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A step-up action-research model for the revitalisation of service learning modules

This reflective overview indicates how action research was utilised to revitalise and improve service learning modules for first-year nursing students at the University of the Free State. The two modules under consideration include a curriculum-based community development project in which the students compile a community profile and subsequently strive to address identified needs and challenges together with the community. A step-up action-research model was developed to enhance the quality of these service learning modules, mainly by focusing on a more thorough integration of service, learning and research, with this finally resulting in more sustainable student learning and community development. The research process has moreover demonstrated the importance and appropriateness of action research for the development of higher education service learning modules.

'n Aksienavorsingsmodel vir die trapsgewyse hervitalisering van diensleermodules

In hierdie reflektiewe oorsig word daar aangedui hoe aksienavorsing aangewend is om diensleermodules vir eerstejaar verpleegkundestudente aan die Universiteit van die Vrystaat te hervitaliseer en verbeter. Die twee modules wat bespreek word, sluit 'n kurrikulum-gebaseerde gemeenskapsontwikkelingsprojek in, waarin die studente 'n gemeenskapsprofiel saamstel en vervolgens poog om behoeftes en uitdagings wat geïdentifiseer is, saam met die gemeenskap aan te pak. 'n Aksienavorsingsmodel wat trapsgewys verloop ('n "step-up"-model) is ontwikkel om die gehalte van die diensleermodules te verbeter, hoofsaaklik deur te fokus op 'n deegliker integrasie van diens, leer en navorsing; en dit het uiteindelik gelei tot meer volhoubare studenteleer en gemeenskapsontwikkeling. Hierdie navorsing het origins die belangrikheid en toepaslikheid van aksienavorsing vir die ontwikkeling van diensleermodules in hoër onderwys aangetoon.

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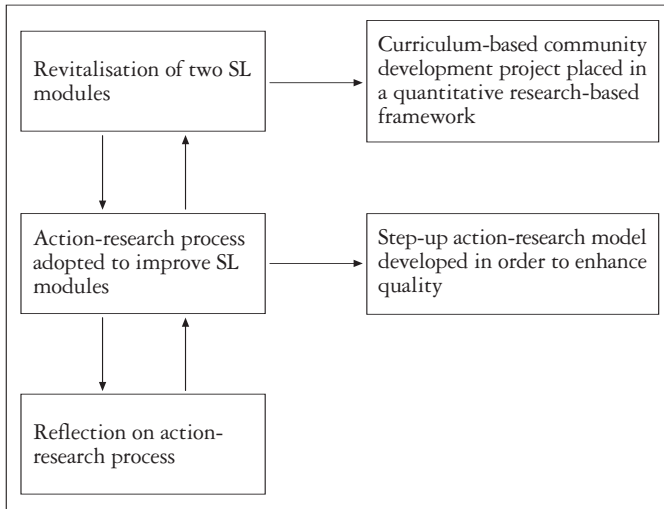
The aim of this article is to reflect on the action-research process and the experience gained by participants during the purposeful revitalisation of two service learning (SL) modules involving first-year nursing students at the University of the Free State (UFS). The revitalisation of the modules described in the article was aimed at integrating the core functions of higher education, that is, service, learning and research, in order to improve sustainability in the educational field as well as in the area of community development. Although these SL modules have been fairly successful in previous years, and were continuously aligned with national and international community service trends, the adoption of the Community Service Policy of the UFS in 2002 (UFS 2002) provided an added impetus for the action-research innovation process that was embarked on. With the advent of this policy, stronger emphasis was placed on integrating community service into teaching, learning and research than ever before in the history of this institution.

One of the most noteworthy actions taken during the action-research revitalisation process was to integrate theory and practice by placing the curriculum-based community development project, that forms part of the two SL modules mentioned above, into a research-based framework. In this project students are given the task of assessing the needs of a community, of making a community diagnosis and, finally, of addressing some of the identified problems while they engage in activities that encourage community participation and development.

The focus of this article will be on the action-research cycle of the 2003 academic year of the first-year nursing students. The main researcher and first author of this article was the co-ordinator of this group of students; and will be referred to as the research co-ordinator. With the support of other academic staff members in the School of Nursing, the research co-ordinator actively engaged in guiding the research process. The implementation of a step-up action-research model, developed by the research co-ordinator, aided and enhanced the revitalisation and improved the quality of the two SL modules. This model explains the adopted action-research process for facilitation of renewal and integration, and it can possibly guide other convenors of SL modules in need of revitalisation and improvement.

The discussion in the article can be separated into the various “strands” illustrated in Figure 1.

Figure 1: Strands in the article



A considerable component of this action-research process also formed part of the extensive national SL initiative referred to as the Community-Higher Education-Service Partnerships (CHESP)¹ programme, which aimed to develop and conduct research on SL modules at various higher education institutions in South Africa. By means of providing dedicated funding, on the one hand, and by setting specific aims and objectives for the SL modules of the UFS School of Nursing, on the other, this programme has made a considerable contribution to the innovation of the two SL modules under question. Many of the data collection techniques to be discussed in this article stemmed from the monitoring and evaluation component of the CHESP programme.

For a better understanding of the context in which the research process took place, background knowledge will now be provided on SL, sustainable education and community development, as well as on the institutional premises for the development of SL.

1 The South African Joint Education Trust, together with the Ford and Kellogg Foundations, has been supporting the CHESP initiative since 1998 (www.chesp.org.za).

