
TRAINING UNIVERSITY STUDENTS FOR COMMUNITY ENGAGEMENT: LESSONS FROM A KNOWLEDGE, ATTITUDES AND BEHAVIOUR (KAB) STUDY

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ABSTRACT

This article describes the contents and effect of an accredited short course on socio-economic development that was designed for the project leaders of the Student Rag Community Service (SRCS) of the North-West University's Potchefstroom campus. The SRCS is the largest student-driven non-profit organisation in South Africa and the course was intended to enable its students, which came from diverse academic backgrounds, to become effective leaders of non-curricular community engagement projects. Measurements were done by means of knowledge, attitudes and behaviour (KAB) scales, as well as an adapted Facilitation Assessment Scale (FAS). The results proved that the course had a practical significant effect on the participants' knowledge and a medium to large effect on their attitudes and intended behaviour. These findings make it possible to use the course as a basis for the development of similar courses in community engagement at other tertiary training institutions and even further afield.

Key words: community engagement, student volunteers, training, socio-economic empowerment, community service, KAB (Knowledge, Attitudes and Behaviour) studies

INTRODUCTION

Although community engagement (CE) has become a ‘hot topic’ at most South African universities since the publication of the White Paper on Higher Education in 1997 (Ministry of Education, 1997), the meaning(s) that should be attributed to this construct is still open to debate (Hall, 2010; Nongxa, 2010). An analysis of a number of institutions’ policies (e.g., North-West University (NWU), 2013; University of Cape Town (UCT), 2012; University of Pretoria (UP), 2012; University of Johannesburg (UJ), 2009) shows a degree of consensus that it involves some or other form of curricular engagement (e.g., service and work integrated learning) and community-based research (South African Higher Education Community Engagement Forum (SAHECEF), 2013). Very few go beyond this very narrow ambit and *explicitly* include activities and services what could be termed as “non-curricular community engagement” (UP, 2013:1-2). Such engagement could include public access to university infrastructure (e.g., libraries, venues, art galleries and sport facilities), knowledge transfer (e.g., through science fairs, short courses and consultation services), and faculty and student volunteering (Hart and Northmore, 2011). At the time of the study (2011), very few viewed the training of students *in volunteer work* as a part of their overall community engagement responsibilities, although some departmental and faculty based volunteer training did exist (e.g., UP, 2013; UJ, 2013).

This ‘gap’ in policy and practice has made the development, implementation and official recognition of a broad-based student volunteer training course at the Potchefstroom Campus of the North-West University somewhat unique. The course was first provided on an experimental basis to volunteers of the Student Rag Community Service (SRCS) in 2008. It has since been further developed and refined to such an extent that it received official accreditation as an 8 credit certificate short course on NQF level 6 from the University’s Institutional Committee for Academic Standards in 2010.

The course’s effect on participants was measured by means of a comprehensive knowledge, attitudes and behaviour (KAB) study at the end of 2011. The results of this study, as well as the lessons that could be learned from the development and implementation of the training are covered in this article.

CONTEXT OF THE STUDY

It should be stated from the outset that the course is offered in a somewhat unique context that does not exist at most other South African institutions for higher education. It, for instance, has a ready-made audience of student volunteers that already deliver a wide range of community and socio-economic development services. The training principles involved should, however, be applicable to all types of volunteer training at university level, whether it be within the context of academic departments/schools and faculties, or on a wider basis.

The NWU: Potchefstroom Campus is in the somewhat unique position that its Student Rag Community Service is a student driven, registered non-profit organisation (NPO) that currently plans and manages 92 CE projects and has a total annual budget in excess of R1 million. In 2012, the SRCS was the runner-up in the international MacJannet Awards for Global Citizenship (Tailloires Network, 2013).

Currently each of the SRCS's projects has its own team leader and team. These teams range from 10 to over 30 members in size and involve a total of more than 4,500 student volunteers annually (SRCS, 2012). The current projects are divided into four main fields of service delivery or programmes, viz.:

- “Early Childhood Development (ECD) Programmes”, which include projects in pre-primary schools;
- “Child and Youth Development Programmes”, for primary and secondary school learners;
- “Vulnerable Adults Programmes”, which include projects for older “persons, people with disabilities and the unemployed, and
- Outreach Programmes” that target various other groups in the community, including people living in absolute poverty, street children, vulnerable women, nutritional schemes and support services to hospitalised children (Weyers and Herbst, 2011b).

The challenge faced in training was that it had to, within stringent time constraints, empower over 4,500 student volunteers drawn from nearly every sector of academic life to deliver fairly sophisticated services to a diversity of target groups. This led to a decision to initially only focus on the training of project leaders and to enable *them* to ‘cascade’ their new knowledge and insights to their team members. The course will later, if policy and finances permit, be rolled out to ‘ordinary’ student volunteers.

