

Centres of excellence in the context of further education and training in South Africa

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Abstract: *Since 1994 South African further education and training (FET) has undergone significant and fundamental changes. These changes include the transfer of colleges between state departments, curriculum revision, forced mergers and a shift in the student population. As a result of the growing interest in, and funding of, vocationally aligned education, education and training excellence models have permeated into the management portfolio of South Africa's FET. FET colleges (FETCs) have been faced with the emerging excellence discourses in the higher education and business sectors, as well as funding and accreditation linked motivators. How FETC managers have chosen to incorporate, or not to incorporate, centres of excellence (CoEs) into their organizational structures indicates both the difference in the application of CoE models to the sector compared with the higher education and business sectors and the way FETCs are managed in their volatile environment. This paper uses data initially gathered for a funded project aimed at identifying excellence indicators applicable to the FET sector, and a comparative content analysis of related publications and telephone interviews with senior staff responsible for innovation. The authors argue that higher education or business excellence models cannot be applied to the further education and training college environment; models need to be adapted to suit this specific type of environment.*

Keywords: *centres of excellence; further education and training; quality; FETCs; South Africa*

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South Africa's vocational education and training sector has undergone significant and fundamental changes over the past decade (Akoojee *et al*, 2005; Papier, 2010). These changes include the merging of 152 colleges into

50 multi-site institutions and curriculum restructuring and as well as being responsive to the needs of their surrounding communities (Crosser *et al*, 2003; Papier, 2010 pp 153–154). The communities that the new

geographically dispersed institutions serve are diverse, ranging from commerce and industry to the state-orchestrated Sector Education and Training Authorities (SETAs) and the school-leaving/job-seeking student population. One of the institutional responses, with varying levels of success, has been the formation of centres of excellence (CoE). At some institutions CoEs have been created as part of funded projects, while at others a broader, marketing based approach has been adopted.

The increase in demands placed on higher education since the 1980s has resulted in a separation of the need to increase and widen access on one hand and to maintain or develop academic outputs on the other. This, in turn, has resulted in the acceptance of a pocket-type focus in which units within institutions have expanded support structures and developed semi-independent units which can channel resources in specific directions, within institutional parameters where possible and outside institutional parameters if needed. The formation of units in which pockets of related activities occur has changed resourcing and work dynamics within the educational institutions involved. Not only do faculties have to compete for internal and external resources within traditional boundaries, they also compete with other units offering the same or very similar services. A strategy or approach followed has been to define the activities of such units narrowly and develop the units into what has become known as centres of excellence (CoE). Educational administrators and funding bodies have accepted the CoE construct and provide preferential funding to such units. In South Africa, the National Research Fund (NRF) has been providing funds to such units for a number of years (NRF, 2004).

In the finance- and output-driven higher education environment a CoE component appears to make business sense. In the corporate environment excellence models have been used for decades, as a response to a need to increase and benchmark productivity (Macleod and Baxter, 2001, pp 392–394) in an increasingly competitive environment. The main impetus and most commonly used benchmark within the higher education environment has been the production of knowledge through research outputs, to the extent that a centre of excellence in the higher education environment is equated to a research centre. More recently, the CoE focus has expanded to encompass teaching and learning, primarily through the creation and funding of Centres for Excellence in Teaching and Learning (CETLs) (Gosling and Hannan, 2007; Turner *et al*, 2008; Clouder, *et al*, 2008; King, 2010). With the growing interest in, and funding of, vocationally aligned further education and training, excellence models have permeated the sector.

The study reported in this paper was developed as part of a project aimed at identifying the nature of a CoE in the South African further education and training environment. As the programme progressed it evolved into an analysis of how FETC management use environmental factors to serve the needs of their own organizational development and the communities they serve. The paper focuses on the applicability of higher education excellence models to the vocational further education sector by analysing practice in some evolving South African further education and training colleges.

