

ACCEPTANCE OF CO-OPERATIVE EDUCATION PRACTICE BY THE ACADEMIC STAFF AT TECHNIKON SOUTHERN AFRICA.

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ABSTRACT

Technikons advocate the practice of co-operative education, which is an educational strategy that integrates learning through productive work with the theoretical curriculum. However, only 35% of the Technikon SA programmes have a compulsory experiential learning component. Grounded theory research was undertaken to determine some of the basic assumptions of Technikon SA's academic staff in this regard. Rather than starting out with a specific research problem, grounded theory explores an area of interest and allows what is relevant to emerge. Semi-structured interviews with four open-ended questions, were conducted with a stratified-random sample of 25 teaching staff at Technikon SA. It was found that, although there is some willing compliance and belief in co-operative education, it is not indicative of the organisational culture of Technikon SA.

OPSOMMING

Technikons propageer die beoefening van koöperatiewe onderwys, 'n opvoedkundige strategie wat leer deur produktiewe werkservaring integreer met die teoretiese kurrikulum. By Technikon SA egter, het slegs sowat 35% van die formele programme 'n verpligte leerervarings komponent. Teoretiese-begronnings navorsingsmetodologie is gebruik om sekere basiese veronderstellings van akademiese personeel te bepaal. Eerder as om 'n spesifieke navorsingsprobleem as vertrekpunt te gebruik, ondersoek teoretiese-begronning 'n area van belang en laat die metodiek die relevante sake toe om te voorskyn te kom. Semi-gestruktureerde onderhoude, met vier ope vrae, is gevoer met 'n gestratifiseerde ewekansige steekproef van 25 akademiese personeellede van Technikon SA. Daar is bevind dat alhoewel daar beperkte oortuiging en gewillige uitlewing van koöperatiewe onderwys is, is dit nie beduidend as kenmerkend van die organisasie kultuur van Technikon SA nie.

Higher education in South Africa in the year 2001, seven years after the first democratic elections, is challenged by a need for reconfiguration. The Council on Higher Education (Republic of South Africa, 2000a) stated that higher education has a critical role to play with regard to socio-economic development and that the wealth or poverty of a nation depends on the quality of its higher education. The preamble of the Higher Education Act (Republic of South Africa, 1997) emphasised the desirability to establish a single co-ordinated higher education system. A system implies a complex whole, a set of connected parts or sub-systems, an organised body. Unfortunately, according to the Council on Higher Education (Republic of South Africa, 2000a), higher education in South Africa has a heritage of dysfunctionality. They hope that the envisaged system will overcome this dysfunctionality. In order to facilitate the required change at Technikon SA, it is regarded important to know what the intrinsic culture of the academic staff is in this regard.

According to Louw (1996; 1997) and Posthumus (1997), the South African Higher Education structure and practices originated from Western European, and especially, British systems. Technikons started as Colleges for Advanced Technical Education in 1967. According to Janse van Vuren (1995) the new name was introduced in 1979, by a combination of the Greek root word "techne" (= ingenuity, dexterity or skill) and the suffix "kon". Louw (1997) and Homes (1999) observed that the difference between the roles of universities and technikons in South Africa started fading since the sixties and blurred even further in 1995 when technikons were authorised by law to issue degrees up to doctoral level. This, Louw (1997) asserted, requires a redefinition of the respective identities and a necessity to reconsider the vision, mission and purpose upon which every aspect of an institution's policy, structure and functions is based. If not, Venter (1997) cautioned, universities and technikons will gradually encroach on one another's market segments, offering courses that are virtually the same. This is especially important in the light

of the preamble of the new Higher Education Act (Republic of South Africa, 1997), which states that it is desirable to establish a single co-ordinated higher education system.

Homes (1999) pointed out that in this respect that the vice-chancellors of technikons differ in opinion. Whereas some believe that if technikons were to become technological universities it would cause confusion and a loss of focus, whereas others believe that leading technikons are close to becoming top-notch technological universities ("Varsities" by a degree, 1999).

The Council on Higher Education, Shape and Size of Higher Education Task Team (Republic of South Africa, 2000b) recommended a reconfigured higher education (HE) system, with a range of mandates or core foci. Figure 1, based on that report, represents the proposed reconfigured higher education system. The task team stated (p. 43) the following about a single dedicated multi-purpose distance education institution:

The combination of the University of South Africa, Technikon Southern Africa and the Vista Distance Education Campus could lead to the rationalisation of programme offerings and focus investments in quality enhancement, information and communication technologies and the development of materials. It could also enable the rationalisation of learning centres around the country and enhance management capacities.