NATURE OF THE COMMUNITY ENGAGEMENT COURSE

The course, entitled “Introduction to socio-economic development” (ISED), was developed by two members of the University’s Social Work Division. The content represented an operationalised version of the social development, developmental social welfare and strengths/assets approaches as espoused by authors such as Midgley and Conley (2010), Patel (2005) and Brueggemann (2006) and incorporated a number of components drawn from social work modules, especially those covering community work. A strategic decision was taken to select the more neutral ‘socio-economic development’ (as opposed to ‘social development’ or ‘community engagement’) as a descriptor as this would prevent confusion with University policy and structures, and facilitate the participants’ understanding of the core construct involved. For the purposes of the course, ‘socio-economic development’ was simply defined as a “...specialised effort to link intended improvements to people’s *quality of life* with intended improvements to their *material welfare* or *standard of living*” (Weyers and Herbst, 2011b:9).

The primary aim of the course was not only to provide SRCS project leaders with essential knowledge of the nature of socio-economic development, but also with skills in the planning, implementation and evaluation of projects and the ability to effectively run project teams. Therefore, in essence, to enable them to become *effective volunteers*. It placed a strong emphasis on experiential learning, was spread over four contact sessions of three hours each and required at least 40 hours of direct community engagement from participants. The ultimate goal of the training was not only to equip students to function effectively within the narrower ambit of CE projects at university level, but to empower and encourage them to stay involved in community services *after* the completion of their university studies.

The course material was divided into four primary sections (Weyers and Herbst, 2011b). These sections, together with the core themes covered in each, are summarised in Table 1.

Table 1: A summary of the ISED course content

SECTION A: AN EXPLORATION OF BASIC CONCEPTS

1. Community, community service, community engagement and socio-economic development
2. Self-help, empowerment, sustainability, awareness-raising and the 'ripple-effect'
3. Sympathy vs. empathy
4. Programme, project, action step and fields of service
5. Relationships with institutions, liaison persons and sponsors
6. Values and the strengths approach

SECTION B: DIFFERENT TARGET GROUPS/ CLIENT SYSTEMS

1. The poor and poverty
2. Children
3. The youth and the needs of the street child
4. Vulnerable adults
5. Women and their empowerment

SECTION C: PROGRAMME PLANNING AND PROJECT MANAGEMENT

1. Introduction
2. Why some projects succeed and others fail
3. Before you start: Know the requirements for effective community service
4. Now you are ready to start: The programme and project management process
 - 4.1 Step 1: The needs assessment and problem formulation
 - 4.2 Step 2: Decision-making and planning
 - 4.3 Step 3: Implement the plan of action
 - 4.4 Step 4: Evaluation
 - 4.5 Step 5: Celebrate the project

SECTION D: ADDITIONAL TOOLS AND AIDS

1. Project management: My macro checklist
 2. The project management worksheet
 3. An "Ideas bank" of community engagement projects
 4. The SRCS's points system and process reports
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Because the participants came from diverse academic backgrounds, the primary aim of the first section was to ensure that they all ‘spoke the same language’ and understood both the meaning and implications of the core concepts used in training and practice. It also covered the strengths approach as the core theoretical paradigm on which the course was built. Attendees were encouraged to use this approach when they planned and implemented their CE projects.

Section B especially dealt with the nature and needs of the specific groups that are targeted in service delivery. Topics included the socio-economic consequences of poverty, the developmental stages of a child and the needs of older persons.

Section C formed the core of the course and focussed on project planning, project and team management, and project evaluation. Attendees were, amongst others, enabled to formulate ‘S.M.A.R.T.’ goals and objectives, to do needs-assessments and to use tools such as the ‘option assessment chart’ and ‘D.E.C.I.D.E.’ framework.

Section D covered some additional project tools and aids. It included a ‘bank’ of project ideas, designs and examples.

PROBLEM STATEMENT

Up until 2011, the assessment of the ISED course was limited to semi-structured participant feedback. Although this feedback, coupled with the anecdotal indicators that emerged during the formative and summative assessment of the projects themselves, did *indicate* that the course contributed to the quality and relevance of CE projects, the exact nature and extent of its effect was still unknown. The continued annual presentation of the course, as well as its potential use as a basis for the development of similar courses for other target groups in the NWU and other higher education institutions, necessitated a more scientific enquiry and quantitative analysis. This led to the development of a research project that measured the effect of the course, as well as its relevance, value and quality.