Research design

When the project was initiated the intention was to analyse principles identified at colleges in the Western Cape. However, primarily because CoEs are new to the FET sector, a review of literature on CoEs in other sectors produced over the past two decades has been used to form the basis for identifying principles applicable to good practice in the FET sector. The content of the literature review was initially coded by means of a simple content analysis classified by means of the framework applied by means of the DACUM method (Powel and Landman, 1999).

Developing a Curriculum (DACUM) is an analytical tool designed to analyse occupational skills that has also been successfully used to analyse occupations with the goal of identifying key features to be included in a curriculum aimed at developing the identified skills. It involves reviewing a situation and identifying key factors, called the general area of competence (GAC), as well as subordinate factors, called workplace skills (WS). DACUM was initially designed as a tool for designing curricula and is a useful tool for data collection and analysis when a need exists to identify causal factors in a qualitative data collection environment.

The DACUM model's linear and functionalist orientation proved to be insufficient on its own, because both the literature review and the analysis of college practice supported a multi-objective notion. A content analysis (Henning *et al*, 2004) was applied because the aim of this paper was to identify practice and argument. By combining a DACUM and content analysis both FET college task specific excellence indicators and broader social excellence have been identified.

CoEs: ancient tradition or market-led concept

The literature available on CoEs is relatively sparse and is dominated by neither discourse nor publication environment. A general trend in the literature available

on CoEs gives the impression of individuals, usually champions, raising or forwarding the issue in the academic environment from which the publication emanates. From the literature two discourses can be identified. The first focuses on the educational institution as the traditional home of CoEs; the second focuses on CoEs as a new, necessary, construct in the academic environment. The term *centre of excellence*, as a social construct, is inextricably linked to the production of knowledge through training and the provision of skills, as well as further and higher education.

The term Centre of Excellence (CoE) is commonly used to describe an institution or unit within an institution that develops knowledge for a given environment. This could be a research unit (Ostar, 1991; Bell, 1996), a service unit (Gray-Donald, 2004; Robson *et al*, 2005) or a unit that serves as an exemplar of practice worthy of emulation (Gray-Donald, 2004). As currently used, the term CoE differs from its more general use in a traditional sense. It stems from the response of universities to changing perceptions of its social value in the late 1980s to mid-1990s and subsequently draws on the university's tradition and place in society.

The reason for universities being earmarked as CoEs is somewhat obvious. The growth of social structures and resultant division of labour throughout the ages has seen the establishment of centres where higher order skills and knowledge are conceptualized, developed and theorized. Within the European- and mid-Eastern environments, universities and craft centres were at the heart of social and technological practices, as well as acting as centres for innovation such as the 'enlightenment', social and economic revolutions. As a result, an argument postulating that the French *Grandes Écoles* are traditional centres of excellence (Beraud, 2000, pp 369–70) might be expected to be found. These schools date back to 1747, when the École Royale des Ponts et Chaussées was founded. Similarly, the suggestion by Gray-Donald and Selby (2004, p 203) that 'Higher education is the industrialized world's top industry . . . the mother of all industries . . . because the specialists of most industries in this economy were trained at the university' can be seen as evidence of the discourse that universities are and have been the Western world's centres of excellence.

A CoE in the current environment differs contextually from its traditional point of origin. Ostar (1991, pp 57–58) differentiated between 'classic research universities' of an 'earlier period' – before the 1980s – that cooperated with their external communities in a fragmented manner and what he called 'interactive universities' that 'thrived' on two-way communication

and cooperation. Bell (1996) locates the transformation earlier, to the mid-1970s, but also points to the establishment of research units, including University Research Centres, Science and Technology Centres, Organised Research Units (Bell, 1996, p 323) and, more recently, centres for promoting teaching and learning (Gosling and Hannan, 2007; Turner *et al*, 2008; Clouder, *et al*, 2008; King, 2010).

CoEs should not, however, be seen as benign university responses to market pressures. The NRF, South African National Research Foundation's Centres of Excellence webpage revealed at the time (2004) the political dimension by indicating that establishing such centres forms 'a key component of the human capital and transformation dimensions of government policy' (nrf.ac.za); and the NRF handbook noted that gender sensitivity was to be an 'imperative' for 'all activities' (South Africa, 2004, p 8). It is difficult not to draw a parallel of the NRF's intention with that of the Higher Education Funding Council for England's idea of CETLs as catalysts 'for change' (Clouder *et al*, 2008, p 635).