It is not clear whether the co-operative education nature of current Technikon SA programmes would be retained in the single, integrated, dedicated distance education institution that is being proposed.

Co-operative education is an educational philosophy that advocates the formal integration of work experience (or community service) into the theoretical curriculum (Pratt, 1996). Cates and Jones (1999) defined it as a structured educational strategy that progressively integrates academic study with learning through productive work experiences in a field related to a student's academic or career goals. It is not an add-on to the curriculum,

1	2	3	4	5
Institutions constituting the bedrock of HE	HE institutions whose orientation and focus are respectively:		Single dedicated distance education orientation and focus institution	Private HE institutions
Quality undergraduate programmes				
Limited post-graduate up to taught masters	Comprehensive postgraduate, – taught and research up to doctoral	Extensive taught and research up to masters		
Research about curriculum, learning and teaching – for application.	Extensive broad range research (basic, applied, strategic and developmental)	Selective doctoral taught and research Select areas of research		

Figure 1: Graphic illustration of the new reconfigured higher education system as proposed by the Council on Higher Education, Shape and Size of Higher Education Task Team.

but an integral part of the educational process. It requires acceptance, which implies believing in and willing compliance. Since there has been an erosion of core defining features of co-operative education over the past twenty five years, the Co-operative Education Network (1996) developed a list of attributes of co-operative education programmes to distinguish them from other programmes that involve a combination of work and study, work-based learning or ex-periential learning. In summary, the attributes are:

- institutionalisation of co-operative education,
- academic ownership of the programmes,
- extensive employer involvement throughout,
- formalisation of student involvement in their respective work-study programmes.

The mission and vision statement of the Technikon SA states that it *'is a career-focused co-operative education institution within a flexible higher learning system . . .'* (Technikon Southern Africa, undated). However, there are many shortcomings with regard to co-operative education practices. The extent to which co-operative education has been infused as part of the Technikon SA culture is questionable. Although co-operative education is an integral part of technikon education, it does not manifest throughout Technikon SA.

Bartkus and Stull (1997) reported that a group of co-operative education professionals described the status of research into co-operative education with adjectives such as 'sketchy', 'sparse', 'limited', 'spotty' and 'haphazard'. They further acknowledged that research in co-operative education has fallen short with regard to scientific enquiry, systematic efforts to raise questions and seek answers, and the development of theory. For this reason, the present study derived a theoretical interpretation that is grounded in the empirical reality reflected by the data that were collected. According to Strauss and Corbin (1990), grounded theory research is a process of inductive building of theory through analysis of qualitative data. Such a study was undertaken to determine the degree of acceptance of technikon co-operative education, versus the extent of other forms of higher education practice favoured among Technikon SA academics.

RESEARCH METHODOLOGY

Grounded theory

The aim of this study was to determine some of the basic assumptions and the driving forces within of the academic staff of Technikon SAs. A qualitative research methodology, grounded theory, was chosen since no previous research pertaining to this specific topic has been undertaken, necessitating inductive study. Various authors working in the field of grounded theory (Dey, 1999; Glaser, 1992; Strauss & Corbin, 1990) cautioned against the formulation of a specific research problem because it forces the data. Both co-originators (Glaser and Strauss) emphasised theoretical sensitivity, that is the researcher needs to distance her/himself from the theory to avoid drifting into preconceptions and to maintain a balance between theory development and 'good science'. Corbin (1998, p. 127) emphasised that Strauss always said 'Let the work speak

for itself'. Grounded theory is an iterative process, described by Bryman and Burgess as follows:

The researcher begins to collect data guided by a rather general view of the research issue, theorises about his or her data (for example, by noting interesting general categories and their connections), examines these initial theoretical reflections by carrying out further data collection, theorises further, collects more data and so on. The idea is progressively to elaborate a more general theoretical statement about the data. What is crucial is that the theory is grounded in and a product of the data (1999, p. xxv).

