

Conference Report & Evaluation

Creating Futures Through Research – Meeting Challenges, Embracing Opportunities & Delivering Impact

Inaugural Collaborative Research Conference, INtel Institute of Higher Education, Nairobi
Dr Susan J Jones, Prof. Helen Edwards and Anita Aggarwal (INtel, Nairobi)

Background to Development of the Inaugural Research Conference at INtel

The INtel Institute of Higher Education, first established in 1990, is a privately run university close to the centre of Nairobi, Kenya. Specialising in courses in business and computing, INtel has been a longstanding collaborative partner with the University of Sunderland since 2000, delivering undergraduate and postgraduate programmes in computing and business to students in Nairobi as part of its TNE provision. As part of INtel's strategic developments in line with the Kenyan 2030 Vision for a knowledge-based economy (KBE), exploiting the application of information and communications technologies for the achievement of economic growth and international competitiveness, a key priority for the institution is to align its HE provision with the rapidly expanding private university sector charged with raising the quality of education, addressing inequalities and meeting the human resource needs of Vision 2030. A key focus in the changes to the education system that lie ahead include learning which will "inculcate the use of knowledge in science, technology and innovation (STI) to create wealth", and new incentive structures to, "recognise and reward innovators", including the support of specialised research centres and universities.

As a consequence of education policy changes driven by the Kenyan 2030 Vision initiative, INtel must adapt to the new changing HE landscape which includes significant long term development of its human resource base so that it is more able to contribute to a culture of research and innovation. To date the University of Sunderland collaboration with INtel has focused exclusively on the delivery of taught programmes. Although the part-time tutors delivering UoS programmes are for the most part active researchers from the University of Nairobi and the Jomo Kenyatta University of Agriculture and Technology for example, a lack of facilities at INtel and poor infrastructure or impetus for research collaboration has meant that developments in this aspect of the TNE partnership have not been given any importance. UoS computing programmes/modules delivered at INtel do benefit from a research informed curriculum because most academic staff responsible for modules delivered off campus are research active. However, the key focus in the relationship between academic staff in Sunderland and local tutors in Nairobi is the faithful delivery of programme content; no structures or resources are currently in place that would facilitate extending the academic interaction beyond this. This means that at present interactions in the TNE context, between computing academics who share the same subject specialisms and expertise are restricted to discussions about module content and delivery. This is a lost opportunity for research and the long term benefits to the strategic TNE partnership that this alliance would bring. Further, the constraints impacting on these cross-cultural

relationships are limiting opportunities to enrich the academic dialogue and discourse that might otherwise foster and help nurture a research culture at INtel.

Going forward a key priority for INtel is to commence the process of transforming aspects of its human resource base so that it is research active, can contribute more effectively to a research informed curriculum and engage in the developments underpinned by the Kenyan 2030 vision. To enable this long term shift in strategic focus, INtel has undergone a major extension of its estate which includes the creation of a new third floor, incorporating a purpose built conference facility, four new classrooms and a roof-top learning and recreational space. This capital investment demonstrates INtel's commitment to its long term strategy and is illustrative of the forces being brought to bear on public and private universities in Kenya at this time. In early 2015 the decision was taken to use the opening of the new facilities to stage an inaugural research conference, both to celebrate the new developments being opened at the college and to provide opportunities for young and early career researchers in universities in and around Nairobi to contribute to and engage in a research conference.

Conference Planning

In June 2015 Dr Susan Jones, Centre Leader for Computing programmes being delivered at INtel, secured funding from the University of Sunderland Digital Innovation Beacon to provide INtel with the support of an experienced and esteemed professorial researcher, namely Emeritus Professor Helen Edwards, to 'Chair' the proposed inaugural research conference at INtel from Friday 6th to Saturday 7th November 2015 and to act in an advisory capacity to help INtel to plan, organise and lead this important event:

The key goals of this inaugural collaborative conference were to:

- Provide staff at INtel interested in undertaking Ph.D research with an introduction to the research process and steps involved in engaging in and completing a Ph.D
- Provide opportunities for INtel's research active staff, including the principal Anita Aggarwal and colleagues from the University of Nairobi and the Jomo Kenyatta University of Agriculture and Technology, for example, to disseminate their research achievements and/or work in progress of their own research students
- Provide opportunities for postgraduate students at INtel to present their ideas for future research activity
- Promote dialogue and discourse between INtel staff (full-time and part-time) and senior alumni and strategic partners, (including the British Council and the Commission for University Education) and raise awareness on the impact of the Kenyan 2030 vision and INtel's place in the new HE sector

The key outputs from this project were to include:

- A series of research project proposals driven by the computing curriculum of UoS masters programmes and the interests and specialisms of collaborating staff;

- A volume of conference proceedings to be made available publicly via SURE, the University of Sunderland's open access research database.