Reason for establishment

The social reason underlying the establishment of a new relationship between universities and their surrounding environments, as noted by Rip (2004, p 153), stems from the disappearance of the 'old division of labour between fundamental and applied or problem-oriented research. . . and with it, the functional distinction between universities, public laboratories and industrial and other private research' (Rip, 2004, p 153). Centres of Excellence, or what he calls Centres of Excellence and Relevance, have replaced traditional research units because universities now face a situation of increasing diversity and a decreasing gap between research outputs and societal uptake of the research output.

In this new environment there is a greater need for mode 2 and mode 3 knowledge production, as well as a need for 'transdisciplinary' research and training (Rip, 2004, pp 156, 159). In this environment, as pointed out by Bell (1996, pp 322–325), university–industry interaction, associations with Government and the involvement of 'national associations' were fostered. Research for the sake of 'enterprise' in a competitive environment is also required. Universities, argue Gray-Donald and Selby (2004, p 203), are 'no longer in the privileged position of simply observing, criticizing and evaluating what goes on beyond the seminar room'. By developing interactive universities (or units) that interact directly with elements of their external environments 'through the creation of innovative strategic partnerships among higher education, business,

government, labour, and economic/community development organizations', Ostar (1991, p 56) argued – a little more than a decade earlier – that universities can 'address the challenges presented by changing demographics, rapid advances in technology, and global competition'.

For colleges operating in the further education and training (FET) environment there is logic in the CoE paradigm. Colleges are expected to act in tandem with market forces, they are not bound by a discipline-based structure and they have a management structure more closely resembling that of the business environment. Seeking accreditation and concomitant funding is a logical managerial step.

Determinants of excellence in the FET environment

Within the further education and training and skills development environments, as opposed to the higher education environment where research is the key component (Ostar, 1991; Bell, 1996; Ruben, 2004), the emphasis of a CoE is on the production, development and provision of skills. Reference can be made to medieval craft centres that formed the basis for skills development on which the world economy was born, or to FE/technical colleges where artisans of the industrial age were developed. Changes in vocational education, starting with changes in further education in the United Kingdom in the 1980s, as with universities, have resulted in a different set of determinants for quality and its measurement.

Vocational education in South Africa has developed in tandem with economic and political developments following the discovery of minerals, first in the northern parts of the Cape Colony in the 1860s and, later, gold and other minerals north east of the colonial borders, in areas that would be incorporated in the country following the Anglo-Boer war (Pittendrigh, 1988, pp 108–109).

Three key determining occurrences shaped vocational education in South Africa. The first was unification in 1910, which provided a national system of education and training based on the British apprenticeship system. The second was the electoral victory of the nationalist party in 1948, which resulted in the apartheid-based realignment of state systems. Apartheid legislation restricted access to certain forms of skilled work to whites and separated provision on racial lines. Systemic realignment following the 1976 uprisings resulted in the removal of race-based access to skilled jobs but not racial integration in education and training provision systems. As a result, by the early 1990s major centres had a relatively large number of

technical colleges, in close proximity to each other, offering the same national qualifications but to different race groups.

The third determining occurrence shaping vocational education in South Africa was the electoral victory in 1994 of the African National Congress in the country's first democratic election. The African National Congress's post-apartheid vision included an integrated education and training system. Initially the idea was to have a single ministry responsible for both education and training, but post-election realities resulted in the development of a training system under the Department of Labour and a separate system for education. Although the two were incorporated into a single national qualifications framework, a single integrated system was never achieved.

For FET colleges the 1990s were particularly traumatic. As a sector it was moved from the relatively well-resourced Department of National Education to provincial departments. At the time the movement occurred, provincial education departments were not only inadequately equipped to manage them, they were also preoccupied with the challenge of integrating schools into single provincial systems and aligning them to a new school curriculum. FET institutions were therefore left to largely fend for themselves, which they did by providing Education Department-accredited national certificates, training artisans for the Department of Labour and offering short courses serving local labour market needs.