METHODOLOGY

Aim and hypothesis

The research had a fourfold aim. They were:

- to measure the effect of the course on attendees’ *knowledge, attitudes and behaviour* (KAB);

- to ascertain their experience of the *relevance and value* of the course content;
- to measure the *quality* of the course presentation and its potential positive or negative influence on outcomes; and
- based on the above, to formulate guidelines for the future improvement of the course and its presentation to a wider audience.

The research intended to test one central hypothesis, namely:

that the short course in socio-economic development does have a *practical significant effect* on the KAB of the attending student volunteers.

The research design

A one-group pre-test/post-test design was used in which the dependant variable (the existing KAB of participants) was first measured, followed by the introduction of the independent variable (the training course) and, finally, the repeated measurement of the dependant variable (the new KAB of participants) (Fouché, Delpont and De Vos, 2011). This typical effect measurement approach was augmented by the utilisation of a one-group post-test-only design (Fouché et al., 2011). This entailed the use of an adapted version of the Facilitation Assessment Scale (FAS) (Weyers and Rankin, 2007) to measure the *relevance* and *value* of the training content, as well as the effect of the training context on the outcomes of the course.

The measurement instruments

KAB-studies are based on the premise that human functioning can be divided into three dimensions viz. the cognitive (thinking), the affective (feeling) and conative (doing) (Thompson, 2009; Babbie, 2001). These three dimensions are interrelated, but not necessarily linearly dependent. A change in one dimension does, therefore, not necessarily bring about a change in another (e.g., an increase in knowledge does not necessarily change attitudes), nor is the accomplishment of change in one dimension (e.g., attitudes) a prerequisite for change in another (e.g., behaviour) (Weyers, Huisamen, Kleingeld and Williams, 2006). This makes it possible to measure changes in each dimension separately.

The KAB-questionnaires were based on instruments developed for similar studies involving the empowerment of participants through training (e.g., Weyers and Herbst, 2011a; Williams, 2006; Weyers et al., 2006). In this case, each pre- and post-test questionnaire consisted of 33 mostly 4-point Likert-type questions that were arranged into four scales. These measured potential

changes in the participants' objective knowledge, subjective knowledge and attitudes, as well as differences between their current and intended behaviour. Within this context, 'objective knowledge' involves the participants' *actual comprehension* and *retention* of the facts regarding a subject. 'Subjective knowledge', on the other hand, refers to their subjective *perception* of the extent to which they had mastered the subject matter or, as defined by Lee and Koo (2012:1976-1977), "...the extent to which individuals perceive that they know".

It was not practically possible within the ambit of the study to measure any long-term changes in the participant behaviour directly. The focus, consequently, shifted to each individual's current (pre-training) and *intended or envisaged* (post-training) actions/responses. Such a focus on *intended behaviour* is, according to McCormack and Hill (1997), quite acceptable in cases where it is not possible to directly measure the medium and long-term effect of an intervention. Various studies, including that of Huisamen (2005) and Williams (2006), also showed that intended behaviour is a good indicator of *actual* medium term (6 to 7 months post-intervention) behavioural change.

The adapted FAS-questionnaire (Weyers and Rankin, 2007) consisted of six subscales and a total of 46 questions. These assessed the relevance and value of the training, the presenters' aptitude and presentation skills, the learning process and the context within which the training was conducted.

The research procedure and participants

The pre-test KAB-questionnaire was administered to all 57 students that attended a pre-course orientation session on 27/09/2011. These respondents represented the universum of SRCS project leaders, consultants and managers. This was followed by the administration of the post-test KAB-questionnaire plus the FAS scale at the end of the course on 19/10/2011. Because the study only focussed on students who did not previously complete the course, 18 attendees (mainly members of the management cadre of the SRCS and established project leaders) were excluded from the data base. There were also seven participants who did not complete both the pre- and post-test questionnaires or whose responses were so incomplete that they could not be used. This left a total of 32 'linkable' pre- and post-test KAB- and 29 completed FAS-questionnaires. It should be noted that not all of the participants necessarily completed all the questions and that variations in response rate to scales and subscales did occur. Although the number of respondents were on the low side, a power analysis done with the STATISTICA programme indicated that even with questions to which only 25 students responded, 80%+ 'power' was assured.

The research group consisted of 12 (37.5%) male and 20 (62.5%) female students. Of these, 2 (6.25%) were newly appointed consultants, while 2 (6.25%) were from the management cadre of the SRCS. All the rest (28/87.5%) (*see* Table 2) were project leaders in the four main fields of service delivery. Their distribution (*see* Table 2) was fairly representative of the number of projects in each of the four fields.