1. Conceptualisation and background

1.1 Service learning

Bringle & Hatcher (1995: 112-22) define SL as an educational experience where students take part in an organised academic activity that meets the needs of a community. Students later reflect on the activity in order to gain further understanding of the module content and to enhance their sense of civic responsibility. Responding to an item of the CHESP post-implementation questionnaire, a 2003 first-year nursing student at the UFS defined SL as “learning your theory in a practical way by serving in your community”. This questionnaire focused on the students’ perception of SL after the event of their SL experience. Within the CHESP framework, McMillan (Billig & Furco 2002: 57) defines SL as an opportunity for students to obtain credits for academic learning while carrying out beneficial community projects. Thus, it could well be described as a teaching strategy that integrates service to the community into the curriculum. Furthermore, SL aims to empower communities through the partnership it establishes between the community, university and various service providers. At the time of the revitalisation of the two SL modules, there was already a well-established partnership with the services and the community involved due to previous community-based education and SL projects.

1.2 Sustainable education and community development

The focus for this section will fall on the research impact on educational sustainability (the learning component of SL) and sustainable community development (the service component of SL). The concept of sustainability came to the fore in 1987, when the World Commission on Environment and Development published *Our common future*, a landmark report in this regard (Santone 2003: 60). This report issued a call for the improvement of human well-being while maintaining long-term environmental viability. A specific need for sustainability in the educational field was expressed by the United Nations’ declaration of the period stretching from 2005 to 2015 as the Decade of Education for Sustainability (Santone 2003: 64). Educational sustainability is seen by Wheeler & Bijur (Santone 2003: 61) as a rigorous approach to lifelong learning, emphasising higher-order thinking, decision-making, collaboration and

problem-solving. In South Africa, the outcomes-based educational approach facilitates all of the above requirements for sustainable learning. The research co-ordinator's striving to achieve sustainability in modules from the discipline of health sciences is thus reflective of an interdisciplinary and worldwide movement.

The political changes in South Africa in the 1990s may be considered to have been some of the most critical forces in the process of educational change. It became vital to adapt education to the needs and demands of the changing society. The *Education White Paper 3, a Program for Higher Education Transformation*, endorsed broadened participation in social interests and needs (DoE 1997: 8-9). According to the White Paper, community service programmes should promote an awareness of the social and economic development role in the sphere of higher education. The availability of expertise and infrastructure for these programmes would demonstrate such a commitment from institutions, while partnership formation between higher education institutions and the wider society would encourage interaction, strengthen relationships and ultimately result in sustainable community development. The ways in which the partnership model of SL initiatives can contribute to sustainable development for all involved have been discussed by Erasmus & Jafftha (2002). They had already underlined the institutional commitment to community engagement:

The UFS regards collaborative, co-operative partnerships, based on mutual understanding and clear agreements of intent, as a *sine qua non* for community service learning and research (CSL & R) programmes (Erasmus & Jafftha 2002: 11).

Their main contention is that SL partnerships provide an enabling framework for the collaborative efforts of the various constituencies to become more meaningful, reciprocal and viable. The linkage between SL and sustainable development, taking higher education "beyond the ivory tower" of knowledge, dissociated from reality, has also been elucidated by Prof M Fourie (2003: 33) in an article based on an investigation of the impact of the CHESP SL modules implemented at the UFS in 2002.

1.3 Institutional background

During 2003 it became clear that the UFS leadership was intent on reaffirming the institution's commitment to providing meaningful service to society. At the same time, there arose a new understanding that the full integration of the core functions of teaching and learning, research and community service could lead to the excellence, innovation and equity that are intrinsic to the vision of the institution. The need for the transformation of higher education institutions towards greater social responsibility has been endorsed through the adoption of a Community Service Policy in October 2002. In his inauguration speech as rector of the UFS, F C v N Fourie (2003: 4) explained that the UFS viewed community service learning (CSL) and research as an integral part of the core activities of the university, and not merely as an "add-on". A maxim for community service at the UFS that has been taken up in the Community Service Policy reads as follows: "We learn and serve in partnerships for sustainable development". This confirms the dedication of the University to the partnership approach in their striving for the sustainability of the development goals for all involved (UFS 2002: 4).

From 1969 until 1996, the UFS School of Nursing offered a four-year generic degree programme, where the training of nurses was primarily hospital based and teacher centred. The healthcare needs of communities were not a particular priority in programme planning. In 1991 the School of Nursing became involved in the formation of a University-Community Partnership Programme in Mangaung (MUCPP), funded by the Kellogg Foundation. This partnership initiative contributed to the development of a new curriculum for the generic degree programme, following a community-based education (CBE) approach. The premise of this new approach is that early student exposure to health-related problems in communities better prepares students to deal with challenging situations in their future careers. Fichardt *et al* (2000: 90) classified the community-based education approach used by the School of Nursing (first implemented in 1997) as an independent, consultative, training-focussed and service-orientated programme. In their first year of study, students now focus on community involvement after which they complete a second year of more specific primary health care. Third-year students deal primarily with secondary and tertiary settings and fourth-year students receive training in mental health and midwifery. Students are

therefore introduced to the community and families before they deal with individuals in hospital beds. The understanding here is that, when interaction with individuals takes place, the patient is seen holistically and the student comprehends that this individual is part of a broader system.

This holistic approach is aligned with the critical cross-field outcomes identified by the South African Qualifications Authority (SAQA) (RSA 1997: 48). These generic outcomes inform all teaching and learning, extend across curricula and are not restricted to a specific learning context. In addition, these outcomes address the cognitive, social, psychomotor and affective areas of student development. The endeavour to achieve these outcomes forms an integral part of the overall implementation process of the community development project in the nursing modules concerned. The students engage in activities such as group work, the use of technology, public speaking, conducting meetings and reflection sessions, which are all complementary to the achievement of these critical cross-field outcomes. One of the outcomes which enhances the holistic approach entails that the student should see the world as a set of related systems, and thus should understand that problem-solving contexts do not exist in isolation.