The second form of provisioning became a lucrative form of income for many colleges as the Department of Labour extended the apprenticeship model from a few sectors (primarily engineering and hair care) to all occupation sectors. This was achieved by raising Sector Education and Training Authorities (SETA) on the one hand and legislating the payment of a Skills Levy by all employers on the other. SETAs received and managed the levies. With the resulting income SETAs could accredit providers and pay them for offering skills programmes (short courses) and 'learnerships', the term used to describe artisanship-type courses in sectors where they had not previously been applied.

With the promulgation of the Further Education and Training College Act in 2006 (FETC Act) and the introduction of the National Certificate (Vocational), NCV, programmes in 2007 it became both possible and desirable for FET institutions to develop their own community-based provisioning mix.

One of the results of the FETC Act was the development of what has been called *mega colleges* through the merger of individual colleges into multi-campus institutions. Several FET institutions have

Table 1. Excellence determinants.

✓	Quality
✓	Identification of purpose
✓	Accreditation
✓	Nurturing environment
✓	Staff ownership
✓	Effective planning and implementation
✓	Transdisciplinary operations
✓	Existence of a champion
✓	Allocation of sufficient funds

developed centres of excellence: some institutions have aligned themselves with the development of a single CoE and others have developed a number of campus-based CoEs, each linked to an employment sector.

CoEs have been placed on the FET institution agenda primarily for two reasons. Because colleges, prior to merging, were relatively small and offered a relatively narrow range of courses, they had close contact with local communities and, as a result, serviced community needs. In the new provisioning environment FET institutions needed to balance multi-campus missions, intertwined with national and social transformation objectives, with local level community needs. In servicing community needs, some FET institutions found themselves in competition with each other, as well as in competition with private providers. Private providers were able to compete favourably with FET institutions since they were not constrained by parameters determined by national curricula. By developing centres of excellence, FET institutions hoped to become local favoured providers. The challenge faced, however, is that of developing equilibrium between their CoEs and the demands of local communities.

FET institutions have also developed an interest in CoEs because some SETAs have developed criteria for accreditation of CoEs. The accreditation provides national-level credibility and offers advantages arising from being associated with sector education and training in authorities. To date in excess of 500 'sectoral or occupational excellence' (ISOE) units have been established (College of Cape Town, 2010). As a result of both the need to reinforce or develop local level credibility and establish an alliance with national ISOE norms, FET institutions have been exploring both the accreditation route as well as their own definitions of CoEs (see Table 1).

The issue of quality

Unlike universities, where research was a key determinant for excellence, further education and other

education and training establishments have based excellence determinants on business quality management models. These include the application of business excellence models, ISO9000 and Total Quality Management (TQM) models (Robson *et al*, 2005, pp 465–466).

Quality, as a measured construct, is elusive (du Toit *et al*, 2007, p 531). It has its roots in post World War II production ideologies and processes (Russell and Taylor, 1995, p 87) and, over the past few decades, in the provision of service. Quality measures have, since the mid 1990s, also been applied to education and training, particularly as a result of state demands on the improvement of quality (Robson *et al*, 2005, p 468). Quality is, however, not a simple or singularly definable concept. A descriptive key to quality, according to Holm and Pederson (2000), is 'being able to do something well' and that of being competent as a matter of 'having the ability, authority, skills, knowledge, etc, to do what is needed'. However, Holm and Pederson continue, for quality and competency to be expressed in an organization it must store and share specific competencies amongst members of an organization. Simply having competence stored in an organization is not sufficient. For an organization to be regarded as competent, knowledge must be distributed and become embodied into products, services and systems (Nonaka and Takeuchi, 1995).

