Journal of Asian and African Studies
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Journal of Asian and African Studies 2014 49: 457 originally published online 8 July 2013
DOI: 10.1177/0021909613488745

The online version of this article can be found at:
http://jas.sagepub.com/content/49/4/457

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JAAS

Journal of Asian and African Studies
2014, Vol. 49(4) 457–472

DOI: 10.1177/0021909613488745
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Distigmatisation of Apprenticeship – A Vehicle for Entrepreneurship Promotion and Job Creation among Further Education and Training College Students

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Abstract
The intention of this paper is two-fold; firstly, it is to explore the causal effect of perceived negativity towards Further Education and Training (FET) college education among South African youth. Secondly, it is to determine the impact of apprenticeship on the development of entrepreneurial knowledge and skills among FET college students. The FET sector serves a particular function, which is the imparting of hands-on vocational training, intended to inculcate and promote a culture of self-employment, considered a necessity for employment creation. A questionnaire was used to collect data from 112 randomly selected students from three Motheo FET colleges. The findings reveal very contrasting results, a direct correlation between apprenticeship and entrepreneurship; however, 53% of the respondents did not feel sufficiently equipped, ready and confident enough to start their own businesses after graduation. About 48% feel the need to further their studies at university in order to stand a better chance of landing a good job.

Keywords
Distigmatisation, apprenticeship, Further Education and Training students, entrepreneurship, job creation, self-employment

Introduction

South Africa, like many other countries, is grappling to appropriately tackle the job creation challenge, especially among young people and graduates. More often than not, the blame is put squarely

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at the door of education institutions, whether schools or post-school institutions. Currently, there seems to be a mismatch between the education deliverables and the socio-economic needs of the country, leading to frustration and disillusionment among its youth. Du Plessis (2012: 08) captures this frustrating situation, expressed succinctly below.

> It is just after midday in Soweto and two engineering students are talking about hopes, dreams and their uncertain future. While they appear to be no different to thousands of other South Africans studying at tertiary institutions, these further education and training (FET) college students face a tougher battle for jobs than their peers. 'You come to an FET college looking for a better future for yourself and your family but…there is quite a lot of sadness and disappointment,' says 21-year old Relebohile Nephawe.

Apprenticeship is a means of learning for work that has been used successfully since the middle ages (Alet and Bonnal, 2011). The term has entered the language to describe the process of learning new and valuable skills from a seasoned professional. Apprenticeships have long been viewed as a way of bringing theoretical and practical knowledge together. Many countries in the world are seeking to expand, or at least sustain, some form of apprenticeship as part of their education and training systems. This affirms the belief held by many policy-makers, employers and individuals that this form of vocational preparation has continued value. The available literature indicates that in most European countries, apprenticeship has existed for many centuries. The first (Brockmann et al., 2010) is a European study (focusing on England, France, Germany and the Netherlands) that compared how different qualifications are produced, understood and valued, and how they correspond with different occupational divisions of labour. Several studies in Europe have shown that among youngsters who enter the labour market, those who are enrolled in an apprenticeship present a lower unemployment rate. Bonnal et al. (2002), for example, found that apprentices are more likely to experience a smoother transition to employment after graduation. In the words of Lerman (2009), apprenticeship programmes offer an array of advantages over pure post-secondary education programmes. Since apprenticeship openings depend on employer demand, mismatches between skills taught and supplied and skills demanded in the workplace are unusual. Apprenticeship provides workers with a full salary, so that participants can earn while they acquire the necessary skills. Apprentices learn in the context of real work settings and attain not only occupational skills, but other work-related skills, including communication, problem-solving, allocating resources and dealing with supervisors and a diverse spectrum of coworkers.

As in other countries in Europe, traditional apprenticeship has been used in a number of African countries to provide on-the-job training, which aims at self-employment in the community. The source of traditional apprenticeship in some African countries is found in the form of institutions that have evolved over centuries to solve training in a society where technology is essentially static (Gamble, 2001, 2004). In traditional apprenticeship, the apprentice learns by observing and imitation. Most of the training is hands-on, that is, on the job while working for an employer (master craftsman), who helps the apprentice learn a particular trade in exchange for their continued labour for an agreed period of time after he or she has become skilled. In some African countries, such as Ghana, Nigeria and Kenya, the informal sector includes a wide range of small enterprises, ranging from marginal petty trading activities, to fairly successful manufacturing and construction businesses (Palmer, 2009).