Table 2: Profile of the respondents in terms of field of service

Field of service	Frequency	Percentage (%) of respondents	Percentage (%) of project leaders
Early Childhood Development Programmes	5	15.62	17.9
Child and Youth Development Programmes	16	50.0	57.1
Vulnerable Adults Programmes	4	12.5	14.3
Outreach Programmes	3	9.38	10.7
Management	2	6.25	-
Consultant	2	6.25	-
Total	32	100	100

The participants represented all of the University's faculties, ranging from engineering to social sciences and from education to health sciences. They could, consequently, be viewed as fairly representative of all the different types of students that are found at South Africa's tertiary training institutions. The only core difference was that they all had at least one year previous experience as volunteers.

Data processing

The data generated by the questionnaires was analysed in conjunction with the Statistical Consultation Services of the NWU: Potchefstroom Campus and with the aid of the SAS computer package (SAS Institute Inc., 2009). It included determining whether the measurement scales were reliable and could measure change. The procedures and formulas that were used for this purpose will be discussed briefly.

Procedures and formulas for the calculation of reliability

The Cronbach's Alpha coefficient (depicted with ' α ') of each scale and subscale was calculated in order to determine if they were reliable instruments. Due to the non-clinical nature of the study, an α of 0.50 was accepted as the minimum reliability coefficient (Jackson, 2003) and $\alpha \leq 0.8$ as highly reliable (Gravetter and Forzano, 2003).

Procedures and formulas for the calculation of change/effect

The study used the *standardised mean difference* to determine the practical significant *change* (if any) that the course brought about in the KAB of participants. This type of effect size is also known as Cohen's d and entails the use of the following formula:

$$d = \frac{\mu_1 - \mu_2}{\sigma}$$

Where:

- d = effect size
- μ_1 = average difference score in the group (pre-test)
- μ_2 = average difference score in the group (post-test)
- $\mu_1 - \mu_2$ = difference between average difference
- σ = maximum standard deviation of difference scores
(Steyn, 2000; Cohen, 1988)

In the case of the FAS-questionnaire, Cohen's formula for determining effect size *within* a group was used (Steyn, 2000; Cohen, 1988).

The following guidelines can be used to judge all d-values:

- d = 0.2: This indicates a small effect, implying that the research should be repeated in order to confirm if there is an effect;
- d = 0.5: This indicates a medium effect, implying that the result can be viewed as significant, but also that better planned research could produce even more significant results;
- d = 0.8: This indicates a large effect that is of practical significance;
- Because there are no absolute boundaries between the three d-values, concepts such as 'small to medium effect' and 'large effect' can be used (Corcoran and Walsh, 2010; Rubin, 2010; Cohen, 1969).

Besides effect sizes (d-values), descriptive statistics such as totals, percentages and averages were also used.

THE EFFECT OF THE TRAINING COURSE ON PARTICIPANTS

Only the main findings from the study will be covered. The exposition will start with a brief glance at the reliability of the scales.

Table 3 includes a summary of the Cronbach's Alpha coefficient of each of the four KAB-scales, as well as the average valid responses per scale. It shows that all the scales had an acceptable reliability coefficient (i.e. $\alpha \leq 0.5$) and could, therefore, be used in the effect measurements.

It was assumed during the study that the respondents had already developed a certain level of knowledge and had fixed attitudes and behavioural practices *before* the start of the ISED course (Thompson, 2009). These levels were measured with the pre-test. They were again measured *after* the presentation of the course. The final effect sizes produced by these pre- and post-training measurements are included in Table 3 and will be discussed further.

Table 3: Overall effect of the ISED course on attendees' KAB

Scales	n ^a	α	d-Values (Effect sizes)
Scale 1: Effect of the training on the objective knowledge of participants	32	0.54 [‡]	1.19**
Scale 2: Effect of the training on the subjective knowledge of participants	32	0.89 [‡]	1.43**
Scale 3: Effect of the training on the attitudes of participants	31.5	0.69 [‡]	0.78*
Scale 4: Effect of the training on the (intended) behaviour of participants	31.75	0.81 [‡]	0.69*

n^a = Average valid responses per scale. [‡]Reliable scales.

*Medium effect: $d = \pm 0.5$ **Practical significant effect: $d \leq 0.8$

Effect on knowledge

The items in Scale 1 were, in a typical knowledge test approach, randomly selected from a pool of potential 'test questions' that covered all of the course content. Its core purpose was to test whether there was any clear difference between the participants' knowledge levels after the course as opposed to before it.