In addition to internal dynamics, an organization's level of competency cannot be separated from its external environment. Holm and Pederson (2000) argue that developing a high level of competence depends upon the kind of interaction and relationships within an organization and the relationships it has with its external environment; and, conversely, its ability to learn and generate higher levels of competency depends on environmental interaction (Nelson and Winter, 1982). According to Holm and Pederson (2000), an underlying problem with the integration of knowledge in organizations is that different knowledge areas are, comparatively, more or less difficult to articulate and transfer. This reflects a fundamental problem facing its determinants.

Publications of the 1990s, (for example, de Wit and Hammersma, 1992; Pycraft *et al*, 1997) indicate that quality has a number of determinants. Resultant collective business wisdom (De Wit and Hamersma, 1992, pp 241–242) indicates that quality determinants include technological requirements, psychological requirements, reliability and maintenance, contractual requirements and employee ethics. Quality reflects functionality, appearance reliability, durability, repair recovery and contractual obligation (Pycraft, *et al*, 1997, p 621). Quality requirements for both products and

services, but more so for services, are not devoid of perception of value; each quality determinant represents a point in a continuum, often with conflicting poles. When quality is determined by technological requirements, it is determined by breakage and usage requirements. The stronger a product technically, the longer it will last but (generally) the more expensive it will be. When determined by consumer satisfaction, quality becomes the subject of an uncontrollable and transient determinant that is dependent on a very wide range of psychological, sociological and economic factors. Reliability and maintenance as a quality requirement involve balancing the result of potentially conflicting perceptions (reliability) and wide variety of physical and legal parameters (maintenance). In addition, reliability and maintenance cannot easily be separated from contractual requirements or specifications. Although it is relatively easy to assert that products of high quality are built more closely to design specifications than products of low quality, it is extremely difficult to compare service determinants and actual service. Lastly, ethical requirements as a quality determinant rely on the existence of a value system shared in an organization, an internal environment that is extremely difficult to develop and maintain.

The complex and conflicting nature of quality determinants in education and training is well documented. The paper by Hawes and Stephens (1990), dealing with a British situation, differentiates between seven different stakeholder groups which include parents, whose focus is on exam results; inspectors, who require better general standards; the 'Chairman of the school board [of Governors]' who focuses on good use of money; a professor, who is interested in good teaching and learning practices; the [local] mayor or Member of Parliament, who has an interest in effective work orientation; a clergyman, whose interest is in character-building; and a 'village elder', whose interest is in the maintenance of the community.

Determining the quality determinants for a CoE is clearly not easy and is influenced by a potentially infinite number of internal and external variables. It is, however, a vital element of the definition of a CoE. The challenge is to identify an adequate set of benchmarking tools. These are tools used to determine and measure key performance areas, but which can also be used to determine strengths, area for improvements and comparisons with other organizations. Various benchmarking tools are available and can be supplied by organizations that specialize in performance measurement (Robson *et al*, 2005, p 468). The challenge facing FET institutions is that of defining excellence in a complex environment, where key stakeholder demands have elements of incompatibility,

while simultaneously redefining themselves and their curricula and assimilating changes in the legislative landscape within which they must operate.

The college merger process coincided with a curriculum change which resulted, at least for a short time until the decision was rescinded, in the phasing out of the curricula and aimed instead at the artisan training process, which was generally accepted by the labour market without a replacement accreditation mechanism. The new curricula also opened FET institutions to a new student population: these institutions therefore faced the challenge of reconstructing quality perceptions in their labour markets.

In addition to rebuilding external quality perceptions, FET institutions also face internal quality and credibility challenges. Staff preparedness and support for the new curricula was questionable; and staff were largely antagonistic. As veterans of this environment, however, FET institution managers are acutely aware that they need to maintain their own integrity within – and despite – changing environments. As a result, both internal and external factors have framed the development of FET-level CoEs.

FET institution managers have looked to the Department of Labour's Sector Education and Training Authorities (SETAs) as the key external CoE determinant. SETAs serve as accreditation and funding bodies; and some have developed criteria for recognition as a sector CoE. FET institutions have also ensured local-level alignment with the external environment by collaborating with regional initiatives, by using inputs in their own governance structures and by maintaining local-level provisioning alliances that existed prior to incorporation.