It is against this background that the rest of the article will be presented. The next section outlines the structure of the two SL modules within which the community development project functions.

2. Structure of the service learning modules

The two integrated SL modules under consideration, namely VRT 116 (Nursing Theory) and VRP 114 (Nursing Practical) are offered in the first semester of the first year of study. The focus of the modules falls on community assessment (identification of community needs) and development (implementation of actions to address needs). Students concentrate on community needs that relate clearly to their curriculum content. In the second semester, students focus on the stages of human development in the theory component of their course of study, consolidating what they have learnt by completing family studies. As part of their theoretical foundation for the VRT 116 module, students receive instruction on themes such as community assessment and development;

epidemiology and demography; primary health care principles; partnerships; and environmental health principles. Acquiring skills such as communication techniques; meeting procedures; and public speaking and group dynamics forms part of the preparation for implementing the community development project assignment and this is included in the VRP 114 module. The project serves as a vehicle to integrate theory and practice (praxis) for the CSL modules. Zuber-Skerrit (2001: 15) defines praxis as the interdependence and integration of theory and practice, research and development, thought and action.

In addition to the above-mentioned outcomes listed for the VRP 114 module, the South African Nursing Council (SANC) requires that each student following this module should complete a specific number of experiential learning hours in different health settings. This entails a specific placement of the students in hospitals, clinics or the community, in order to gain experience related to the exit level outcomes of the programme. In fulfilling the requirements for the first semester, the practical component involves service in the community through involvement in the community development project. The project is implemented in purposefully chosen sections of Mangaung, a previously disadvantaged urban township community.

For the duration of the experiential learning period (six hours, twice weekly, for approximately ten weeks), students enter the community in groups of 12 to 15 students, accompanied by a facilitator. These groups are heterogeneous in terms of race, language, learning style and gender.² The purpose of this heterogeneous group division is mainly the promotion of sensitivity to cultural diversity. It also serves as a strategy to ease entry into the community. In addition, the diversity in the groupings and the variety of available skills contribute to the effective application of theory into practice. The structuring of the two modules (as set out above) was found to be conducive to the revitalisation of the modules. In order to address the issue of meaningful integration of service, learning and research, action research was regarded by the research co-ordinator and other colleagues as a suitable approach, mainly in view of the known fact that it complements the nature of experiential learning approaches such as action learning and SL.

2 The learning style of each student is pre-determined, according to the Kolb model, by the UFS Kopsie Counselling and Development (KCD) division.

3. Research methodology

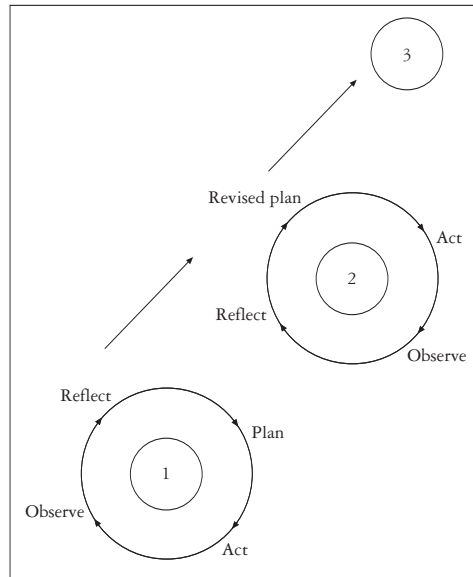
3.1 Research paradigm

Reason & Bradbury (2001: 1-4) contend that action research is grounded in a participatory worldview emerging at the present historical moment. The research itself is a participative, democratic process concerned with developing practical knowledge in the pursuit of worthwhile human purposes. Fear *et al* (M Fourie 2003: 34) believe that a participatory worldview endorses a “sustainable ethos”. It is through this lens, within a participatory methodological paradigm (Mouton 1996: 37), that this study has been conducted.

3.2 Action research

In action research, the existence of multiple realities is a given and therefore the entire research process cannot be placed within a positivist paradigm (Waterman *et al* 2001: 2). O'Brien (1998: 2) mentions that action research takes place in a real-world situation and turns the persons involved into researchers. He further notes that the initiating action researcher, unlike researchers with a positivist stance, does not attempt to remain objective, because the researcher is actively involved in the process of promoting change. Furthermore, Zuber-Skerrit (2001: 23) states that we need to explain and justify our research paradigm so that the findings can be evaluated accordingly, rather than using external positivist criteria. The research co-ordinator and other academic staff members involved in the SL modules of the first-year nursing students related to this view of research and endorsed personal, active participation in the process. Members of the research set were also convinced that more traditional approaches to research would not effect the improvement and change desired for this SL module; thus the action-research approach was followed. The validity and strength of this study, as set out in Figure 2, thus lie in its participatory nature, change initiation and the articulation between planning, action and reflection for the purpose of revising and redesigning the SL modules (cf Waterman *et al* 2001: 3; Altrichter *et al* 2002: 130).

Figure 2: The action-research spiral



3.3 Theoretical framework

Zuber-Skerrit (2001: 8-16) utilises principles from the following three theories in order to explain her theoretical framework for action research: the personal construct theory, critical theory and systems theory. The principles of these theories relate to the methodology followed for this study. The personal construct theory implies that action researchers are personal scientists who construct and interpret their own experiences; and thus knowledge and theory become personalised, relevant and integrated into practice. An important principle in critical theory is that, in order to achieve real transformational change, one needs to adopt a critical and self-critical attitude. However, critique is never taken as a personal attack, but is a necessary condition for change, recreation or innovation. The systems theory uses the principle of searching for holistic solutions to complex problems. Systems thinkers understand that all things are interrelated. In applying these theories, the participants in the action-research initiative under discussion used their contextual knowledge (gained through experience) collaboratively. During group

meetings, problem-solving was facilitated by means of systematic critical thinking processes. O'Brien (1998: 2) explains that action research differs from general problem-solving activities in that such interventions are informed by theoretical considerations. He clarifies this argument, stating that the emphasis on scientific study separates this type of research from daily problem solving.