Strauss and Corbin (1997) commented that to begin with an interest in a substantive area, rather than a research problem, exemplifies appropriate use of grounded theory methodology. The 'area of interest' of the present research was: Where in the higher education landscape do Technikon SA academics believe they are, or perceive themselves to be, individually, collectively or in sub-groups?

The objective of grounded theory is to intimately link the research to the reality of the participants and to allow findings to emerge from the 'actual words spoken by the participants, and thus truly "grounded" in them' (Corbin, 1998). Although firmly rooted in the original data, the research results also involve the inductive interpretations of those data by the researcher (Hurst, 1999).

Participants

Participants were selected through stratified-random sampling. The reason was that only about 35% of the instructional programmes offered by Technikon SA have a compulsory experiential learning component as part of the curriculum. These instructional programmes resort under five of the 13 academic departments, called programme groups. A few other instructional programmes have a voluntary experiential learning component, but at least 50% of the approximate 85 instructional programmes have no experiential learning at all.

The population of academic staff was divided into four clearly recognisable, non-overlapping sub-populations (Welman & Kruger, 1999): staff associated with programmes with a compulsory experiential learning component, sub-divided into white and other than white staff, and staff associated with programmes without an experiential learning component, also sub-divided into white and other than white staff. The ethnic distinction was done in anticipation of possible differences in perceptions. The proportion of individuals from each sub-population was then calculated to make up a sample of 25 participants. All members of the four sub-populations were numbered and a table of random numbers from Welman and Kruger (1999) was used to select the participants randomly.

The participants were 13 women (10 white) and 12 men (also 10 whites). Five of the participants hold doctoral degrees, 11 masters degrees, seven honours or equivalent qualifications and the remaining four a bachelor's degree or a National Diploma. Seventeen of the participants obtained their first qualification through full-time study and only eight studied through correspondence, of which six obtained only some of their qualifications through correspondence. Twelve of the 13 academic departments of the technikon were represented in the sample.

Procedure

The data collection was through individual semi-structured interviews, by means of two short sensitising briefs with which the participants entered the field (Annells, 1997), followed by open-ended questions (Brott & Myers, 1999; Rennie & Brewer, 1987). Participants were re-assured regarding the confidentiality of their responses and that the findings would not disclose the identity of participants at all. To reinforce this the names of individual participants were not recorded. The interviewer used codes known only to the him.

The interviewer simplified the higher education landscape in terms of two juxtaposed continua. The one continuum represented the degree of academic freedom (Bargh, Scott & Smith, 1996; Blignaut, 1985; Mphahlele, 1996; Nelson & Watt, 1999; Nkabinde, 1997; Posthumus, 1997; Sowers-Hoag & Harrison, 1998; Venter, 1997) to teach and research, with total freedom, at the one extreme, and co-determination (with the client) of the curriculum, at the other. The second continuum represented the degree of geographical interface, with total independence, at the one extreme, and total reciprocity (Bonnen, 1998; Deruosi & Sherwood, 1997; Louw, 1996, 1997; Palm & Toma, 1997; Posthumus 1997; Seaberry & Davis, 1997; Wade, 1997) and high social responsibility towards the community, at the other end. Participants were presented with the illustration in Figure 2, of this higher education landscape and asked to reflect on their own beliefs about higher education and to position themselves.

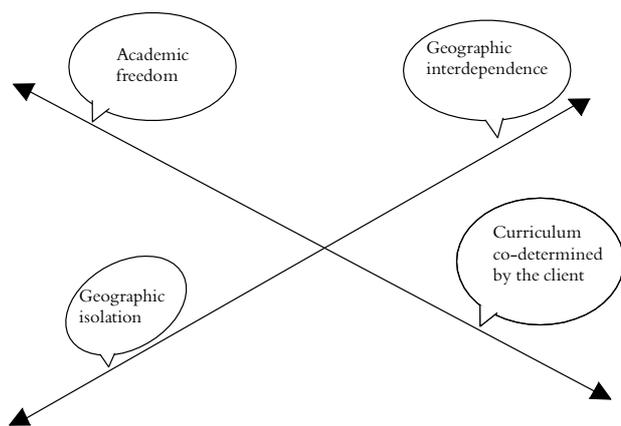


Figure 2: Two juxtaposed continua – the degrees of freedom and engagement with society