Today, arrangement in modern apprenticeship is much more formal, that is, it forms part of vocational training. Modern apprenticeships as practised in Western countries are a combination of on-the-job training (work-integrated learning) and are related to classroom instruction, in which apprentices learn the practical and theoretical aspects of a designated trade. A more engaging

argument for formal apprenticeship is based on the notion that it has the ability to deliver the type of practical skills and knowledge relevant for self-employment. McDonald and Worswick (2010) posit that the apprenticeship system is one of the most important gateways through which individuals become licensed to work in a range of skilled trades and occupations. As well as developing high-level skills, apprenticeship can be seen as a route to other forms of education and training. It is certain to retain a valuable role in the era of lifelong learning (Fuller and Unwin, 2008). An empirical study by Fuller and Unwin (2007), which sought to identify the characteristics of effective apprentices, indicates that they are strongly associated with a sustained organisational commitment to apprenticeship. This stems from an identifiable business case to recruit and train young people and a concern with their personal (long-term), as well as job-specific (short-term) development. This approach is manifested through the development of programmes which ensure that apprentices participate in a wide range of coordinated and progressive work and learning opportunities.

Given the high unemployment rate among young people in South Africa, there is obviously a need to focus vocational curricular attention on interfacing academic, apprenticeship and entrepreneurship training in the Further Education and Training (FET) phase, thus enabling young people to acquire the skills and competences needed for self-employment. However, the biggest challenge is overcoming the entrenched perception of inferiority and an insignificant regard for FET qualifications among the youth. This is further confirmed by the recent Centre for Higher Education Transformation report as cited by Du Plessis in his newspaper article (2012: 8) that 'FET colleges have a poor image with employers and therefore only a minority of their graduates, aggregated across all fields, find employment'. In this study we explore both this perception and examine the apprenticeship system of training as a vehicle for entrepreneurship promotion and job creation among FET college students. It is our contention that apprenticeship entails a learning process in which apprentices not only learn to do something, but they also need to understand the principles of operation, together with the knowledge that informs what they are doing. A well-organised apprenticeship system can go a long way in preparing young people for productive economic activities, thus reducing the current level of unemployment in the country.

Apprenticeship as a model of learning

The concept of apprenticeship has recently come to form an important part of learning theory. It has relevance regardless of setting, age range or topic. Billett (2008) views apprenticeship as an activity that centres on experiences arising through relations between the social and personal world, yet also acknowledges the mediation of brute facts (i.e. nature). According to Billet (2008), there are immediate social experiences that are projected by the particular socially and culturally derived events (i.e. activities and interactions) that individuals encounter, often in circumstances shaped by socially situational and physical factors. Hargreaves (2004) has argued that the model's emphasis on mentoring and coaching could help schools rethink the teacher–student relationship.

Hahn (2011) has provided a rich conceptual framework for analysing different apprenticeship models based on the concept of 'community of practice' to convey how people learn through the mutual engagement in an activity that is defined by the negotiation of meanings, both inside and outside the community. Based on Wenger's (1998) focus on the 'work of the imagination' in communities of practice, Fuller and Unwin (2003) identify two approaches to characterising contemporary apprenticeship, which they term *expansive* and *restrictive*, both with different organisational and learning cultures. Expansive features are characterised by the participation of apprentices in multiple communities of practice, inside and outside the workplace. The apprenticeship programme

aims for a gradual transition to a rounded and full participation in and access to a range of qualifications, including knowledge-based vocational qualification. The characteristics of the restrictive approach, on the other hand, are identified by a narrow access to learning restricted in terms of tasks/knowledge/location; access to competence qualification; limited opportunity to extend identity and little boundary-crossing experience. Fuller and Unwin (2003) argue that an apprenticeship characterised by the features listed as *expansive* will create a stronger and richer learning environment than those that are associated with the *restrictive* end of the continuum.

Reflections on international practices: Europe and Africa compared

The available literature indicates that in most European countries apprenticeship has existed for many centuries. The first study (Brockmann et al., 2010) is a European study (focusing on England, France, Germany and the Netherlands) that compares how different qualifications are produced, understood and valued, and how they correspond to different occupational divisions of labour. An important point that emerges is the idea of division between two main systems of vocational education. Brockmann (2010), drawing on the work of Rouner (2007), distinguishes between vocational education and training systems that focus on education for an occupation, such as the German dual system, and education aimed at 'employability'. In the former, vocational education and training is integrated into a comprehensive education system, and is designed to develop the ability to act autonomously and competently within an occupational field. Qualifications are obtained through the successful completion of courses developed through negotiation with the social partners, integrating theoretical knowledge and workplace learning. The findings of a comparative evaluation study by Rouner et al. (2010) reveal differences in the organisation of apprenticeship among European countries. The United Kingdom, for example, has adopted the Programme-led Apprenticeship (PLA) approach, which uses a full-time vocational education course as the first phase of an apprenticeship. This is followed by a full-time period with an employer in order to complete on-the-job training and achieve the competence required for the mandatory National Vocational Qualification. In this model of apprenticeship, the employer becomes a marginal player, waiting for potential employees to appear, employees who they are led to believe are very close to being work-ready (Fuller and Unwin, 2007).