Table 4: Scale 1 - Effect of the training on the objective knowledge of participants

Questions	Mean (Pre-/Post- test)	n	σ	d-value (Effect)
1. In AIDS education, the acronym VCT stand for “ <i>Voluntary Counselling and Testing</i> ”	3.69	32	.738	0.47*
	4.03	32	.822	
2. The “ <i>Question-Answer-Requestion</i> ” technique is a useful tool in needs assessments	4.09	32	.734	0.51*
	4.47	32	.567	
3. The “ <i>Community Self-Survey</i> ” technique is a useful tool to identify the <i>severity</i> of a problem/need	3.69	32	.931	0.67*
	4.31	32	.780	
4. The acronym “ <i>OAC</i> ” stands for “ <i>Opinions Assessment Chart</i> ”	3.28	32	.581	1.40**
	4.09	32	.818	
5. An objective should be measurable	4.22	32	1.070	0.47*
	4.72	32	.581	
6. When evaluating the results of your project, you should take a penetrating look into the past	3.78	32	1.211	0.34
	4.19	32	1.091	
7. The celebration of the project is the final step in the project management process	2.50	32	1.391	1.46**
	4.53	32	1.135	

*Small effect: 0.2 - ± 0.35 . *Medium effect: $d = \pm 0.5$. **Practical significant effect: $d \leq 0.8$.*

Tables 3 and 4 indicate that the course did succeed in bringing about a significant overall increase in participants’ knowledge levels ($d = 1.19$). A more detailed analysis of Table 4 shows that the largest effect sizes were achieved with questions that cover issues that would not normally form part of a student’s school or university education (cf. Scale 1: Q4 and Q7), but which is important for CE projects. They did, in contrast, seem relatively knowledgeable about HIV and AIDS related issues and the formulation

of objectives (*see* Table 4, Scale 1: Q1 and Q5). This is probably due to previous training that some had received.

In the case of Scale 2 (Table 5), the questions were purposefully selected to cover core learning material from all the sections of the course (*see* Table 1). This made it possible to identify those components that produced the largest 'felt' increases in knowledge.

Table 5: Scale 2 - Effect of the training on the subjective (perceived) knowledge of participants

Questions	Mean (Pre-/Post- test)	n	σ	d-value (Effect)
1. My knowledge of the <i>dimensions</i> of a community can be described as...	2.31	32	.821	1.14**
	3.25	32	.440	
2. My knowledge of nature of human <i>strengths</i> can be described as...	2.84	32	.574	1.25**
	3.56	32	.504	
3. My knowledge of the implications of the concept " <i>sustainability</i> " can be described as...	3.31	32	.592	0.47*
	3.59	32	.499	
4. My knowledge of the implications of the concept " <i>poverty</i> " can be described as...	3.13	32	.660	0.43*
	3.41	32	.560	
5. My knowledge of the <i>development phases of the child</i> can be described as...	2.78	32	.832	0.49*
	3.19	32	.644	
6. My knowledge of the <i>needs of street children</i> can be described as...	2.44	32	.801	0.90**
	3.16	32	.628	
7. My knowledge of the <i>needs of older persons</i> can be described as...	2.53	32	.803	0.43*
	2.88	32	.660	
8. My knowledge of the <i>requirements for effective community service</i> can be described as...	2.69	32	.592	1.00**
	3.28	32	.523	

9. My knowledge of the difference between <i>needs</i> and <i>wants</i> can be described as...	3.59	32	.499	0.50*
	3.84	32	.369	
10. My knowledge of the use of the " <i>Question-Answer-Requestion</i> " technique can be described as...	2.19	32	.859	1.13**
	3.16	32	.574	
11. My knowledge of the use of the <i>OAC</i> can be described as...	1.84	32	.628	1.54**
	2.81	32	.693	
12. My knowledge of the <i>SMART principle</i> in goal formulation can be described as...	2.56	32	.878	1.32**
	3.72	32	.457	
13. My knowledge of the use of the <i>project outline</i> can be described as...	2.75	32	.718	0.83**
	3.34	32	.483	
14. My knowledge of how to use the <i>project management worksheet</i> can be described as...	2.31	32	.693	1.35**
	3.25	32	.568	

**Medium effect: $d = \pm 0.5$. **Practical significant effect: $d \leq 0.8$.*

The analysis of the data contained in Table 5 indicates a marked difference between the extent to which the participants' knowledge of the more 'technical' elements of service delivery, as opposed to other subject matter, had increased. Questions pertaining to specific client systems (e.g., children and older persons - Table 5: Q5 and Q7), as well as some core concepts (e.g., 'poverty' - Table 5: Q4), tended to produce lower d-values. This somewhat skewed profile could be attributed to two factors. The first is that the client systems and concepts were not, because of the fields in which they were active, of equal importance to all the participants. The second was that there was a real lack of knowledge regarding the 'technical elements' of service delivery and that they felt that the training made the biggest contribution in eliminating these gaps.