Participants were also presented with the diagram illustrating the recommended reconfigured higher education range of the Council on Higher Education (Figure 1). Several participants knew about the proposed reconfigured higher education debate, but most participants were unfamiliar with the proposed range illustrated in Figure 1. These two diagrams together served as conceptual vocabulary and frame of focus for the semi-structured interviews (Clarke, 1997). Altogether, four open-ended questions evolved (Brott & Myers, 1999) from the review of the literature and were designed to extract particular information (Petersen, 2000). The questions were:

1. Reflecting on your own beliefs about higher education, where would you personally position yourself in the higher education landscape (Figure 2)?
2. What signals permeate from the technikon's top and senior management to you in your position as academic?
3. What do you think is the viewpoint of your programme group (academic department) regarding the Council on Higher Education 'Size and Shape' proposals (Figure 1)? And your personal views?
4. Co-operative education has not been specified in the higher education landscape description. Do you think it should have been indicated and what would be your reason for inclusion/exclusion?

Extensive notes were made of all responses by the participants, because Strauss and Corbin (1998, p. 106) "believe that unaltered field notes more closely resemble the material with which researchers are working".

Data analysis

Grounded theory has three major components, the data, the analysis of the data (or interpretative procedures) and the written report. The reciprocal relationship between the data and the analysis (coding, categorising, etc.) has already been indicated (Bryman & Burgess, 1999; Strauss & Corbin, 1990).

Coding entails the breaking down of data, conceptualising and putting it together in new ways. The specific coding methods vary in terms of the background or training of the researcher, her/his experience and the purpose (Strauss & Corbin, 1990). Glaser (1992), as well as Strauss and Corbin (1990, 1998), indicated three major types of coding, i.e. open, axial and selective.

Open coding is the initial process of fracturing the data, examining them, comparing, conceptualising and categorising. Then follows axial coding. The term 'axial' refers to coding around the axis of the categories that were formed during open coding, along the lines of the dimensions and properties of the category. Axial coding is a set of procedures to put data together in new ways after open coding. The so-called paradigm model is used to link sub-categories of data with categories. Simplified, the sequential steps of the paradigm model are: causal conditions, phenomenon, context, intervening conditions, action/interaction strategies and consequences.

Selective coding starts after the core categories have been found. It is a delimiting coding (or explicating the story line) of only those issues that relate to the core category. In this study a number of categories of results were discovered after open coding had been applied. Axial coding followed. Then followed selective coding, which is the final process of integrating and refining (Strauss & Corbin, 1998).

During the entire coding process ample use is made of memos and diagrams. Memos are analysis notes and may include code notes (such as conceptual labels, paradigm features, etc.), theoretical notes (such as summaries of potential categories and their properties, etc.) and operational notes. Diagrams are visual representations of the emerging relationships between concepts, which show process, depict lines of action and integrate. Memos and diagrams are sorted and organised to finalise the integration (Glaser, 1992; Orona, 1997; Strauss & Corbin, 1990).

In this study the field notes of all individual participant comments were collated under the four questions. The key clauses within the data under each of the four headings were abstracted and grouped together as categories. According to Corbin (1998) this material is no longer raw data at this stage, but the concepts of the researcher. The categories were carefully analysed, interpreted, refined and in some cases regrouped. In some cases data collected in response to a particular open-ended question was moved to another heading because it belonged better there. The categories of responses were thereafter described in terms of the data collected.

RESULTS

The third major component of grounded theory, as indicated before, is the written report.

Although stratified-random sampling was applied, no distinct sub-group affiliation was observed. The exception was that to an extent, some of the participants with doctoral qualifications, tended to prefer that post-graduate studies should be offered by Technikon SA. The remaining results are presented under four sub-headings.

Positioning in the higher education landscape

The study revealed that different participants attached different meanings to academic freedom. Some regarded it as freedom to determine the syllabus and programme content, to take control, but also to be empowered and to be allowed creativity. One participant remarked that, "we cannot afford to be client driven because the academic field is developing rapidly, and we must be able to respond promptly". Others felt that academic freedom is about contact with clients (that is both prospective employers of graduates, as well as current and former students) and to keep up with rapid change. Several voiced the frustration that their freedom is restricted by

to the national systems with regard to technikon education. Several of the various meanings associated with academic freedom, that are reflected in the general literature – such as the desire to be free to pursue truth, to weigh up different schools of thought, to disseminate insights and to think, speak, research and write whatever chosen without interference – never emerged from the data.

