registered
as a student at the former University of Natal