Throughout the research process, the actions based on theoretical considerations resulted in change, while reflection by students and academic staff resulted in a better understanding of research and theory application. Dick (2000: 2) confirms that the action-research design serves a dual purpose, namely, to yield simultaneous change and understanding. Likewise, Noffke (Waterman *et al* 2001: 2) are of the opinion that the strength of action research is its participatory approach, linked to action and change. Kurt Lewin, referred to as the father of action research, was a proponent of the principle that decisions are best implemented by the people who help make them (Waterman *et al* 2001: 1, O'Brien 1998: 6). The process adopted in the UFS action-research initiative was collaborative, that is, the academic staff involved in the modules shared their concerns with the partners involved in order to find solutions to the emerging challenges (Zuber-Skerrit & Farquhar 2002: 102). Weekly meetings were held to provide a forum for discussion of the revitalisation of the SL modules and the research process. Throughout the process, the academic partners participated in decision-making. The four moments of the action-research spiral (cf Figure 2) were continuously utilised to implement decisions made during the group discussions. In order to facilitate the research process a so-called "step-up" model (cf 3.6), which is based on the "moments" of the conventional action-research spiral, was developed.

Data collection methods and techniques, as well as some of the ethical principles that were followed, will now be elucidated.

3.4 Data collection methods and instruments

A predominantly qualitative approach was followed for data collection. A wide range of data was collected and analysed by means of a variety of methods, as action research allows for the utilisation of various approaches to data collection (O'Brien 1998: 8). The various sources of data strengthen the rigour of research through the principle of trian-

gulation. Mills (2000: 49) classifies qualitative data collection techniques for action research according to three types of data sources, namely, experience, inquiry and examination. Data collection for this initiative thus included all three sources. For example: administering of pre- and post-implementation questionnaires (CHESP monitoring and evaluation instruments), reflection reports, focus group interviews (the CHESP FGI protocol was utilised and interviews were conducted by an independent researcher), minutes of weekly meetings, discussions, student course evaluations and observation were all utilised as sources of data.

Table 1: Data collection methods

| Purpose of data collection | Participants | Methods and instruments | Data source according to Mills' Taxonomy |
|---|---|--|--|
| Data collected on the two SL modules | Students Community members Faculty members Service sector members Research co-ordinator | Questionnaires (pre and post) Module evaluation Reflection reports Focus group interviews | Inquiry Inquiry Experience Inquiry |
| Data collected on the action research process in order to revise the SL modules | Faculty members Research co-ordinator | Minutes of meetings Reflective discussions Module evaluation SWOT analysis | Examination Inquiry Inquiry Inquiry |
| Data collected to reflect and evaluate the action research process | Research co-ordinator | Reflective notes Researcher as observer CHESP narrative report | Experience Experience |

The action-research team consisted of all the faculty members involved in the two modules, first-year nursing students, a service sector representative and some community members. Most of the data gathered in the course of 2003 was analysed by an independent researcher; however, faculty members' summative reflection on the findings was conducted at the close of the implementation phase. Formative reflection occurred throughout the action phase and involved all faculty members, with only occasional moments of community participation, due to logistical and financial constraints. This shortcoming, that is, the inability to elicit further community input, should be a priority in future action-research cycles.

3.5 Ethical principles

The appropriate ethical principles for action research as described by O'Brien (1998: 10), were taken into consideration during the action-research initiative described in this article. They include openness to the suggestions of others, collective decision-making and equal access to the information that was gathered. The adopted process was essentially collaborative, which means, *inter alia*, that the academic staff involved in the modules were able to share their concerns on an ongoing basis (Zuber-Skerrit & Farquhar 2002: 102). Weekly meetings gave staff the opportunity to reflect, plan and act on challenges that arose during the implementation period. These meetings also provided a forum for discussion of both the SL modules and the action-research process. The involved academic staff accepted the actions that were taken to renew the SL modules and participated in decision-making based on data collected from the staff, students, service sector and the community.

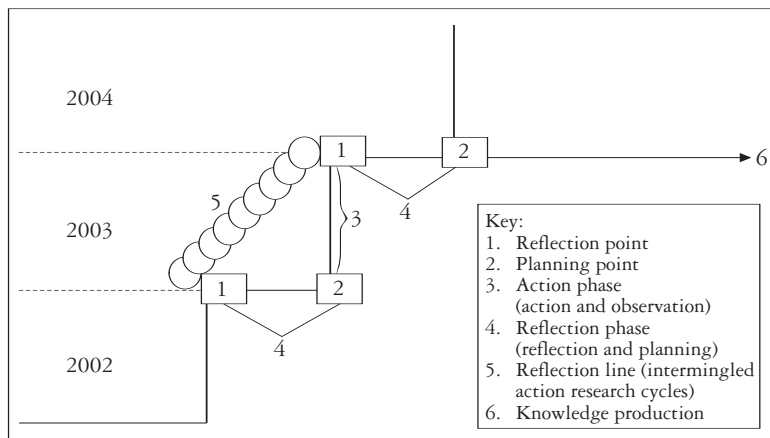
The following two sections will explain the model that was developed to enhance the quality of the research process and the actions taken.