Calls for participation in the conference were circulated via INtel staff, students and alumni in early Sept 2015 and fourteen submissions were subsequently accepted into the conference, forming the main part of the programme (not including Keynote Speakers).

Conference Planning

Conference Chair: Emeritus Professor Helen Edwards, Department of Computing Engineering and Technology, Faculty of Applied Science, University of Sunderland.

Conference Host: Anita Aggarwal, Principal, INtel College

Conference Organisation: Dr Susan J Jones, Centre Leader
Committee Rose Masaba, Administrator

Conference Ops Team:

Programme Design
IT & Sound System: Job Okanga

Conference Set-up Betty Alusa, Charleston Kagiri, Lucy Kuria, Oscar Lukunza, Philip Makhanu, Joyce Marete, Kenneth Miguna, Daniel Mugo, Paul Musakali, Henry Mutisya, Shadrack Mwangagi, Zachary Senelwa

Badges: Owen Oduor

Ushering Judith Kavukilwa, Lillian Kihiu, Evans Kyaa and Margaret Ogutu

Conference Programme

The conference was held on Friday 6th Nov 2015; a copy of the conference programme is included on the University of Sunderland SURE database. The conference commenced with a Keynote lecture by Professor Helen Edwards entitled, "Research Relevance & Impact: Where's the Evidence". A second Keynote lecture was presented by Prof Some of the Kenyan Commission for University Education on the HE context in Kenya. The remainder of the conference was divided along three key strands structured around the submissions, namely 'Business' (5 presentations), 'IS Modelling' (5 presentations) and 'ICT Use and Technical Solutions' (4 presentations). Presenters included research students and staff from a number of universities in and around Nairobi including:

- ❖ Chuka University
- ❖ Technical University of Nairobi
- ❖ The Management University of Africa
- ❖ United States International University – Africa
- ❖ University of Nairobi

Research Symposium

The conference was followed by a 'Research Symposium', effectively an interactive workshop delivered by Emeritus Prof Helen Edwards & Dr Susan J Jones which gave delegates the opportunity to consider what was involved in postgraduate research, to appreciate the difference between masters and Ph.D research and the challenges involved in postgraduate research studies.

Conference Evaluation

Both the inaugural research conference and research symposium were extremely well attended, filling the new auditorium to capacity (70 persons) during both events. The conference drew participants and delegates from a broad range of other HE institutions in and around Nairobi, including researchers and their supervisors, INtel alumni and staff. The recently completed facilities proved a highly fitting and high quality conference venue including excellent staging, audio-visual technology and furnishings suitable for such a prestigious event in the city. The conference organisation committee effectively planned, prepared and delivered the event to a very high standard, in keeping with other similar events staged in an international research context.

Keynote Speakers

The Keynote lectures were extremely very well received and were both followed by lively discussion and debate. Emeritus Prof Helen Edwards focused her presentation on approaches to demonstrating research impact, supported by her experience of developing structured approaches to evaluating empirical research (Prof Edwards PowerPoint presentation is available via the University of Sunderland SURE database). Prof Some's overview of the HE sector in Kenya was also very well received with much discussion on the changing HE landscape.

Conference Presenters

The conference strands and their respective participants provided an interesting and engaging mix of research ideas, work in progress and research methodologies and results. PowerPoint presentations from nine of these participants are also included on the University of Sunderland SURE database. The majority of participants were highly effective in terms of their oral presentation skills, although on occasion some participants had to be encouraged to stick to their allotted time slots. Key feedback from Prof Edwards to participants was to encourage them to focus on presenting the key aspects of their research, rather than trying to be overly detailed, resulting in overlong presentations. Prof Edwards also encouraged

participants to practice their presentations in advance of important conference events. Detailed feedback on conference presentations was provided by Dr Susan J Jones to all participants after the conference (see Appendix I). Participants were also given instructions on how to finalise their slides for submission and upload on the University of Sunderland SURE database (see Appendix II).