Three important conclusions could be drawn from a combined analysis of scales 1 and 2.

The first is that there were gaps in the attendees' knowledge *before* the start of the course that could and should be filled through training. This is significant because a substantial number of the attendees would have come

from either the social sciences (*see* Sections A and B of Table 1) or the management sciences (*see* Section C of Table 1). There are strong indications that their existing training in these sciences *does not* provide a sufficient basis for community engagement.

It is, secondly, clear that the course in its current format did succeed in having an overall practical significant effect on both the actual and felt knowledge levels of participants. They were, consequently, not only provided with new knowledge on the objective level, but also felt empowered by the training.

The third conclusion is that the participants especially required new knowledge regarding the more 'technical' aspects of CE projects. This includes the appropriate approach to use, the process that should be followed in project development and implementation, and the different tools that could be utilised during this process. The amount of attention given to specific target systems (e.g., children, at-risk youths and older persons) would depend on the prior training that the volunteers had received at school and university level.

Effect on attitudes

The purpose with Scale 3 was to ascertain whether there was any clear difference between the participants' attitudes *after* the presentation of the course as opposed to *before* it. In selecting appropriate questions, the focus was on the typical misconceptions that exist amongst students regarding the nature and purpose of CE programmes.

The overall result of the measurement (Table 3) indicated that, although the effect size fell in the medium to large range ($d = 0.78$), it was not fully on a practical significant level (i.e. $d \leq 0.8$). Indications of the possible reasons for this outcome can be found in the context within which the training took place, as well as in the responses to specific questions (*see* Table 6).

Table 6: Scale 3 - Effect of the training on the attitudes of participants

Questions	Mean (Pre-/Post-test)	n	σ	d-value (Effect)
1. I do not need to know how a community functions in order to be able to help a specific group/organisation within that community [‡]	1.41	32	.665	0.47*
	1.72	32	.958	
2. If I can change the life of one person for one day, I have achieved my goal	2.50	32	1.047	0.33
	2.84	32	1.081	
3. Our good intentions is a good enough reason for donors to support us [‡]	2.53	32	.761	0.21
	2.69	32	.780	
4. The problem of poverty will be solved if enough job opportunities are created in the community [‡]	2.72	32	.683	0.50*
	3.06	32	.669	
5. I must always choose the solution to a problem that has the best chance to succeed	1.90	31	.746	1.77**
	3.23	31	.617	

[‡] = 'Negative' questions. Small effect: 0.2-0.35. *Medium effect: $d = \pm 0.5$.
 **Practical significant effect: $d \leq 0.8$.

The responses in Table 6 should be seen against the backdrop that the participants had come 'up through the ranks' as ordinary volunteers before being elected to their current leadership position. During this process, some of the fallacies regarding community engagement ought to have been dispelled. The responses to the individual questions indicate that this would especially pertain to the goal of service delivery and the grounds for donor support (Table 6: Q2 and Q3). Questions that deal more directly with project leadership issues such as the selection of appropriate solutions (Table 6: Q5, $d=1.77$) and the role of needs-assessments (Table 6: Q1, $d=0.47$), did, in contrast, produce higher effect sizes.

Effect on behaviour

Because Scale 4 was administered shortly after the completion of the course, it could not measure behavioural change directly. It, therefore, focused more

on how the participants *intended* to change their behaviour in future (McCormack and Hill, 1997). Although the scale proved to be highly reliable ($\alpha = 0.81$), the overall effect size ($d = 0.69$) only fell in the medium to large range (see Table 3). This somewhat unexpected result necessitated a more detailed analysis of the responses that produced the data as summarised in Table 7.

Table 7: Scale 4 - Effect of the training on the behaviour of participants

Questions	Mean (Pre-/Post- test)	n	σ	d-value (Effect)
1. How often did you keep your goals in mind when <i>planning</i> projects/activities?	3.84	32	.628	0.55*
1. How often will you keep your goals in mind when <i>planning</i> projects/activities?	4.19	32	.397	
2. How often did you formulate measurable objectives?	3.42	31	.807	0.64*
2. How often will you formulate measurable objectives?	3.94	31	.574	
3. How often have your objectives been specific?	3.50	32	.718	0.61*
3. How often will your objectives be specific?	3.94	32	.504	
4. How often have your objectives been set within a time frame?	3.38	32	.976	0.45*
4. How often will your objectives be set within a <i>time frame</i> ?	3.81	32	.738	
5. How often did you keep your objectives in mind when planning activities?	3.75	32	.672	0.47*
5. How often will you keep your objectives in mind when planning activities?	4.06	32	.354	
6. How often were there a direct link between your objectives and the identified needs?	3.44	32	.878	0.43*