3.6 Development of the step-up action-research model

The "step-up" action-research and development model (cf Figure 3) flows from the cyclical spiral of action research and serves as the basis for reporting on the research process. The model consists of ascending action-research steps, where each step represents an action-research set, each of which, in turn, consists of two phases, namely an action phase (cf Figure 3, number 3) and a reflection phase (cf Figure 3, number 4).

The action phase takes place when participants act on the planning and collect the data or observe the situation. During this phase, upward movement representing improvement and change takes place, thus taking the quality of the modules to a higher level. During the reflection phase, planning and reflection create the basis for the next action phase to be built upon (redesigning). Planning for further, revised action is done in order to move up yet another level. Knowledge production is a result of the processes of reflection and innovative redesign. The forward movement of the reflection phase to the right indicates the contribution to knowledge creation (cf Figure 3, number 6). Within each step-up action-research set, multitudes of intermingled action-research cycles occur including formative reflection. This is illustrated with a diagonal line in the form of a spiral (cf Figure 3, number 5) cutting through each reflection point (cf Figure 3, number 1). Summative reflection takes place at the reflection points. These reflection processes contribute to both quality improvement as well as to innovation and knowledge creation, as indicated by the upward movement of the slope. The planning point (cf Figure 3, number 2) serves as a basis for departure in identifying and implementing actions. This planning point is an extension of the reflection process.

Figure 3: The step-up action-research model



4. The step-up action-research model applied to service learning

There is a close relationship, or a “natural affinity” (cf Erasmus 2003), between SL and action research. Both have strong elements of planning, acting, observing, reflecting and redesign or revision. The participatory nature of both is visible in the SL partnerships and collaborative action-research activities. Where the common features of SL and action learning are concerned, Erasmus (2003: 2) also points to the fact that both promote the fundamental premise that community members can generate valid knowledge about the social systems in which they participate and that they should be full partners in defining, investigating and acting to meet the relevant challenges.

The step-up model may also be used to explain SL in general, again indicating the close link between action research and SL. The reflection processes of the reflection phase reinforce the learning taking place in the student. Through action and observation, service inside a community allows learning to take place and contributes to community development. The upward movement in Figure 3 is indicative of this. There is a direct relationship between the action phase (service to the community) and the reflection phase (learning) of student learning when using SL as a teaching strategy. The integration process of service and learning results in sustainability of the learning process and sets the stage for community involvement and development.

The implementation of the 2003 step-up set will be discussed with reference to the various phases of the model in the following sub-sections.

5. Implementation of the step-up model

5.1 Planning and reflection: beginning of 2003

At the end of 2002, the first-year nursing co-ordinator and the portfolio head for community service and learning were involved in reflective planning on ways to address sustainability issues. The reflection phase (cf Figure 3, number 4, end of 2002) indicates this process. The question of how service and learning could be integrated for greater sustainability, led to the formulation of the following hypothesis: The more

innovative the integration, the greater the possibility to reinforce sustainability. Challenges with related possible actions surfaced because of this reflective planning process and evolved around two facets of SL, namely the educational (learning) impact and the community (action) impact.

Although the students were engaged in some kind of investigation while completing their community development projects in the previous years, they did not fully grasp the essence of the research; students merely participated in the projects without properly reflecting on their actions. The key challenge was to structure the project activities in such a way as to introduce the academic concept of research to first-year students. The contention was that early involvement with research principles would promote a research culture amongst undergraduate students and that this would facilitate the implementation of outcomes 13 and 14 of the National Plan for Higher Education Transformation (NPHE) (MoE 2001: 71).⁴ Collier & Morgan (2002: 187) state that research methods can provide a foundation for courses that include elements of community-based learning. They developed a methods-based SL project, where the nature of focus group methodology facilitated the students' understanding of sociology. Likewise, the community development project of the nursing students was placed within a quantitative research-based framework (cf Table 2). The aim of this innovative method was to facilitate an understanding of the research steps and principles through practical application, thus promoting learning and impacting on the community at the same time.

The actions planned within the modules in order to support the application of the student research included a lecture on the quantitative research design and process, student activities related to environmental health issues, the compilation of an assessment instrument, participation in a coding process, and the description of the data. The compilation of an individual assessment instrument is a learning experience in itself, but the provision of a standardised instrument was an action aimed at the improvement of the quality of the actual community assessment. Likewise, the use of a biostatistician for the statistical analysis of the student research contributed to yielding more reliable results.

4 Outcome 13 and 14 of the NPHE focus on increased enrolment and output at Master's and Doctoral level, where funding of institutions are linked to output.

Table 2: Placing a curriculum-based community development project within a quantitative research framework

| Research process | Applied to project |
|--|---|
| Formulate a research problem/question | Assignment given to students: Compile a community profile/Assess a specific community Structured activities in workbook to guide the process |
| Define the study's purpose | To compile a community profile and make community diagnoses To identify health risks |
| Review relevant literature Develop a frame of reference | Module content: Research Demography Epidemiology Environmental health Community assessment |
| Hypothesise/make assumptions explicit and identify limitations | Assume that environmental safety will be lacking |
| Select a research design | Quantitative design, descriptive in nature using survey method Examples provided to guide the students |
| Define a population | Bloemside Phase Six population |
| Conduct sampling | Random selection |
| Conduct a pilot study | Test assessment instrument |
| Implement the research plan Collect the data | Collect data from the community Interviews with selected community members |
| Analyse the data Interpret the findings | Organise and code data in class: all students involved Analysis conducted by biostatistician Identify patterns and trends in class: different groups covered different themes |
| Communicate the findings | Presentation: Community Project Written profile Conference participation: national and international |

An adaptation of the existing timetable had to be done in order to facilitate the implementation and integration process of these actions in a comprehensive, workable way. The new timetable clearly indicated practical, theoretical, community and other activities, and facilitated effective facilitator involvement.

