CHEC JOINT TASK TEAM-FUNDED PROJECTS IN 2015 AND 2016

INTRODUCTION TO THE CHEC-WCG PARTNERSHIP

This is the second newsletter from the Cape Higher Education Consortium (CHEC) to showcase its work with the Western Cape Government (WCG).

As indicated in the first newsletter, the partnership between CHEC and the WCG was formalised in a Memorandum of Understanding in October 2006 which provides a structured framework for engagement where expertise, research and best practices are shared for the benefit of both the Province and the universities – see the MoU on the CHEC website **http://www.chec.ac.za/external.html.**

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THE PROGRAMME OF ACTION AND THE PROJECTS FUNDED IN 2015

An annual grant from the WCG provides for funding for work within a number of strategic areas, particularly research projects that address the interests of both partners and may also include postgraduate students in the universities. Proposals from the universities are first evaluated internally before being reviewed for final approval at a meeting of the Joint Task Team.

In 2015, the strategic areas to which project proposals responded were:

1. Climate change / sustainability and adaptation
2. Innovation for social inclusion
3. Education and training
4. Strengthening Higher Education in the Western Cape

The following projects received funding in 2015:

1. The Development of the Child Rights and Advocacy Module (Lori Lake, Children's Institute, UCT) R30 000

2. Development and pilot testing of an evidence-based screening tool for the selection of foster mothers in South Africa (Johannes John-Langba, Dept of Social Development, UCT) R40 000

3. An evaluation of the Parent Centre's Positive Parenting Skills Training Programme – a randomised controlled trial (Cathy Ward, UCT) R48 000

4. Evaluating a remote sign language interpreting service in Cape Town; health science students collaborating with deaf participants and interpreters (Marion Heap, Health and Human Rights Programme, UCT) R30 000

5. Preparing pre-service teachers to teach with information communication technologies (Agnes Chigona, CPUT) R95 000

6. Maths and English Academy – a service-learning initiative (Hanlie Dippenaar, Faculty of Education, CPUT) R50 000

7. Development of novel photocatalysts and a prototype treatment plant for textile waste water (Veruscha Fester, Department of Civil Engineering, CPUT) R50 000

8. Municipal Participatory Risk and Vulnerability Assessment: a service learning exercise for DRS Honours students (Patricia Zweig, Department of Geography and Environmental Science, SU) Balance of funds from 2014

9. MHealth Intervention: Developing a mobile application for the international classification for functioning, disability and health (Stefanus Snyman, SU) R75 000

10. As You are Standing Here: an Excavation Project (Ernst van der Wal, Department of Visual Arts, SU) R50 000

11. Improving small-scale honeybush farmer knowledge for climate change adaptation (Shayne Jacobs, Department of Conservation Ecology and Entomology, SU) R50 000

12. Creating a trauma-sensitive classroom for adolescent learners at risk (Sharon Johnson, Psychology department, SU) R50 000

13. Stimulating effects of eCentres on community participation (James Njenga, Department of Information Systems, UWC) R50 000

14. Unlikely Arts: Aesthetic Education and Art Production on the Cape Flats (Lalu Premesh, Centre for Humanities research, UWC) R50 000

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FOUR EXAMPLES OF THE PROJECTS FUNDED IN 2015:

1 **Evaluating a remote sign language interpreting service in Cape Town; health science students collaborating with deaf participants and interpreters (Marion Heap, Health and Human Rights Programme, UCT)**

This project was carried as a Special Subjects Module (SSM) for second-year medical students in UCT's School of Public Health and Family Medicine over four weeks in July and August 2015. Its aim was to evaluate the acceptability of a Video Remote Interpreter (VRI) service for hospitals and clinics, particularly those in outlying and rural areas. In this way, the project would contribute to healthcare by advancing the reach of the medical interpreter service. It addressed the thematic areas of social inclusiveness, innovation and education and training.

The project was conducted at UCT with participants from the deaf community who acted as the patients, staff who acted as the healthcare personnel, and information technology experts. An interpreter was set up in a meeting room with a laptop and a Skype account was created. Students were involved in project planning and preparation including the development of consent forms, three questionnaires and protocols. During the final stages, the students analysed the data and wrote draft and final reports.

While participants in this study rated the VRI highly and reported that they were comfortable using this service during consultations, they generally preferred the face-to-face interpreter situation. The researchers recommended that the service be tested in the health services to determine its appropriateness in different locations.

Two student reports have been produced and information from these have been shared in three presentations: one with representatives of the Western Cape Health Department, a second with representatives of the National Department of Health and the third with academics from the Linguistics Department at the University of Stellenbosch.

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2

Preparing pre-service teachers to teach with information communication technologies
(Agnes Chigona, CPUT)

The study aligns with the WCG's broadband strategy to ensure that all schools are connected to broadband as a key reason for ensuring that all new teachers are adequately trained and equipped to teach with digital technologies and so participate in the Connected Schools environment.

A group of 2014 fourth-year pre-service Intermediate and Senior Phase teachers was selected for the study. This group had had previous exposure to and training in the use of ICTs (three hours once a week for six weeks). In-depth interviews were conducted with 20 randomly selected teachers from this group in 2014. In addition, three focus group interviews were conducted. These interviews considered participants' perceptions and experiences of the training and the effects of the training on their "level of control" in the classroom.