Conference Topics

The conference title, “Creating Futures Through Research – Meeting Challenges, Embracing Opportunities & Delivering Impact” was chosen for its inclusivity in contemporary research themes in business and computing and the submissions reflected and benefitted from this breadth, both in terms of interest and appeal. The research itself reflected ongoing challenges in the business domain of the effectiveness of leadership styles, co-worker support and employee engagement and challenges facing SMEs and social enterprises in the Kenyan context. An interesting range of presentations also fell under the IS Modelling and ICT Use strand, including the application and exploitation of ICT systems in a range of educational administrative and learning contexts, and in the use of ICT with children with dyslexia. The final strand on ‘Technical Solutions’ provided a fascinating mix of delivery mechanisms including multi-agent systems, reflecting international trends in the research into AI and its application in real world contexts.

Research Symposium

After the formal proceedings of the inaugural conference itself, the research symposium was a highly engaging, participative and fun event, during which groups of delegates explored their own personal understanding and misconceptions about the nature of the research process. Delegates were asked to brainstorm their ideas, then contributed to a broad summation of findings using flipcharts at the front of the auditorium, followed by a more general discussion.

From feedback at the end of the research symposium, respondents said that the most important things that they had learned or considered were:

- ❖ Their motivations for doing a Ph.D (16)
- ❖ Better understanding of the patience and persistence needed (10)
- ❖ Commitment required (9)
- ❖ Personal evaluation needed (9)
- ❖ Time and costs involved (8)
- ❖ How doing a Ph.D opens up opportunities (8)
- ❖ An understanding of differences of a masters and Ph.D programme (7)
- ❖ The challenge of moving from a masters to a Ph.D (5)
- ❖ Advice on undertaking a Ph.D (5)

In terms of areas for improvement in workshop delivery, six delegates felt that a longer time for the Q&A session would have helped. A number of delegates also suggested that they would like further advanced training in research methodologies, techniques and data analysis (12) and on how to develop skills in developing good research proposals to attract

funding (12). Delegates were also interested in how they could secure funding or sponsorship to embark on their own postgraduate research careers (6).

Post Conference Lunch & Networking

Following the Research Symposium on Saturday 7th Nov, all delegates were invited to a lunch and networking event on INtel's roof-top terraces which was also a 25th Birthday Celebration of the opening of the college. In chatting and discussing the event with delegates over lunch, it was clear that there was overwhelming support for the conference itself and for the provision of further opportunities to participate in research related workshops and conferences at INtel College. The lunch and networking event provided a perfect ending to the inaugural conference, which had clearly proven a valuable opportunity for staff, students and alumni to share and discuss their research aspirations and plans going forward.

Acknowledgements

Many people supported, organised and took part in this highly successful inaugural research conference at INtel College and our thanks go to everyone who played a part in making this conference happen.

Particular thanks go to:

- ❖ The University of Sunderland Digital Innovation Beacon for funding Emeritus Prof Helen Edward's visit to Nairobi
- ❖ Prof Some, Commission for University Education in Kenya for his Keynote Speech and support of this inaugural research conference at INtel College
- ❖ Ms Rose Masaba and the INtel administrative team who organised and staged the conference and research symposium

Especial thanks go to Ms Anita Aggarwal, Principal of INtel College for her overwhelming commitment to the success of this conference, without whose support and dedication this conference would not have been possible.

Appendix I

Creating Futures Through Research – Meeting Challenges, Embracing Opportunities & Delivering Impact

INtel College in collaboration with the University of Sunderland
6th & 7th November 2015

Conference Feedback

Dear Conference Participants

We would like to take this opportunity to thank you for your participation at INtel's Inaugural Research Conference held on 6th & 7th November 2015. The conference was a tremendous success and this was only made possible by the enthusiasm and professional approach taken by participants over the two days of the conference. The following feedback is intended to recognise the quality of the presentations at the event and to give pointers about what worked well and what could be improved by participants going forward.

Conduct of Presentations

On the whole presenters were well prepared to conduct their presentations, were confident speakers and addressed the audience clearly and with enthusiasm. Where presenters had prepared well in advance, this clearly helped on the day, particularly with respect to the duration of presentations. Mostly presenters kept to time, but a small number of presentations overran significantly. At conferences steps are taken to alert presenters if they are reaching their time limit, and it is important to react to these directions from conference organisers. On the whole presenters responded very well to questions and clearly understood the material they were presenting.