From 1997 up to 2002, students participated in curriculum-based community development projects, in small groups, within different communities. This only affected a small group of people and seemed to exercise a limited influence on the communities involved. A further challenge was to restructure the process in order to exercise a greater impact on the community. Since 2003 all students have been engaged in one large project in one community only, aiming at a greater and more sustainable impact on the community.

5.2 Action and observation: 2003

Participative plans and actions implemented on a continual basis were vital for sustaining both student learning and community development. This notion is confirmed by Greenwood & Lewin (Melrose 2001: 160) who state that action research is a continuous and participative process to create sustainable learning capacities.

During the 2003 action phase, the planned actions described in the previous cycle were implemented. Observation (which included data collection) took place on a continual basis (cf Figure 3, number 3, 2003). A complete report on the gathered data was compiled in the CHESP interim narrative report (Honiball 2003). Data applicable to the revitalisation process of the two SL modules were selected and analysed using the most suitable and logic procedure for the specific set of data. Tesch (1990: 96) points out that it is possible to analyse any phenomenon in more than one manner and that each qualitative analyst must find his or her own process of creative involvement. However, as Beyliefeld (2002: 135) affirms, this does not imply methodological lawlessness, as the methodological approaches and techniques have to be accounted for throughout.

Interpretations took place against the background of planned actions. Reflection on the analysed data served a formative function and formed part of the intermingled action-research cycles (cf Figure 3, number 5).

Additional actions emerged through these participative, continuous reflection processes such as the proper implementation of the re-structured timetable for optimal learning opportunities for all. Furthermore, the complexity involved in facilitating and co-ordinating four different groups working on one community development project created the need for innovative and instantaneous actions.

Some of the most salient issues emerging from an analysis of the students' reflection report are reported below:

- Wider community involvement should take place
- Prompt logistic arrangements should be made
- Student presentations should illustrate student learning
- Better co-operation between students and facilitators should take place
- An annual programme should be given to the community.

5.3 Step-up action in response to the findings

At the end of 2003, the faculty members reflected on the first action-research set (cf Figure 3, number 1, end of 2003). Through this summative reflection process, validation of the findings and an overview of the research outcomes were conducted. The next step-up movement emerged from reflecting on the research process, and thus the planning sessions held at the end of 2003 led to new actions for 2004. This included, among others, regular meetings with the leaders of the student groups in order to deal with problems and to train them in assisting with the flow of events. The group leaders acted as facilitators who motivated their peers. An additional action that was taken involved the sharing of the main responsibilities related to the community project between two academic staff members. One staff member facilitated the writing of the community profile and the other one drove the planning process of the project presentation. Student groups alternated between the profile writing sessions and the presentation planning sessions. Due to the sharing of the responsibility and the fact that the smaller groups allowed for individual facilitation, students were exposed to better learning opportunities. However, this action is in need of re-consideration, because the fact that a number of students were involved in the writing process of the profile resulted in a fragmented profile. A

further action entailed the involvement of the community and the schools in the planning and implementation of project activities. This resulted in a strengthening of partnerships and utilisation of home-based caregivers in accompanying students and academic staff. Certain of the actions taken in 2003 had an escalating effect in 2004 and their effect is visible in the ongoing strengthening and building of partnerships.

6. Outcomes achieved: reflection

6.1 Educational sustainability

The data indicated that students felt they benefited from the research-based approach adopted in doing the community development project. One student wrote as follows in a post-implementation questionnaire:

I think our course's approach was very effective, not only did us students develop people and communication skills, but also develop better understanding or background knowledge of their circumstances.

Faculty members felt that students were more actively involved in the learning process than before and that the research approach stimulated critical thinking in students and contributed to the scientific management of nursing education in general. For example, students had to compile their own assessment instrument and then compared it to the standardised instrument normally used to assess the community. However, the 2003 students experienced the coding process of their project data as unorganised while the facilitators felt that it was an achievement to be able to guide first-year students through such a process. Colleagues who were not initially involved with the first-year students felt that too great a task was attempted. Still, the successes related to the research-based approach ultimately surprised many of the sceptics. The design of a more structured timetable for the two modules and the systematic implementation of the student project activities undeniably complemented the process of understanding and learning undergone by the students. A more organised approach involved more structured opportunities for the students than before, which led to the relatively easy implementation of the project and modules in general.

Various stakeholders, such as academics within other disciplines, community members, as well as service partners were invited to the

annual celebration where students disseminated the results of their community development project. The overwhelmingly positive feedback from the attendants was greatly encouraging to the students. Student responses to questions relating to their research process showed insight and understanding. One of the answers anticipated that the next group of first-year students would continue the process in 2004, thus building on the research in an effort to sustain and improve the community. In other words, the logical manner in which these questions were answered clearly showed that the students had grasped the scientific process.

Two academic staff members, two students and two community members had the opportunity to present the action-research process, including the quantitative student project, at an international Action Learning, Action Research & Process Management (ALARPM) conference (Honniball *et al* 2003). One of the students also presented an individual family study conducted in the second semester, after exposure to the community development project. The student employed a quantitative research methodology in carrying out the family study. Knowledge and skills gained through the learning experience of the first semester were applied in the second semester. This particular student also presented the family study at an international nursing conference in 2004. The reactions of the attendants were extremely positive and this student's project was broadcast on *Morning Live*, a television programme of the South African Broadcasting Corporation. The sustainable effect of learning that took place is evident. However, not all students were granted equal opportunities to present their data. The project thus led to the improvement of presentation skills for some of the students, while all students benefited from the group work on which the presentations were based.