The issue of the curriculum co-determined by the client enjoyed strong support. Matters such as client needs, relevance, the need to consult and to remain abreast of new developments were frequently voiced. However, the current situation wherein the curricula of technikons are nationally fixed, and that it requires an elaborate process to change them, was voiced as an obstacle regarding client responsiveness. On the other hand some participants cautioned that the client should never be too dominant. There is a view that the academic serves as filter with regard to needs articulated by clients and that the academic needs to rework the client needs that are identified, in order to be manageable by students. Some of the participants were of the opinion that the clients do not know their needs – neither the employers – nor the students, but that the specialist (academic) does know. One participant remarked that, “clients do not know what they need or want and students want to be guided”. Yet others argued that a balance should be maintained between consulting and the use of the academic’s professional judgement. Some emphasised that education is not limited to the needs of today, but is also about an anticipation of future needs; the academic has an important role to play in this regard, namely to interpret existing or emerging practice and to anticipate future developments.

The technikon’s obligation to the community, a key characteristic of the so-called metropolitan university, enjoyed less support. The few who raised the matter, however, felt quite strongly about it. A few emphasised that the different circumstances of students must be taken into consideration, especially in the light of the nature of the distance teaching. A few felt strongly about learner-orientated courseware and teaching. Some points were also raised about the geographically widely spread population of Technikon SA, as distance education institution, and the impact which that has on the nature of teaching, as well as the placement of students for experience.

A few participants highlighted the vocational and practical orientation of technikons. The aim of technikons to produce ready, employable persons was voiced, as well as the need that students must acquire the required skills were also raised. Again the need for a close association with clients came to the fore.

The personal positioning of participants did not suggest a strong acceptance of willing compliance and belief in, or support for, the practice of co-operative education, defined as formal integration of work experience into the overall curriculum. A wide range of views was raised, but nothing that suggested structured educational strategies to integrate academic study progressively with learning through productive work experiences in the appropriate field.

Although Technikon SA’s mission advocates, as indicated above, a ‘career-focused co-operative education institution’, the findings of this study do not suggest such a positioning in the higher education landscape. However, there is an inclination toward client-orientated curriculum development, taking into consideration both employer needs and student circumstances.

Signals permeating

With regard to the open-ended question, ‘What signals permeate from the technikon’s top and senior management to you in your position as academic?’ the data suggested reason for concern. Hardly any signals (directives, expectations, ‘the way forward’ or objectives) from management were mentioned pertaining to the practice of co-operative education. However, some participants indicated, in no uncertain terms,

signals suggesting alignment with universities, for example, that research and publication are emphasised. This is in contrast to the literature review (Homes, 1999; Louw, 1997; Venter, 1997) which cautioned about the blurring of roles and the need for redefinition of identities.

The corporate strategic goals of Technikon SA are abbreviated as ‘10/10/20’, that is 10% increase in non-subsidy income, 10% reduction in costs and 20% increase in pass rates. Some participants indicated an awareness of these agreed strategic thrusts and mentioned items (signals) such as the need to generate income through short courses or modular offerings, self-sustainability, increase of student numbers, improved throughput and assessment of students, as well as the need to reduce costs. However, decisions once taken are often not implemented and ideas raised by staff are often not considered. Strong frustration emerged regarding these matters.

Several participants raised concerns about ‘mixed messages’, no or very little direction, a ‘lack of focus’, ‘uncertainty’, awaiting guidance from senior line management, ‘hurry up and wait’, ‘insecurity’, ‘empty promises’, ‘contradictions’, ‘ever changing new or potential markets’, ‘hidden agendas’, ‘restructuring’, ‘down sizing’ and ‘retrenchments’. This is possibly due to the rectorate and senior line management themselves not being clear about their objectives. Worse still, some participants fear that the technikon is steering towards an abyss. Some participants even thought that top management do as they please and are ‘only interested in broadening their own power-bases’. Some participants voiced a concern that top management has ‘immense visions and expectations but funds are often not made available’; they, furthermore, loose perspective on implementation. Often ‘academic staff are expected to achieve the impossible’, although ‘negative attitudes about their performance prevail’.

Some encouraging signals suggested improvement of the technikon’s reputation, improving client services, becoming an institution of choice (technikon study preferred) and brand establishment. Community outreach and work creation projects were also voiced by a few participants.