In the Netherlands and Denmark, a different form of PLA exists in which young people alternate their time between studying in a vocational school and working with an employer. This 'school-based' apprenticeship has proved popular with both employers and young people. The key difference with the PLA, however, is that the school-based approach is structured around the concept of 'alternance', whereas in the PLA, work experience comes at the end of a period of full-time education, a model most popular within the South African FET sector. On the other hand, large apprenticeships in Germany and Switzerland are underpinned by streaming at an early age into tracks that lead to large vocational education pathways and small tertiary education pathways (Steedman, 2001). A further discussion by Steedman indicates that in both countries, apprenticeship involves on-the-job, as well as off-the-job, education and training, which includes a general and a technical education component. Apprentices are drawn from a whole range of school leavers, including low achievers and those with higher qualifications. While it is expected that apprenticeship places will be found for many with weak academic attainments, apprenticeship is about skill development and renewal and not primarily for combating social exclusion.

While informal apprenticeship has also existed in Africa for many centuries, it is only recently that some countries are recognising the method of skill training as a valuable route to lifelong education and self- employment. An analysis of work-based training programmes for youth in some

countries in West and East Africa (for example, Bennell, 1999; Madhu, 2009; Nyerere, 2009) reveals that in addition to informal arrangements, formal work-based training is in place in these regions. A few countries have even introduced clear goals to substantially increase the number of participants in apprenticeships and to tap potential for this kind of learning. A recent study by Torini (2005) suggests that this relationship may be non-robust. According to the ILO report (2007), 80% of the skills imparted in the informal economy in West Africa are transferred through apprenticeship. The ILO report also states that approximately 200,000 young apprentices were trained in Benin in 2005, which represents 10 times as many apprentices than students in vocational and technical education.

Apprenticeship training in South Africa

In response to economic difficulties, the apartheid government attempted to transform the skill regime by moving away from 'low skill' towards a framework based on free market regulation, a revived apprenticeship system, and a new institutional environment structured around the Industry Training Board (Kraak, 2004). Thus, the introduction of formal apprenticeship training in South Africa, although designed on racial lines, can be traced back to the Apprenticeship Act of 1944 and the Training of Artisans Act of 1951 (Bird, 2001). The apartheid government sought to use a formal apprenticeship training system to address two parallel problems: the first was the many whites that were displaced from their land as a result of Anglo Boer War, and the second was the need for many more craft workers to work in the newly established parastatal utilities for electricity generation, post and telecommunications, railways and iron and steel production, which supported the industrial expansion at the time. Gamble (2004) describes how the shape and form of the apprenticeship system followed changes in work organisation, with the move to mechanisation prompting the teaching of Mathematics and Science in colleges, and later, with a move to standardisation in mass production and the introduction of competence-based modular training. Kraak (2004) describes this change, through which the time-based training system was converted into a competency-based one, as a key innovation. Ironically, as described in other literature, these features were also key to the reforms that the democratic government 'reintroduced'.

Since 1994, there has been a renewed government focus on skills development and its relationship with combating unemployment, and especially unemployed school leavers in South Africa. Underpinning the skills development strategy, as well as the broader education policy, was a National Qualifications Framework (NQF), which was intended to replace all existing qualifications in the country with a set of new outcomes-based qualifications designed by new stakeholder-based structures (Republic of South Africa, 1995; SAQA, 2000a, 2000b). The system as a whole was intended to be 'a demand-led enterprise training policy underpinned by appropriate supply-side measures' (Kraak, 2004: 126). It was also hoped that it would lead to new provisions, as well as to many individuals obtaining qualifications based on existing knowledge and skills. The idea was to ensure that a regulated market of the provision of training would ensure that training was responsive to employers' needs. According to SAQA (2000a), stakeholders, including employers, would define the competencies (learning outcomes) that were required of learners. These would be registered as qualifications and unit standards (part qualifications) on the NQF. Providers could then apply to Setas and other quality assurance bodies to be 'accredited', to offer programmes leading to qualifications or unit standards of their choice.