In 2015, seven of the trained teachers were observed in classrooms in order to determine how well prepared they were for teaching with technologies. Data analysis was conducted within the broader framework provided by Technological Pedagogical Content Knowledge (TPAK) theory.

The key finding was that while the teachers were "familiar" with the digital technologies in the classroom, they were not confident in using the technologies for curriculum delivery. In other words, they could not integrate the ICTs into teaching and learning. Participants explained that the use of digital storytelling (learned as part of their previous training) could not be implemented in the way that CAPs is designed.

The findings have implications for teacher education and for the instructors of modules that focus on digital technologies. The researcher argues for the use of "the instructors' own TPAK" but no concrete recommendations are provided.

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3

Municipal Participatory Risk and Vulnerability Assessment: a service learning exercise for DRS honours students (Patricia Zweig, Department of Geography and Environmental Science, SU)

This project was undertaken in Touws River, a low-income urban area near De Doorns on the N1. It aimed to investigate the risk and vulnerability profile of the Steenvliet community, based on the lived experiences of community members, particularly with regards to flooding, and a survey of existing and required skills among the town's youth.

During their three-day visit, the honours students met with municipal officials and town role players, conducted a transect walk of the community, interviewing residents, and conducted a risk assessment workshop with volunteers from the community and ward councilors. The students established the spatial extent and locality of high-risk areas in Steenvliet and represented this through narrative account, photographic evidence and a flood risk map.

A final consolidated report, based on the group reports, was delivered to the municipality and councilors and a hard copy was delivered to the town library.

4

Improving small-scale honeybush farmer knowledge for climate change adaptation (Shayne Jacobs, Department of Conservation Ecology and Entomology, SU)
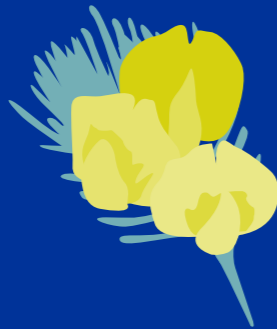
This project forms part of a larger research programme on honeybush and rooibos production systems as sociological systems. It combined field ecology and greenhouse trails with social surveys in local communities with specific farmer-driven research questions.

Following an initial workshop, student researchers were selected and carried out projects designed to address one or more of the four research aims. Semi-structured interviews were used to assess local knowledge, while greenhouse trials which involved the use of lime, polystyrene and Rhizobium inoculant as treatments. Resources were provided by local community members in collaboration with a local farmer. Plans were monitored in the university facilities for a period of two months.

The section on conclusions and recommendations contains various sub-headings related to the research questions and aims. These point to ways in which current knowledge should be documented and shared, accessed and disseminated. The need for additional involvement of the ARC, of older people and the youth, and of the local extension officers is highlighted. In addition, the use of lime is discouraged, the dangers associated with invasive trees and soil health and the more drought resistant species of honeybush are identified. There are also recommendations for further research – especially in natural sites.

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THE 2016 PROGRAMME OF ACTION AND ITS PROJECTS

2016

Following a consideration of the five strategic goals of the WCG, the four focus areas in the CHEC-WCG Programme of Action were re-aligned to match the five Provincial Strategic Goals.

The five focus areas are:
1. Create opportunities for growth and jobs
2. Improve education outcomes and opportunities for youth development
3. Increase wellness and safety, and tackle social ills
4. Enable a resilient, sustainable, quality, and inclusive living environment
5. Embed good governance and integrated service delivery through partnership and spatial alignment

In addition, two broad types of projects were identified for funding:

- single institutional project grants as in 2013-2015; and
- a larger collaborative project grant where more than one university could work together on a project.

The collaborative grant was awarded to Mark New of UCT (the primary investigator) and researchers from the other three institutions for a project entitled "Bridging the divide: Building resilience to climate change in the Western Cape through knowledge exchanges".

Awards for the following single institutional projects have been made this year:

1. Preventing pregnancy amongst girls and promoting dual contraceptive use amongst teenagers (PI – Prof Di Cooper, UWC with UCT)
2. The effectiveness of using pictograms on medication labels at primary healthcare facilities in Cape Town (facilities used by the UWC School of Pharmacy as service-learning sites) (Dr Mea van Huyssteen, UWC)
3. Research dissemination systems facilitating research uptake in the Western Cape Department of Health (Dr Virginia Zweigenthal, UCT)
4. Development of an assessment tool for community systems for healthy lifestyles and wellness (Prof QA Louw, SU)
5. Evaluation of a smartphone tele-consultation system for acute burn injuries in the Western Cape (Prof L Wallis, SU)
6. Production of Carbon Neutral Biofuel using Marine Biomass: an incentive to cut down the carbon emission responsible for climate change (Dr Lalini Reddy, CPUT)
7. Backyard dwellings in a new state housing development (Ms Trish Zweig, SU)

EDUCATION

8. An investigation into literacy teaching and learning in Quintile 1 schools in the Western Cape (Prof Rajendra Chetty, CPUT)

The reports on these projects are due in December 2016 after which we will again feature some examples in a newletter.