Other determinants

Where FET institutions have introduced CoEs they have done so strategically and systematically. The CoE portfolio has been included in the competency specification of one of three Deputy Chief Executive Officers (DCEO) at FETCs. CoEs have been allocated to specific campus-based departments and resourced by means of a combination of external and internal funding.

These strategic decisions are in line with research based indicators of good practice. According to McDonald-Hooks and Randolph (2004, p 231) an important consideration is the identification of the CoE's purpose, which will require the clear determination of mission goals and objectives. The goal of a CoE should include the transformation of an institution from one with areas of excellence to an 'institution modelling university-wide excellence' and

making a major contribution regionally, nationally and internationally (Gray-Donald and Selby, 2004, p 204). In any environment, they argue, a mediocre institution with a pocket of excellence is less effective than an excellent institution comprising a number of centres. Rip's (2004) construct of relevance to an environment should not be ignored. Unit goals either contribute, or do not contribute, to the attainment of goals and therefore an institution's goals should be compatible with the situation and trends in its external environment.

Another broad determinant is accreditation with regional and national associations as well as the identification and development of partnerships and a collaborative environment (McDonald-Hooks and Randolph, 2004, pp 232–234). Of relevance to the South African context are SAQA-based accreditation bodies. According to McDonald-Hooks and Randolph (2004), effective collaboration between partner organizations had a significant impact on the effectiveness of a CoE; and they also indicate three dimensions to a collaborative environment, namely the nurturing of a learning community, true collaboration and accountability for quality. The first dimension involves the development of an internal supportive and reflective community which is required to support exploration, practice and reflection. They argue that for the existence of true collaboration partners need to have equal status and mutually agreed goals. If one partner dominates others, or if goals lack compatibility, the effectiveness of a centre is hampered. The third element, they suggest, is accountability for quality. They focus only on Levine's (1997) construct of accountability for quality teaching, in which both internal and inter-organizational accountability is necessary. Equally important is accountability for the attainment of organizational and collaborative goals.

A nurturing environment (Kraft, 2000, pp 51–52), staff satisfaction and a balance between service and profit (Robson *et al*, 2005, pp 466–467) collectively influence excellence in FET environments. These authors extol the importance of a positive environment and also note that satisfied employees create values which subsequently lead to consumer satisfaction. Kraft (2000, p 50) argues that excellence in teaching is inextricably linked to staff satisfaction, because good teaching 'comes from the identity and integrity of the teacher'.

The importance of effective staff cannot be overemphasized. As Robson *et al*, (2005, p 466) indicate, 'American TQM "gurus" are "unanimous and unequivocal in the view" that process ownership and job satisfaction will yield returns in both quality and productivity'. Robson *et al*, (2005, p 466) acknowledge the importance of striving for profitability and argue

that balancing service and profit is a key factor for the maintenance of any institution or unit supplying services in the current environment. Funding education has, over the past two decades, evolved from being dominated by the State to operating in what Rankin (2004), with relevance to research outputs, defines as operating in both the gift economy, which is supply driven, and the market economy, which is demand driven. Clearly, in a capitalist environment, a CoE cannot be a drain on an institution's resources: it needs to contribute positively towards an institution's financial wellbeing.

Effective strategic planning is accepted as a core determinant of survival of, and excellence in, institutions of further and higher education (Kotler and Murphy, 1981, p 470). As a long-term comprehensive approach, strategic planning develops and maintains a strategic fit between the CoE and its changing market opportunities and suggests steps the institution can take to improve itself. As a subset of strategic planning, operational planning details short-term ways of achieving milestones and outlines how – or what portion of – a strategic plan will be put into operation during a given operational period. An operational plan is the basis for, and justification of, an annual operating budget request and it links the strategic plan with the activities the institution will provide while detailing the required resources. Discussing online learning in higher education, Garrison and Kanuka (2004, p 101) argue that operational plans serve to 'operationalize' an institution's goals and objectives in an action plan. This involves attending to both instructional and non-instructional components including promotional and advertising strategies, shared resources (for example, registration, fees), managing technology, designing effective assessment processes and attending to the needs of transdisciplinary operations.