As part of the National Skills Development Strategy, the Department of Labour has since replaced the apprenticeship system with 'learnerships', which, it is argued, are more 'demand-led', in the sense that they are offered in response to social or economic needs, including, but not only,

formal sector needs. The Department of Education also developed a new curriculum, and a new qualification for the colleges to offer. The intention was for the curriculum to be broader and more substantial than the old courses for the apprenticeship system. There is no doubt, however, that levels of training for artisans and other mid-level skills still remain extremely low (Mukora, 2009). Mukora further argues that the quality of Technical and Vocational Education and Training (TVET) provision in most FET colleges is very erratic. Mukora who acknowledged the confusion about learnerships and apprenticeships, and the old college courses (the theory component of apprenticeships) have been reintroduced. Despite the weaknesses of these old courses, it seems that many employers still have more faith in the old pre-1994 apprenticeship system (Marock, 2011). UMALUSI (2007) describes skills training through learnerships (courses) as a demand-led model characterised by the following: a lack of demand; poor planning capacity and information systems that undermine aligning training with national and sectoral plans; a consensus-based system that is conflictual and bureaucratised; consultancy training providers that make courses expensive and their range too small; the lack of an institutional base for provision, which is a serious problem; the abysmal quality of training, marked by a narrowness of unit standards; atomised and fragmented knowledge; and little possibility for skills development.

The relationship between apprenticeship and entrepreneurship

Among academics and policy-makers, there is increasing recognition of the importance of a successful apprenticeship system to the promotion of wealth creation and economic prosperity. Apprenticeship has also been visible in government policy since the late 19th century, and has formed part of plans for regulating labour markets and creating compulsory education systems in which vocational education would play a key role (Fuller and Unwin, 2007). However, there remains considerable debate over the issue of how to interface apprenticeship and entrepreneurship in the TVET curriculum. In the literature on apprenticeship, a long line of work dating back to the seminal contribution of Knight (1921) emphasises the role of apprenticeship as learning on the job by imitating the trainer, while at the same time developing certain business acumens. One important area of work and employment consists of those occupations that centre on the application of technical and vocational skills to the world of work. The role of TVET in furnishing the skills required to improve productivity, raise income levels and improve access to employment opportunities has been widely recognised (Bennell, 1999). In addition, Hollander and Mar (2009) describe the purpose of TVET as a vehicle of transition for individuals to the world of work. Thus, in the ideal case, TVET leads to (self-) employment and income-generation, which is expected to contribute to the individual's and his/her community's well-being. Furthermore, TVET is often considered as a mechanism for poverty alleviation and a vital contribution towards the attainment of international development goals (such as the Millennium Development Goals and Education for All), as well as towards sustainable development.

In the context of South Africa, TVET forms the core curriculum of FET colleges. The programmes presented at technical colleges offer some insights into the responsiveness of colleges to the labour market and to community needs. Technical college education is provided in six broad Vocational Fields, which are Art – Music; Business Studies; Educare – Social Services; Engineering Studies; General Education; and Utility Studies. A study by Powell and Hall (2000) found that 86% of FET enrolments are in two Vocational Fields: Business Studies, which constitutes 50% of the total FET enrolments, and Engineering Studies, which constitutes 36%. This narrow range of programme, according to Powell and Hall (2000), contrasts sharply with TVET in other countries. Although Business Studies is dominant in all of the provinces of South Africa, the ratio between

Business Studies and Engineering Studies was found to differ markedly from one province to another.

Powell and Hall (2000) argue that FET has a major role to play in developing the knowledge and skills that South Africa needs. The current vision for FET, shaped by the policies contained in the Department of Education's Further Education and Training Act and White Paper and the Department of Labour's Skills Development Strategy, should present FET colleges with a unique opportunity to break with the past and develop a new mode of operation that is responsive and accountable to the needs of our growing economy and the community.