6.2 Sustainable community development

Vegetable gardens established by the students at a local school situated in the community served by them in 2003 showed signs of sustainability almost a year later when the 2004 first-year students entered the same community. The excitement of facilitators and students alike was clearly visible. The involvement of the whole group of students in one project in the same community exercised a direct impact on that community.

During a focus group interview, one of the community members mentioned the fact that the community became self-reliant because of the positive effects of the community development project. The importance of the sustainability of the projects was also emphasised. Suggestions for the future included wider advertising of project implementation, and involvement of, for example, Radio Letsedi and local newspapers to recruit more community members for the projects. Sports events between students and community members were also recommended as a means to build trust.

An article in the *CommTalk Community Service Newsletter* of the UFS (2004) illustrates the impact that the SL modules under discussion had on the community and the schools involved. Botlehadi Primary School was declared a “health-promoting” school and the author comments as follows on the achievements of the lecturers and students involved: “This would not have happened without the contribution from the University of the Free State’s School of Nursing”. However, it should be noted that evidence of sustainable community development is not only a result of actions taken through this research, but was also made possible through many years of committed service and strong partnerships between faculty, services and the community.

6.3 Partnership sustainability

Partnership sustainability also extended to the close collaboration with the Department of Health, as well as with the agricultural sector, thus contributing to trans-disciplinary, application-oriented (Mode 2) knowledge production.⁵ The focal points of these partnerships have been to further develop and sustain vegetable gardens and similar initiatives such as soup kitchens. The following expression of gratitude came from one of the schoolteachers acting as a representative of the community and service sector:

Botlehadi Health Promoting Committee would like to thank the University and the Nursing Department for engaging in the service learning project and programmes. That means a lot for our school and the community. We wish that other University Departments could also be involved in Service and Learning Projects or Programmes that could benefit our schools and communities.

5 The involvement of the agricultural sector emerged specifically in 2004 as a direct result of their taking cognizance of the vegetable garden established in 2003.

Furthermore, a community member made this salient point during a focus group interview:

More people should be drawn into the partnership. Mutual relationships will encourage trust and input into sustainability. We also feel that more faculties and departments should be included in the partnership.

Reflection on the results illustrated an improvement in many facets of the SL modules. Service, learning and research were integrated and sustained through innovative actions. The research process that was utilised resulted in sustainable student learning and partnerships that could address community needs.

7. Value and benefits

The value of the action-research approach cannot be disputed. There is also the possibility of applying the step-up action-research model in other SL modules. Furthermore, drawing on a research-based framework when implementing SL illustrates the manner in which a research process can facilitate the integration of service and learning, which, in turn, results in sustainable student learning and the fulfilment of community needs. In order to enhance a research culture for undergraduate students, similar research-based programmes may be considered in other disciplines. Likewise, the School of Nursing should consider including similar research activities in the second year of study to reinforce and sustain the research principles taught in the first year.

It is advisable that institutions and departments with no SL experience or context use action research and specifically the step-up model to design and develop new SL courses. The value lies in the participatory, informally structured and flexible nature of the process. The involvement of all partners in all moments of the action-research process is vital.

8. Personal reflection

Dick (1999: 6) refers to the value of personal reflection after the rest of the research team has gone. Likewise, Melrose (2001: 162) contends that self-reflection on the research process leads to an understanding of action research as well as the area of practice. The research co-ordinator actively made observations throughout the action-research process and mo-

nitored the interaction of the team. Through self-reflective processes she concluded that team members must have a particularly positive attitude or willingness to join in all actions in order to successfully facilitate the action-research approach; it was realised that the team leader should not be dominant, but should guide the process tactfully. Continuous self-reflection is thus certainly an important tool for enabling the researcher to facilitate the contributions of all participants. It is by means of reflective plans and discussions that we can shape the future for our clients, the students, and for our partners in the community. In addition action research is an ideal way for junior lecturers to get involved and to prepare themselves to conceptualise and implement SL courses. They can further their studies and better their qualifications. Such research has obvious benefits because of its being work-related. Group cohesion, as an element of participatory action research, is a worthy element for further investigation.

9. Conclusion

This reflective overview of the revitalisation of the two SL modules for first-year nursing students has provided evidence of the rich scope for higher education research into SL modules. In addition, the positive reciprocal effect of well-organised SL processes in higher education has once again become evident. In conclusion, the following testimonies:

- Service sector representative: “We are what we are because of the School of Nursing”.
- Community member: “The fact that the community should take ownership to enable sustainability has been grasped”.
- Student: “When providing service to any one person, you are, at the same time, being educated yourself”.