Transdisciplinary operations are a vital aspect of further and higher education because of the increasingly multidisciplinary nature of training. Rip (2004) refers to a centre of research excellence and relevance being the 'first step towards transdisciplinary research training'. Because short term collaborative activities with finite life spans and from a variety of disciplines often determine the success of CoEs, project management techniques may also need to be included in the management framework. Project management techniques can be used to identify viable activities and – by definition – to manage each project or activity effectively. Similarly, project management techniques can be used to promote internal collaborative activities, resources and staff. Strategic management and support from top level or institutional management is needed for a CoE to extend itself within an institution.

Table 2. Negatives.

- ✓ Conflict with existing patterns of work
- ✓ Implementation process or mechanisms
- ✓ Lack of participant willingness

Gray- Donald and Selby (2004, pp 203–204), discussing a CoE that promoted the idea of eco-friendly university campuses, argued in favour of a ‘multi-wave’ model. The model involved a ‘first wave’ consisting of a group of ‘affiliated fellows’ who developed and championed the goals of the centre: an element of the centre’s work was to create a ripple effect and, as a result, second and third ‘waves’.

One factor identified as a key to the realization of the theoretically infinite number of determinants is the existence of a champion. For example, the presence of a passionate, hard-working member of staff was credited with the transformation of a simple college newspaper to a centre of student development (Nealy, 2005). Similarly, Kraft (2000, pp 51–52) specifically argued that peer leaders are key role players in the continued existence of the Centre for Instructional Excellence at Eastern Michigan University in the USA. Even the literature that does not specifically focus on the importance of a champion indicates that significant amounts of effort that is not normally associated with work within faculties has to be expended to establish and maintain a CoE. Individuals with astute political and project management skills appear to be the most appropriate to manage CoEs.

By allocating the function of developing CoEs to a deputy CEO and over-emotionalizing it through a combination of internal and external funding through development of a campus based CoE, FET institutions have introduced CoEs in line with accepted processes applied in other education sectors.

Negative institutional responses

Centres of Excellence have the potential to provide a social service not traditionally required of educational institutions. As a result, not only does a potential for conflict between a centre and its surrounding environment exist, an antagonistic relationship between the institution and its CoE must also be assumed (see Table 2). Bell (1996) suggested that CoEs threaten existing university patterns of production, particularly as they, the CoEs, evolved at a time when universities and industries were ‘still struggling to come to terms with each other’ (Bell, 1996, p 326). As a result, Bell (1996, p 325) argued that inherent conflict exists between ‘accepted university practices’ and the ‘new’ social

demands on producers of knowledge’. He identifies three forms of conflict:

- competition, as opposed to collegiality, in approaching research;
- conflict of interest between individuals and universities and staff; and
- an impression that university-based research is being corrupted.

Lewis’s (2006) publication entitled ‘Excellence without a soul’, referring not to centres at a university but to Harvard University, a university committed to academic excellence, argues that his university has ‘bowed to consumer culture in which institutions of higher education cater to student demands’, which has resulted in a ‘watered down’ curriculum. Rather than giving students ‘what they want’, he argues that universities must ‘give students what they need. . .and. . .faculty must play a more significant role in helping students to grow up’. The argument of ‘bowing’ to student demands can also be applied to finance-based incentives and demands of the business environment. Following this argument it could be said that the pursuit of market-based excellence may result in the erosion of the more traditional academic excellence.

Gray-Donald and Selby (2004), by identifying and arguing in favour of the need to transfer the implementation of the goals of their Centre of Sustainable Futures, also allude to an antagonistic or negative environment surrounding the Centre. The contention by Robson *et al*, (2005, pp 465–466 and 480) is more specific. They suggest that excellence models tend to be implemented in a defensive manner. Where staff are involved, the application of excellence models ‘helps reduce’ but does not eliminate what they call the ‘satisfaction’ gap. In other words, they argue, in agreement with several other authors, that the ‘positive association between organizational excellence and employee satisfaction is not direct’.

