

COMMUNITY SERVICE PROJECTS AND SERVICE LEARNING - RECOMMENDATIONS FOR THE SCHOOL OF ELECTRICAL AND COMPUTER SYSTEMS ENGINEERING, CUT

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Abstract

This article explores the possible opportunities in Community Service and Service Learning for the School of Electrical and Computer Systems Engineering at the Central University of Technology, Free State, and outlines the associated recommendations. The development of these activities, together with research and postgraduate expansion, are particularly significant in the context of the necessary transformations from a Technikon to a University of Technology and will enhance the relationship with the community that the University must serve. It offers to industry a channel to influence the content of training programmes and a supplementary source of research and development for their specific needs. It further highlights the role of tertiary institutions in skills development of public servants.

1. INTRODUCTION

The Central University of Technology, Free State, (CUT) is committed to strengthening its involvement with the community by focusing on two key elements of service: service-learning modules in the curriculum and community service projects developed in partnership with community organisations and university members. Community service is seen by CUT as essential in fulfilling its mandate of helping to create a vibrant, peaceful and productive civil society.

The two components of service are being introduced systematically throughout the University. With regard to service-learning, it is defined as "... the development and implementation of a community engagement agenda through mainstream academic programmes". Service-learning, according to CUT (2004),

"... enables a student to gain experience of the meeting of needs in the community; it incorporates reflection and academic learning and it contributes interest in and understanding of community life. In essence, service-learning refers to activities that combine volunteer work with education."

Modules that integrate a community-service component into the curriculum are being systematically introduced to all schools. In 2004, 7 modules had been piloted; additional modules are planned for 2005.

The second component of service to the community is in the development of community service projects through partnerships of community and the university. Community organisations frequently approach the university with specific needs, in which case an evaluation is conducted to identify the project's feasibility and the possible role of the

university. Or, through the process of consultation, a joint project may be decided upon by community organisations and university. CUT has undertaken a range of service projects such as a vegetable garden, pottery, and candle-making. An “Adopt a school” project trains learners in computer skills. Since the mission of CUT with respect to community engagement is to “empower individuals to become and remain economically active members of their communities” (ibid), projects very frequently are designed to generate income. Given the high unemployment rate in the province and the country as a whole, community service translated into viable projects fulfils a critical function in the community.

The involvement of the academic staff, fundamental to the success of the university’s community service objectives, is enabled by a method of evaluation that allows staff members the opportunity to develop their own plans. Five key performance areas - teaching and learning; research; management/team work; community service; personal and professional development are used as guides. Of importance is the recognition of community service as a key performance area. Community service may also be combined with research, publications, and professional development.

2. PURPOSE OF THE INVESTIGATION

The purpose of this investigation was to explore ways in which the university’s objectives can be advanced within the school. This is a report of a survey conducted with stakeholders, and of recommendations that the School may consider in both service-learning and community service plans. Representative members of community, government, and university were consulted to understand their needs and the challenges they face, and as a result, to suggest implementation strategies that would successfully bring community service projects into the School.

The following sections briefly describe meetings with representative stakeholders, with recommendations in the concluding section of this report.

3. STAKEHOLDERS

Community: South African National NGO Coalition (SANGOCO) is represented in the Free State. Its core mission is to eradicate poverty in South Africa. SANGOCO’s internal focal areas are in the adoption of common values; good governance; ensuring accountability to the stakeholders; developing management and human resources; establishment of sound financial management strategies; and the proper use of its resources. SANGOCO aims to create an enabling environment for NGOs and FBOs by influencing policy and providing support to the member organisations.

Projects may originate from its members or from a variety of educational campaigns. Examples include a project management course; a poultry project; a piggery. Many of the member organisations are involved with training and income-generating projects: since CUT has the expertise to assist in this regard, further investigation could be very fruitful.

SANGOCO had no specific projects to suggest at the time of the meeting, however, it had previously informed member organisations of the University’s intentions of being actively

involved with community service projects.

Local government: The Economic Development Planning section of the Mangaung Local Municipality has developed four major thrusts, each with specific programmes:

- Economic diversification;
- Creation of an environment conducive to economic growth;
- Development of Mangaung into a regional economic centre;
- Employment creation.

Given the range of programmes in the municipality's development strategy, local government offers a rich potential for the involvement of CUT. For example, in order to achieve one of their objectives, the municipality contracted Boston College to deliver courses on customer service. CUT can be contracted to provide similar short courses.

The municipality's engineering division can be investigated in greater depth. This division administers water, electricity, and other technical services for the community.

One of the major aims of the government has been the reduction of poverty. Since poverty is a local issue, more efficient local governments are essential if this major challenge is to be addressed effectively. There are significant resources in the higher education sector that can provide the necessary training and advice.

University: University has created interrelated structures, whose functions are to establish community service projects and service-learning modules.

Community services department: This department is an essential link between community and faculties. They receive requests from the community for assistance, and the department consults with the appropriate school. One example of a recently received request is that the university has been asked to aid in the development of a tent-making machine for small hiring businesses. The aim was to help small businesses manufacture tents used for hire rather than the owners having to purchase them at a higher cost. Should this project be adopted, it potentially achieves not only the goal of community service, but interrelates with the municipality's goal of economic diversification and job creation.

Faculty Community Service Committees are being formed to provide institutional structures for coordination and development. The Community Services Manager is a member of all faculty committees.

Service-Learning: Service learning modules are being systematically introduced into all Schools. The first 7 modules were piloted in 2004 with very favourable evaluations from students and staff. As service-learning modules are implemented throughout the university, it is anticipated that students will understand the methods and value of developing the community. At the same time, service-learning advances the core values of the university. Each school will have at least one service learning module within the next few years.