The present study indicated a lack of coherence regarding direction ‘signals’, as well as inadequate managerial support when direction is given. It is evident that a co-operative education practice culture is not promoted; however alignment with universities, with regard to especially research and publication, is promoted.

The ‘Size and Shape’ scenario

Three sub-groups emerged from the data, namely those participants who felt that Technikon SA should restrict itself to undergraduate programmes, those who felt strongly about post-graduate programmes up to doctoral level, and those who supported a multi-purpose institution as indicated in the Council on Higher Education proposed reconfigured system. These findings remind one of Bonnen’s (1998) comment, that academics use their bit of ‘turf’ as their model and pursue their own values.

The supporters of only offering undergraduate programmes felt that most academic staff are not adequately equipped to cater for post-graduate supervision. One participant stated: ‘Any other idea is delusion of someone that does not know the institution’. These supporters were, furthermore, strongly of the opinion that the calibre of students studying through Technikon SA is not post-graduate material. Several participants suggested that more contact teaching must be offered and in selected disciplines fully residential undergraduate programmes. Many participants felt strongly about the need for foundation programmes (a characteristic of metropolitan universities) as being crucial to improvement of throughput rates.

A few participants believed strongly that Technikon SA should pursue selected masters programmes and even up to doctoral level. Several, however, supported the idea of a single multi-

purpose distance education institution that includes UNISA and possibly also TECHNISA, that is, both university and technical college education. The latter ties up with the need for foundation programmes, leading into technikon programmes.

From the data it became clear that the academic staff maintain a range of views regarding where Technikon SA is positioned in terms of the 'Size and Shape' debate. A few participants raised concern about the need for focus and emphasised that Technikon SA does not have the resources to pursue all possibilities simultaneously.

Co-operative education

In contrast to the description in the literature review, that co-operative education involves a structured combination of work-based learning and academic study, most participants were of the opinion that co-operative education is inherent, indirectly present or implied as part of technikon education. However, several participants enquired what co-operative education is or what it means. Others stated that there are different definitions and interpretations of co-operative education. Some indicated that it is a noble idea but that it does not work at technikons. A lack of interest among employers was also mentioned and it was suggested that the reason is that co-operative education is not well known in commerce and industry.

The supporters of the notion 'co-operative education' were of the opinion that it is a means to educate people for specific occupations. Co-operative education offers the opportunity to develop demonstrable skills. However, there was also the opinion that the experiential learning, such as learnerships or internships, should be left to professional bodies and that the technikon should only concern itself with the academic teaching. One participant stated that, 'industry must accept the responsibility to prepare the students practically, industry must be directly involved with delivering the end product'.

Several participants felt that alternatives to experiential learning, for example, simulations, case-studies, self-discovery and projects are as good as actual productive work experience and should be actively pursued. Some associated the pursuing of these alternatives with exercising academic freedom.

In general, it became clear that there was little support or enthusiasm for co-operative education, the way it is defined in the literature, among the sample of Technikon SA staff that was interviewed. One participant was adamant that, 'experiential learning placements are not feasible in South Africa'.

DISCUSSION

According to Dienhart (1998), as well as Saikali and Jain (1997), language reflects the way people think about things and the common values of the organisation. Although technikons in general and Technikon SA in particular, advocate the practice of co-operative education, the collected data contained several stray messages but no common language regarding the practice of co-operative education. From the data it is clear that the practice of co-operative education, as defined by Cates and Jones (1999), the Cooperative Education Network (1996) and Pratt (1996), cannot be regarded as intrinsic to the organisational culture of Technikon SA.

The results suggest, furthermore, that there are few shared meanings and beliefs among the randomly sampled participants of this research. It can, therefore, be assumed that the hearts and minds of the academic staff of Technikon SA are not engaged towards a common co-operative education goal. This, as Langan-Fox and Tan (1997) suggested, may well be a liability for the institution and unfortunately difficult to change. The situation is certainly not going to change by itself. A focussed change management programme and prolonged concerted effort will be necessary to infuse a culture of co-operative education practice at Technikon SA.