Holm and Pederson (2000) indicated that besides an unwillingness to participate in knowledge transfer, both competence development in the local context and involvement in corporate learning are time and resource consuming, which creates a problem of balancing the organizations’ administration of engagements. To engage continuously in the use by others of one’s competence involves a risk of losing the competence advantage (Holm and Pederson, 2000). The reason for this is that relating to others means that a certain share of subsidiary resources must be distributed to handling internal interaction and learning. This means that costs and scarce time, which could otherwise have been devoted to excellence or competence creation, will be directed to transfer engagements with other

organizations or institutions. The need for continuous competence development may therefore be eroded. However, an interesting effect of being a CoE is the relatively high influence it has on investments that may support the development of competences required for its existence, and, as a result, potentially contributing to the development of other similar units related to the competences developed for the CoE (Holm and Peterson, 2000). The latter facilitates transfer activities and at the same time has a positive impact on the possibilities to sustain a CoE.

None of the negative issues identified in the literature was openly visible. The reason for this is most likely that the negative factors noted in the university-based literature form part of the FET sector *modus operandi*. Colleges are redefining their patterns of production and the development of a centre of excellence appears as a positive response. Furthermore, this sector of education and training, unlike higher education, is expected to act within the broad parameters of the labour market. Bowing to the consumer is therefore also perceived to be positive, as is the third factor listed as negative in the literature – the development of a responsive centre.

The fourth negative factor, participation in knowledge transfer, has found expression in the FETC environment not so much as a reaction to the development of responsive structures but as a response to the new curriculum. The national vocational curriculum in South Africa was introduced in 2008 without due consideration being given to the ability of staff to handle its implementation. Not only are fewer than half the people employed in the FETC sector without an educator qualification (South Africa, 2008, p 9) but also very little time was available to prepare for the curriculum change. The absence of educationally qualified staff and lack of sufficient time for the transformation resulted in a porous transition that led to staff perceptions of inadequacy and a loss of credibility in the labour market. The broad-scale criticism of the new curriculum not only questioned the credibility of the FETC system but also haunted the Minister of Education to the extent that one of her retiring arguments was self-justification of the simultaneous merging and curriculum change. The challenge of maintaining systemic credibility remained a challenge that her replacements had to address.

Conclusions

Despite the paucity of available literature and the negative indicators from the higher education sector, the centre of excellence construct appears generally suited

to the further education sector. Some FET institutions in South Africa's Western Cape have used a CoE focus as part of the realignment with the new institutional environment and concomitant curriculum change. Unlike HE, marketization and a secular focus is perceived as a positive orientation in the FET sector. In FET, institutions with CoE determinants appear to contribute to the rebuilding and maintenance of lost local-level credibility, following the college mergers process.

The excellence focus in the FET sector, when compared to the higher education sector is different. While the higher education sector's focus is on the creation of focussed pockets within the institution, the FET focus is on the development of institution-based social creditability with one or more strategic directions. The measure, furthermore, is not on the production of knowledge outputs but on the development of credibility in the labour market relationships and labour market entrants. In addressing the credibility challenge, a three-way balance needs to be maintained between the satisfaction of short term community needs, long term socio-structural requirements and their own existence as educational institutions.

FET institutions may need to look to their HE counterparts where CoEs promote knowledge and human capital in areas of strategic importance to South Africa; promote collaborative research, develop interdisciplinary research; systematically develop a creative research training environment that is internationally competitive; strive for the highest standards of quality, international competitiveness and esteem of their science; and, importantly, diffuse knowledge to where it is needed.

Professional excellence is difficult to achieve outside a good organization and, conversely, flourishing organizations are difficult to develop without good people. It is imperative that organizations and institutions realise that the domain in which the intersection of professional and organizational goods is particularly important is that of sharing of knowledge. Sharing knowledge means more than developing new technology for transmitting and receiving information; it is about collaboration in the pursuit of knowledge, excellence or its application. FET institutions, students, communities need to understand the importance of effective knowledge sharing as they strive for excellence.

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