Presentation Slides – Structure & Content

The quality of slide presentations was mixed. Although some presenters used slides that had been clearly thought through in terms of structure, a number of presentations did not communicate structure well, and this ultimately impacted upon the presentation itself.

On the whole slides were overly 'wordy' and often presenters had cut and pasted large sections of text from their written dissertations or research papers directly onto slides.

Communicating in the context of a conference is very different to communicating in a research paper or other document. Presentation slides need to assimilate research work to enable audiences to follow the research process from problem domain through to findings and a clear narrative is required, presented succinctly using a slide format. This is the most common method for presenting research at research conferences. Unabridged blocks of text do not provide presenters with the visual cues they need to progress through their presentation systematically, and it was not uncommon for presenters to simply read the text directly from the slides. It is important to remember that audiences can read text, so text should primarily be hooks that the presenter can use to lead their audience through the material and to keep audiences interested. In summary, at the outset a presentation should begin with an overview of the presentation, should proceed to cover the structure as outlined and should end with by recapping quickly the material covered with some conclusions.

Presentation Slides – Design & Visual Appeal

Generally speaking, very little attention had been paid by presenters in the visual design and presentation of their slides. The use of specially designed templates, logos, diagrams, photographs and other visual material was extremely limited. Presenters need to recognise that a presentation is a multi-modal experience, with audiences watching as well as listening to material. Often where ideas are complex, diagrams can help people to get to grips with ideas quickly and effectively. Across the presentations the visual aspects of presentations was given very little attention. Creating and producing visually engaging presentation slides takes a lot of time, but professionally has high impact and is worth the effort.

Presentation Slides – Results & Statistics

Across the presentations, there was considerable use of statistical methods and results were generally presented well. However, few presenters actually used tests to elucidate the 'significance' of their results and primarily used descriptive statistics. While these kinds of statistics can be very helpful, in the context of published work, levels of statistical significance are critical to underpin the validity of results. In some cases presenters showed a lot of results that could have been better assimilated in tables. Presenters should always remember to try and help audiences to focus on key information quickly; tables can help with this.

Currency of Research Literature Reviews

The pace of research in ICT and business domains has increased dramatically in the digital era and in presenting new research it is important to contextualise within a body of literature that is as up to date as possible. Provision of bibliographic data via online databases means that students in universities have access to recently published research and it is important to use this. While the problems that all presenters are trying to address in their various research projects are clearly of the 'here and now', attempting to resolve problems for people facing social and economic challenges in Kenya, in some cases the research needed to reflect recent literature. In conducting research, finding the 'research question' is often the most difficult hurdle that researchers face and the literature review is critical in this process. For the purposes of this inaugural conference, the research presented was all acceptable as work in progress; going forward all presenters should recognise the need to put their work in the context of the most recent literature.

Appendix II

Creating Futures Through Research – Meeting Challenges, Embracing Opportunities & Delivering Impact

INtel College in collaboration with the University of Sunderland
6th & 7th November 2015

Preparation of Presentation Slides for Upload to the Sure Database

An important output from the conference is a set of proceedings and presentations which will be made available for Open Access via the University of Sunderland SURE database, creating exposure for the University, INtel College and their collaborative partnership.

The proceedings will also create exposure for staff and students who may not have a track record in publishing their work.

Conference participants are invited to submit their presentations to the University of Sunderland Open Access Database SURE using the following guidelines to finalise the slides ready for upload. It is important to remember that the publications will be accessible via search engines and consequently the attention to detail and quality of the presentations is paramount.

- First Slide should include the full title of the presentation, name of presenter and academic institution or organisation as applicable. The first slide should also include a photograph of the presenter. Note the photograph should not take up any more than 25% of the slide.
- Second Slide should include an overview of the structure of the presentation in bullet points.
- Body of the presentation should provide information succinctly and where presenters had copied blocks of long text in their original presentation, these should be replaced by key bullet points.
- Final Slide should provide a set of conclusions of the work and an indication of any future work.
- Slides could be improved by the use of visual material, but only if time permits.
- Slides should be checked for spelling and typographical/grammatical errors.
- There should be no more than 15 slides in total.

Please submit the final version of your slides to Ms Rose Masaba [sunderland@inteluni.ac.ke] by 1st February 2016.

Dr Susan J Jones
Conference Team