The findings of the present study cannot be generalised to other technikons, since Technikon SA is a distance teaching institution. In order to generalise the findings to technikons in general, the study should be replicated at other technikons. A comparative study between technikons and universities could also be meaningful. Furthermore, this study could be replicated at Technikon SA using a different stratified-random sample, namely dividing the population in terms of the level of post-graduate qualification, or alternatively dividing the population in terms of academic job level, to determine whether the results are significantly different.

In retrospect, it is realised that if the sample had included more than five African, Asian and Coloured staff members (i.e. a non-random sample), it would have reflected a more representative viewpoint. This is recognised as a shortcoming of the present research, in view of the fact that the majority of the student population of Technikon SA is black. Another shortcoming was that participants length of service was not controlled for.

The findings of this research are of particular importance to the rectorate of Technikon SA. At a workshop held during the third quarter of 2000 (subsequent to the data collection) to formulate a response to the Council on Higher Education 'Size and Shape' document, several scenarios, which entail different trajectories for the future of Technikon SA, were developed. Although it is advocated that Technikon SA is the only distance co-operative education technikon, the five possible scenarios that were mentioned (Technikon Southern Africa, 2000) make no specific mention of co-operative education. This study also revealed that there is no general support for co-operative education practice among the academic staff of Technikon SA. It can be concluded that there is a lack of focus in this regard. It can further be concluded that if acceptance means willing compliance, then there is not acceptance, neither at senior management level nor among the academic staff.

REFERENCES

- Anells, M. (1997). Grounded theory method. Part 1: within the five moments of qualitative research. *Nursing Inquiry*, 4, 120-129.
- Bargh, C., Scott, P. & Smith, D. (1996). *Governing universities – changing the culture?* Buckingham: Society for Research into Higher Education & Open University Press.
- Bartkus, K.R. & Stull, W.S. (1997). Some thoughts about research in cooperative education. *Journal of Cooperative Education*, 32(2), 7-16.
- Blignaut, C.J.H. (1985). *Beroeps- en akademiese motiewe in die Bedryfsielkunde*. Johannesburg: Randse Afrikaanse Universiteit.
- Bonnen, J.T. (1998). *The land grant idea and the evolving outreach university*. <http://www.adec.edu/clemson/papers/bonnen2.html>. (3 February 2000).
- Brott, P.E. & Myers, J.E. (1999). Development of professional school counselor identity: a grounded theory. *A.S.C.A. Professional School Counseling*, 2(5).
- Bryman, A & Burgess, R.G. (Eds) (1999). *Qualitative research* (Vol. 1). London: Sage.
- Cates, C. & Jones, P. (1999). *Learning outcomes – the educational value of cooperative education*. Maryland: Cooperative Education Association.
- Clarke, A.E. (1997). A social worlds research adventure – the case of reproductive science. In A. Strauss & J. Corbin (Eds), *Grounded theory in practice* (pp. 63-94). Thousand Oaks, CA: Sage.
- Cooperative Education Network. (1996). *College and University Program Attributes*. <http://www.co-op.uc.edu/more/ATTRIBUT.HTM>. (22 December 1999).
- Corbin, J. (1998). Alternative interpretations. *Theory and Psychology*, 8, 121-128.
- Deruosi, P. & Sherwood, C.S. (1997). Community service scholarships: combining cooperative education with service learning. *Journal of Cooperative Education*, 33(1), 46-54.
- Dey, I. (1999). *Grounding grounded theory – guidelines for qualitative inquiry*. San Diego: Academic Press.
- Dienhart, A (1998). *Reshaping fatherhood*. Thousand Oaks: Sage.