Bibliography

- ALTRICHTER H, S KEMMIS,
R McTAGGART & O ZUBER-SKERRIT
2002. The concept of action research.
The Learning Organisation 9(3):
125-31.
- BEYLEVELD A A
2002. Integration and assessment
of critical outcomes in a learning
programme for first-year medical
students. Unpubl PhD thesis,
Health Sciences. University of the
Free State: Bloemfontein.
- BILLIG S H & A FURCO (eds)
2002. *Service learning through a
multidisciplinary lens*. Greenwich,
Conn: Information Age Publishing.
- BRINGLE R G & J A HATCHER
1995. A service learning curriculum
for faculty. *The Michigan Journal of
Community Service Learning* Fall
1995: 112-22.
- COLLIER P J & D L MORGAN
2002. Community service through
facilitating focus groups: The case
for a methods-based service-
learning course. *Teaching Sociology*
30 April: 185-99.
- DICK B
1999. Action research and publica-
tion.
<[http://www.scu.edu.au/schools/
gcm/ar/arp/research.html](http://www.scu.edu.au/schools/gcm/ar/arp/research.html)>
2000. The change process and
action research.
<[http://www.scu.edu.au/schools/
gcm/ar/areol/areol-session02.html](http://www.scu.edu.au/schools/gcm/ar/areol/areol-session02.html)>
- DEPARTMENT OF EDUCATION, RSA
(DoE)
1997. *Education White Paper 3. A
Programme for the Transformation on
Higher Education*. Pretoria: Depart-
ment of Education.
- ERASMUS M A
2003. The 'natural affinity' between
(participatory) action research and
service-learning in South African
higher education institutions.
Unpubl paper presented at the
10th International Action Learning,
Action Research & Process Manage-
ment (ALARPM) & 15th Interna-
tional Participatory Action Research
(PAR) Conference, University of
Pretoria, 21-24 September 2003.
- ERASMUS M A & C D JAFTHA
2002. The role of community
service learning in sustainable
development programmes. The
Role of Higher Education in Sus-
tainable Development conference,
Environmental Management for
Sustainable Universities. EMSU
2002 in Africa. Rhodes University,
Grahamstown. 11-13 September.
<[http://www.uovs.ac.za/documents/
community_service/2005-05/
2005_09_Community_service_
sustainable_development_policy_
web.pdf](http://www.uovs.ac.za/documents/community_service/2005-05/2005_09_Community_service_sustainable_development_policy_web.pdf)>

- FEAR F A, R J BAWDEN, C L ROSAEN & P G FOSTER-FISHERMAN
2002. A model of engaged learning: frames of reference and scholarly underpinnings. Unpubl paper.
- FICHARDT A E, M J VILJOEN, Y BOTHMA & P DU RAND
2000. Adapting to and implementing a problem- and community-based approach. *Curationis* September: 86-92.
- FOURIE F C V N
2003. Continuity and change, scholarship and community, quality and equity. Inauguration Speech as Rector and Vice Chancellor of the UFS, 7 February 2003.
<http://www.uovs.ac.za/documents/2003-02/2003_inaugural_speech_fourie.pdf>
- FOURIE M
2003. Beyond the ivory tower: service learning for sustainable community development. *South African Journal for Higher Education* 17(1): 31-8.
- GIBBONS M
1998. *Higher education relevance in the 21st century*. Paris: Secretary General Association of Commonwealth Universities.
- GREENWOOD D J & K LEWIN
1998. *Introduction to action research: social research for social change*. Thousand Oaks, Calif: Sage.
- HONIBALL S
2003. *Interim narrative report: CHESP pilot service learning modules*. Bloemfontein: University of the Free State.
- HONNIBALL S S, I SEALE, E M PETERSON, K COETSEE & C FOORD
2003. Revitalisation of a community development project in a community-based programme for nursing. Paper presented at the Action Learning, Action Research & Process Management (ALARPM) Conference held at Pretoria on 21-24 September 2003.
- MCMILLAN J
2002. The sacred and profane: theorising knowledge reproduction processes in a service-learning curriculum. Billig & Furco (eds) 2002: 55-70.
- MELROSE M J
2001. Maximizing the rigor of action research: Why would you want to? How could you? *Field Methods* 9(3): 160-80.
- MILLS G E
2000. *Action research: a guide for the teacher researcher*. Upper Saddle River, New Jersey: Prentice-Hall.
- MINISTRY OF EDUCATION (MOE)
2001. *National Plan for Higher Education Transformation*. Pretoria: Department of Education.
- MOUTON J
1996. *Understanding social research*. Pretoria: Van Schaik.

NOFFKE S

1994. Action research: towards the next generation. *Educational Action Research* 1(1): 9-22.

O'BRIEN R

1998. An overview of the methodological approach of action research. <<http://www.web.net/~robrien/papers/arfinal.html>>

REASON P & H BRADBURY

2001. *Handbook of action research participative inquiry and practice*. London: Sage.

REPUBLIC OF SOUTH AFRICA (RSA)

1997. South African Qualifications Authority: Draft regulations governing the activities of National Standards Bodies (NSBs). *Government Gazette* 9 May 1997. Pretoria: Government Printer.

SANKARA S, B DICK & R PASSFIELD (eds)

2001. *Effective change management through action learning and action research: concepts, perspectives, processes and applications*. Lismore: Southern Cross University Press.

SANTONE S

2003. Education for Sustainability. *Educational Leadership* 62(4): 60-4.

TESCH R

1990. *Qualitative research: analysis types and software tools*. New York: Falmer.

UNIVERSITY OF THE FREE STATE (UFS)

2002. Community service policy of the University of the Free State. Adopted August 2002.

<http://www.uovs.ac.za/community_service/Docs/AUG2002-Eng.doc>

2004. Nursing students make a difference at Botlehadhi School. *CommTalk*, Special Edition: Service Learning (2): 4.

<http://www.uovs.ac.za/community_service/Docs/CommTalk4Web.pdf>

WATERMAN H, D TILLEN,

R DICKSON & K DE KONING

2001. Action research: a systematic review and guidance for assessment. *Health Technology assessment* 5(23): 1-67.

WHEELER K A & A P BIJUR (eds)

2000. *Education for a sustainable future: a paradigm of hope for the 21st century*. New York: Kluwer Academic.

ZUBER-SKERRIT O

2001. Action learning and action research: paradigm, praxis and programs. Sankara *et al* (eds) 2001: 1-20.

ZUBER-SKERRIT O & M FARQUHAR

2002. Action learning, action research and process management (ALARPM): a personal history. *The Learning Organization* 9(3): 102-13.