6. How often will there be a <i>direct link</i> between your objectives and the <i>identified needs</i> ?	3.81	32	.471	
7. How often were there a <i>direct link</i> between your activities and the <i>formulated objectives</i>?	3.47	32	.879	0.46*
7. How often will there be a <i>direct link</i> between your activities and the <i>formulated objectives</i> ?	3.88	32	.492	

*Small effect: 0.2-0.35. *Medium effect: $d = \pm 0.5$. **Practical significant effect: $d \leq 0.8$.*

An analysis of the sets of questionnaires that produced the data showed that in approximately 40% of the cases, little or no differences existed between the participants' answers to the pre- and post-training questions. This indicates that some respondents already exhibited appropriate behaviour *before* the start of the intervention and was, therefore, not strongly affected by the course. The others, however, intended to change their strategies and behavioural patterns quite significantly. The fact that two such groups existed explains the absence of an overall practical significant effect size.

Although ethical considerations prevented the linking of responses to specific individuals, the secret code that was used to link pre-test with post-test questionnaires did give an indication of a respondent's age. When this demographic indicator was applied to the two groups of respondents, it showed that those whose behaviour was least affected by the training tended to be older students. It was, consequently, assumed most would have had more years of experience as volunteers and had already mastered the appropriate behaviour. For the other younger respondents, the effect of the course on behaviour was more profound.

RESULTS PRODUCED BY THE FACILITATION ASSESSMENT SCALE (FAS)

The FAS, as originally developed by Weyers and Rankin (2007), was slightly adapted to meet the specific requirements of the study. It finally consisted of six subscales that were grouped into two clusters.

The first cluster deals with the perceived appropriateness or *relevance* of the training material and the perceived work-related utility or *value* of a training event (Weyers and Rankin, 2007; Bates, 2004).

The second cluster consists of four subscales and is intended to answer one core question: *Did the training and the context within which it was conducted have a positive or negative influence on the attainment of the intended outcomes?* It especially focusses on presenter's *aptitude* and *presentation skills*, the quality of the *learning process* and the influence of the *context* within which the training was conducted (Weyers and Rankin, 2007).

The five subscales that were used, as well as each scale's Cronbach's Alpha coefficient (α) and d-value/effects size, are summarised in Table 8.

Table 8: Measurements produced by the FAS subscales

SUBSCALES	n ^a	α	d-value (Effect)
Scale 5: Facilitation Assessment Scale (FAS)	-	-	
Subscale 5.1: The relevance of the course	29	0.85 [‡]	1.46**
Subscale 5.2: The value of the course	27	0.88 [‡]	1.53**
Subscale 5.3: Assessment of the presenters' aptitude	25	0.69 [‡]	3.09**
Subscale 5.4: Assessment of the presenters' presentations skills	26	0.67 [‡]	3.57**
Subscale 5.5: Assessment of the learning process	27	0.84 [‡]	1.83**
Subscale 5.6: Assessment of the context within which the training was conducted	29	0.76 [‡]	2.05**

n^a = Average valid responses per scale. [‡] Reliable subscale: $\alpha \leq 0.5$.
 **Practical significant effect: $d \leq 0.8$

All six subscales met the minimum requirement of $\alpha \leq 0.5$ and three even surpassed the "highly reliable" mark of $\alpha \leq 0.8$. They could, consequently, be used with confidence as reliable measurements of the constructs that were covered.

The d-values produced by the subscales proved that the training had a practical significant effect in all six cases (*see* Table 8). Due to length constraints, all the data that contributed to this result cannot be covered in this text. The focus will, therefore, only be on the most salient contributing factors. These will be grouped according to the two clusters of scales that were used.

The relevance and value of the course

The relevance and value ratings produced high d-values of $d=1.46$ and $d=1.53$ respectively (*see* Table 8). This indicates that the participants found that the material was applicable to their circumstances and appropriate to their needs, and that they could utilise it in their work environment (Weyers and Rankin, 2007).

An analysis of the data on which the ‘relevance’ subscale was based (*see* Table 8: Subscale 5.1) indicated that the participants especially felt that they could apply the new knowledge and insights in their service delivery and that the training would help them to ‘do their job better’. There was a somewhat unexpected result with the response to the question: “I will be able to apply the new knowledge and insights that I have gained in *my daily life*”. It produced the second highest response to all six questions in the subscale. This indicates that the course content was not only relevant to them as volunteers, but that they will also be able to use it on a more personal level.