- Glaser, B.G. (1992). *Basics of grounded theory analysis – emergence vs force*. Mill Valley, CA: Sociology Press.
- Green, M.E. (1997). *Internship success*. Lincolnwood, Chicago: VGM Career Horizons.
- Homes, M. (1999). *Business is dictating trends*. <http://www.fm.co.za/report/techniko/adeegree.htm>. (11 August 1999).
- Hurst, S. (1999). Legacy of betrayal: a grounded theory of becoming demoralized from the perspective of women who have been depressed. *Canadian Psychology*, 40, 179–191.
- Janse van Vuren, A. (1995). *Kwalifikasie struktuur vir technikonopleiding in die biblioteek- en inligtingkunde deur middel van afstandsonderrig*. Unpublished doctoral thesis, Rand Afrikaans University, Johannesburg.
- Langan-Fox, J & Tan, P. (1997). Images of a culture in transition: personal constructions of organisational stability and change. *Journal of Occupational and Organisational Psychology*, 70, 273–295.
- Louw, W.J. (1996). Die idee van die universiteit – algemene oriëntering. *Pedagogiejoernaal*, 17, 84–95.
- Louw, W.J. (1997). Die idee van die universiteit vir die 21ste eeu: 'n Suid-Afrikaanse perspektief. *Pedagogiejoernaal*, 18, 25–56.
- Mphahlele, M.C.J. (1996). *Education through the ages* (Book 1). Pretoria: Kagiso.
- Nelson, C. & Watt, S. (1999). *Academic keywords*. New York: Routledge.
- Nkabinde, Z.P. (1997). *An analysis of educational challenges in the new South Africa*. Lanham: University Press of America.
- Orona, C.J. (1997). Temporality and identity loss due to Alzheimer's disease. In A. Strauss & J. Corbin (Eds), *Grounded theory in practice* (pp. 171–196). Thousand Oaks: SAGE.
- Palm, R.L. & Toma, J.D. (1997). Community Relationships and partnerships. *New Directions for Student Services*, 79(Fall), 57–65.
- Petersen, S. (2000). Multicultural perspective on middle-class women's identity development. *Journal of Counseling and Development*, 78, 63–71.
- Posthumus, L. (1997). Die moderne universiteit. *Aambeeld*, 25(1), 12–17.
- Pratt, P.M. (1996). *Earn and learn through cooperative education*. <http://www.environs.com/talbot/learn1.html>. (22 December 1999).
- Rennie, D.L. & Brewer, L. (1987). A grounded theory of thesis blocking. *Teaching Psychology*, 14, 10–16.
- Republic of South Africa. (1997). *Higher Education Act 101 of 1997*. Pretoria: Government Printer.
- Republic of South Africa. (2000a). Council on Higher Education. *Size and shape task team discussion document*. <http://education.pwv.gov.za/DoE-Sites/Higher-Education/CHE/-Discuss-7April.htm>. (15 May 2000).
- Republic of South Africa. (2000b). Council on Higher Education, Shape and Size of Higher Education Task Team. *Towards a new higher education landscape: meeting the equity, quality and social development imperatives of South Africa in the 21st century*. [http://education.pwv.gov.za/DoE-Sites/Higher-Education/CHE/CHE.Report 30June2000.htm](http://education.pwv.gov.za/DoE-Sites/Higher-Education/CHE/CHE.Report%2030June2000.htm). (30 July 2000).
- Saikali, J.G. & Jain, R.K. (1997). Cooperative educational engineering education. *Journal of Cooperative Education*, 32(3), 6–15.
- Seaberry, J. & Davis, J.L. (1997). The metropolitan university: history, mission, and defining characteristics. *New Directions For Student Services*, 79(Fall), 5–13.
- Sowers-Hoag, K. & Harrison, D.F. (1998). *Finding an academic job*. Thousand Oaks, CA: Sage.
- Strauss, A. & Corbin, J. (1990). *Basics of qualitative research – grounded theory procedures and techniques*. Newbury Park, California, CA: Sage.
- Strauss, A. & Corbin, J. (Eds) (1997). *Grounded theory in practice*. Thousand Oaks, CA: Sage.
- Strauss, A. & Corbin, J. (1998). *Basics of qualitative research – techniques and procedures for developing grounded theory* (2nd ed.). Thousand Oaks, CA: Sage.
- Technikon Southern Africa. (2000). *Response to the minister of education on the report of the size and shape task team of the council on higher education*. Unpublished report, Technikon SA, Roodepoort.
- Technikon Southern Africa (undated). Mission and Vision. <http://www.trsa.ac.za/cabout/mis.vis.htm>. (20 September 1999).
- “Varsities” by a degree. (1999). *Financial Mail*. <http://www.fm.co.za/report/techniko/fvideo.htm>. (11 August 1999).
- Venter, J.J. (1997). Die universiteit – wies en watse besigheid? *Woord en Daad*, Somer 1997.
- Wade, R.C. (1997). Community, service learning and the social studies curriculum: challenges to effective practice. *Social Studies*, 88(5), 197–203.
- Welman, J.C. & Kruger, S.J. (1999). *Research methodology for the business and administrative sciences*. Johannesburg: International Thompson Publishing.