Marketing: The Deputy Vice-Chancellor, (marketing) is responsible for seeking funding from industry for community services projects. Industry may directly or indirectly benefit from the project: where the benefit is indirect, it may be in the form of training or community stability.

The School system: Schools offer a wide range of opportunities for service. The Deputy Vice-Chancellor noted that he frequently has meetings with school principals, who discuss their specific needs. The next meeting is being scheduled, at which time the idea of service by the School can be further discussed. Options for community service at schools can be an expansion of projects such as “Adopt a School” currently being sponsored by the university, the “Saturday School”, or in new projects. Of importance to note is that projects in schools have the added benefit of upgrading students and attracting them to engineering and to CUT. One identified need is in management; principals have indicated that they want a course on school management and general management practices.

Staff: Involvement of the academic staff is fundamental to community service. They provide the expertise, creativity, determination, innovation in making any community service project effective. As noted above, the university has developed institutional support structures and is giving formal recognition of community service in staff evaluations. Staff are entrusted with the responsibility of evaluating their own strengths, interests and constraints, and in consultation with stakeholders, develop community service projects that meet the community’s needs. As community service benefits staff not only in performance appraisals, but it leads to research and publications.

A meeting was held with the school’s staff to discuss possibilities of initiating community service projects. The staff’s positive response indicated the capacity and willingness to pursue this further. Several suggestions emerged in the brief meeting, amongst them the possibility of training people to be able to fix electrical equipment and to effectively run a small business. This can be pursued with the relevant organisations.

4. RECOMMENDATIONS

Local government: it is suggested that further consultations with the municipality be undertaken to become familiar with the four focal thrusts and associated programmes. Particular attention can be paid to the engineering component of the section.

Community: As SANCOGO has a wide network of community organisations, it is recommended that the School strengthen the relationship with it, develop possible service projects through consultation. Staff, for example, thought of a possible project that would train electrical technicians who could then start a small business. SANCOGO could assist in the refinement of such a project.

Service-learning course: Staff responsible for the Service-Learning programme were pleased with the interest shown by the School in service-learning. It is recommended that the School, aided by the service-learning unit, develop a module during this year, to be offered in 2006. One of the existing courses offers good possibilities to be modified into a service learning module.

Schools: Discuss needs with the school principals. The school may be able to, for example, coordinate a management training course, an expanded “Saturday School”, programmes which encourage students to enter science fields of study. The range of possibilities is very broad.

Workshops: The University plans to hold workshops during the year for further discussions on community service. It is recommended that the School request the workshop to be held as soon as possible so that staff may continue developing ideas for service projects.

Staff: further consult with staff about possible community service projects. It may be useful to have a school representative/task team charged with overseeing the development of community service projects in the school. The School can be represented on the faculty community service committee.

Student involvement: students should be involved in the planning and execution stage. Some students have intimate knowledge of community needs whilst others may not understand the need for community service. Student involvement has the benefit of inculcating the concept of good citizenship, trains them in leadership and innovation. If the recommendation of a school task team is adopted, students can be brought into the discussions when/where appropriate.

Timeline: Develop goals and objectives for the next three years. This has the obvious benefit of providing a systematic means of bringing community service fully into the School.

Research: Research and community service are interdependent. One of the major contributions a university can make to the community is to use its expertise for the benefit of the community. Research and publications naturally evolve from such projects. Since this is a major component of academic responsibilities, community service benefits the community, the institution, the academic staff, and creates new knowledge and understanding.

Acknowledging challenges: The introduction of community service throughout the university involves change in practices, curriculum and expectations of academic staff. In particular, part of any change is a change in attitude. To bring a new project to fruition will mean working with the unknown and will involve a great deal of time spent in discussions. The result is expected to be both intrinsically and extrinsically rewarding for all stakeholders. By acknowledging the challenges, the School can in part anticipate and overcome them as they occur. Some of the anticipated challenges may be: difficulties of exploring unknown; developing the means to let ideas develop with partner organisations; identify links between community service and research; effectively drawing upon existing university structures; creating an environment where community service is perceived as beneficial and not an extra burden.

5. CONCLUSION

The plans at CUT for the introduction of service into all aspects of teaching and learning are comprehensive and constructive. Particularly because of this, the School of Electrical and Computer Systems Engineering has support systems to draw on as they develop their own unique service projects. The constructive environment created at the university means that the School can function in harmony with the university's overarching objectives, and this makes success possible.

6. APPENDIX OFFICIALS INTERVIEWED

University:

- 1: Professor Thulare, Deputy Vice-Chancellor, Marketing.
- 2: Prof. G. D. Jordaan, Executive Dean of the Faculty of Engineering, Information and Communication Technology, overview of university and faculty plans regarding service learning and community service.
- 3: Mr. Brent Jeremiah, Faculty Administrator, Engineering, information about Saturday School.
- 4: Community Service/Service-Learning: Community Service Office, Ms. Jackie Thulare, Manager.
- 5: Staff responsible for Service-Learning: Prof. M. G. Mahlomaholo, Dr. F. VanSchalkwyk.
- 6: Board Meeting, School of Computer and Engineering Systems.

Mangaung Local Municipality:

- 1: Documentation: Directorate of Economic Development Planning, Mangaung Economic Development Strategy. Notes economic position at present, challenges and strategies.

Four main thrusts: economic diversification, Creation of an environment conducive to economic growth, development of Mangaung into a regional economic centre; employment creation.

- 2: Ms. Tokky Morolo, Executive Director, Mangaung Local Municipality, Directorate of Community and Social Development.
- 3: Mr. George Mohlakoana (082-850-9803)

Community:

SANGOCO, Coalition of NGOs, CBOs, and FBOs. Mr. Justice Loape. SANGOCO's office in Bloemfontein is a provincial office of a national organisation.