Subscale 2 focussed on the value of each of the 14 core components of the training course. An analysis of the data revealed a trend to give ‘technical’ subjects a higher rating. The four components that, for instance, received the highest ‘score’, were: “The requirements for effective community service”, “The programme and project management process”, “The guideline for the formulation of goals and objectives”, and “The project management worksheet”. This is opposed to the components that dealt with the nature of specific client systems that tended to receive lower ratings. It should, however, be noted that no component received a ‘below average’ rating that would indicate that it should be removed from the course altogether.

Influence of the presenters, learning process and training context

All four subscales that dealt with the quality of the course’s presentation produced a practical significant effect size (*see* Table 8). This implies that any deficiencies measured by means of the other scales and subscales could not be attributed to poor presenters, a deficient process or a negative context.

MAIN FINDINGS AND LESSONS LEARNED

The research addressed an issue that has until now been somewhat neglected in university level community engagement thought, viz.: how to train ‘the average university student’ to become an effective ‘practitioner’ and service

provider within this field. The study focused on the effect of the 'Introduction to socio-economic development' (ISED) course that was specially designed to enable students from a diversity of academic backgrounds to become effective leaders of non-curricular CE projects.

The data produced by the KAB-scales proved that the course had a practical significant effect on the participants' *knowledge* levels, and a medium to large effect on their *attitudes* and *intended* behaviour. The FAS subscales also produced a very high *relevance* and *value* rating. It could be *concluded* from the triangulation of all the data (Weyers, Strydom and Huisamen, 2008) that the course succeeded in the purpose for which it was designed. This finding has implications that go beyond the narrow ambit of community engagement training at a single university. These implications, as well as other lessons that were learned from the development and presentation of the course, will be covered briefly.

The primary implication of the study is that it **is** possible to effectively train university students to become community engagement practitioners. This can be achieved with as little as an 8 credit module on NQF level 6. The *first lesson* learnt from the research and the context within which the training was provided, was, however, that purely theoretical training is not sufficient to turn student volunteers into *effective* practitioners. To be an effective they, in addition, require a structured service delivery context (e.g., an organisation), a number of hours of practical experience (e.g., 40 hours), continuing guidance (e.g., through the use of expert consultants) and financial support (e.g., through the provision of 'seeding money' for projects). One way that universities can overcome these obstacles is by placing student volunteers at existing NGO's in their neighbouring communities.

The *second lesson* was that the course content should cover at least four themes. These are the concepts used in community engagement, the appropriate approach to follow in service delivery (e.g., the strengths approach), the characteristics of the intended target/client systems and *especially* the more 'technical' facets of project planning and implementation. The latter includes the conducting of needs-assessments and the planning and management tools that could be utilised. Although this is *especially* important in cases where the intended recipients of the training do not have an 'academic background' in the so-called human services field and or project management, the study has indicated (*see* Table 5 triangulated with Table 1) that existing training in the social and management sciences *does not* provide a sufficient basis for effective community engagement. Additional, specialised training is, therefore, a prerequisite.

A *third lesson* was that care should be taken when deciding on the types of target/client systems that should be covered. It was obvious in the case of the ISED course that all four fields of service should be used as a criterion. Even so, the selected target groups still tended to produce a lower importance rating. The principle that emerged was that there should not only be the closest possible match between the fields of services in which the volunteers will be involved and the selected client groups, but that this component of a course should, wherever possible, become more specialised. The content will then be different for the different groups of students that are trained for community engagement.

The *fourth lesson* pertains to the changing of students' attitudes and behaviour. Even though this facet of the study only produced a medium to large effect (*see* Table 3), it should be noted that the course was presented to students that had already been involved in community service for at least a year. It is expected that such a course would have an even greater impact on novices.

It was, *fifthly*, apparent that the course would, ultimately, not only be of benefit to the recipients of services. It would also benefit students on a personal level, as well as enhance tertiary education institutions' community engagement endeavours. There are also sufficient grounds to believe that if community engagement training were to be entrenched at university level, students would be more likely to become involved in communities *after* completing their degrees. This raises the question of whether such training should not become part and parcel of the critical cross-field education and training outcomes (South African Qualifications Authority (SAQA), 2000) that all South African students should achieve.

It can *finally* be concluded that the provision of community engagement training should become a formal part of tertiary education institutions' policies, as well as training practices. The latter could take the form of either an optional or, ideally, a compulsory critical cross-field module. The ISED course and its proven positive effect on the KAB of participating students could form one of the core sources on which the development of such a module is based.

The results achieved with the study indicates that, if specialised community engagement training is presented to a wider student audience, it should enable tertiary training institutions to produce a new corps of more community and civic minded citizens. The resultant increase in well-trained volunteers would benefit South Africa as a whole.

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