Methods

The research design

The study is descriptive and exploratory in nature, using a survey method in the form of a semi-structured questionnaire, consisting of a mixture of rating scales. Mwamwenda (2004) states that a survey is a structural questionnaire designed to solicit information about a specific aspect of the subject's behaviour. As the researchers wanted to understand the existence, nature and way of expression of the phenomenon being studied (Henning et al., 2004), an ethnographic and interpretive paradigm employing quantitative research approach was used. A non-probability sampling technique, namely the random sampling technique, was utilised to solicit responses from the respondents drawn from three Motheo FET colleges. The questionnaire consisted of two sections: Section A focusing on demographic issues, and Section B addressing (17 closed-ended questions, as well as 4 open-ended questions) attitudinal and perception variables on the relationship between apprenticeship and entrepreneurship. However, given the relatively small size of the sample population in this study, these findings can provide only an indication of the respondents' perceptions regarding the apprenticeship and entrepreneurship phenomenon, without necessarily laying claim to any national representation.

Participants

This study was limited geographically to the Free State province of South Africa. The subjects for this study were Business Studies students selected from three satellite campuses of Motheo FET College situated in the Province. From the class list of students in the trades that were relevant to this study, 194 were randomly selected using simple random selection. A total of 112 apprentices answered the self-administered questionnaire, giving a response rate of 58%.

Data collection, analysis and measuring instrument

A survey method in the form of a semi-structured questionnaire was used for data collection. The instrument developed is work-based and drawn from two existing instruments, namely original work by Timmons (1989) and Ronstadt (1984) on entrepreneurial competencies. Johnson and Ferej (1997) reported that Timmons (1989) identified the most crucial entrepreneurial competencies based on interviews with successful entrepreneurs. According to Timmons, individuals wishing to pursue entrepreneurial careers should either (a) have these competencies or (b) be aware of their weaknesses and how to overcome them. While Ronstadt (1984) also identified 12 entrepreneurial factors believed to be crucial for entrepreneurial success, in a study of college students, he found that those who had strong entrepreneurial interests took more courses that included the

entrepreneurial factors than those without an entrepreneurial interest. A higher percentage of these students ended up in entrepreneurial careers.

The questionnaire was divided into two main sections: Section A dealt with biographical information about the student, while Section B covered factual items as well as attitudinal and perceptual items relating to apprenticeship training, entrepreneurship within course offerings and perceptions of the student regarding course relevance to employment. All questions were based on a five-point Likert rating scale of 1–5, where: 1= not observed, 2 = weak, 3 = average, 4 = good and 5 = outstanding. A total of 112 completed questionnaires were received out of 194 distributed, resulting in a response rate of 58%. The data derived from sections A and B (that is the, demographic, factual and attitude information of the questionnaire) for the respondents' surveys were coded and analysed using the SAS (SAS Institute Inc., 2004) statistical computer software.

Reliability and validity of the measuring instrument

Initially, the study investigated the overall scale reliability by looking at the Cronbach coefficient alpha for all items combined. The results indicated the coefficient value equals 0.7124, which is greater than 0.6, indicating overall scale reliability. To ensure validity, the questionnaire was translated into the vernacular and piloted prior to its administration. The questions in the questionnaire portrayed real-life situations, which was a positive attribute of content validity (Kerlinger, 2000; Kouzes and Posner, 1993), and the items measured were related to the kind of statements respondents generally made about their own perceptions and experiences of apprenticeship and entrepreneurship (in this case, with regard to their own experiences with apprenticeship training and its impacts on their ability to think differently about self-employment and job creation, i.e. being job creators instead of job seekers), thus contributing to the construct validity of the instrument (Cooper and Schindler, 2003; Niemann and Kotze, 2006).

Ethical issues

Permission was first sought and granted by the relevant authorities at various campuses of this FET college prior to the questionnaire being distributed and administered. Respondents' consent was obtained after the purpose of the study was explained and they were informed that their participation was voluntary. The confidentiality and anonymity of the respondents and their associated institutions were also ensured.

Results

Demographic data

The following demographic variables will be discussed, namely, gender, age, location, education programme being studied and level of study, as reflected in Table 1. All 112 participants, consisting of 47% females and 53% males, were students from Motheo FET College pursuing various fields of study, Business Studies (62%) and Engineering (37%) being the most common and popular fields of study.

The majority (89%) of the respondents were Blacks (that is, Africans, coloureds and Indians), with a mean age of 21. Over 85% of the participants live in urban and peri-urban areas, while only 11.7% live in rural areas. The study level ranged from six months to two years. Presented in Table 2 are students' perceptions regarding the relevance of the courses offered at the FET college.

Table 1. Demographic data of participants (n = 112).

	N	%
Gender		
Male	59	53
Female	53	47
Age of participants		
Between 16–20	65	58
Between 21–25	41	37
Over 25	6	5
Programme of study		
Business studies	69	61.6
Engineering studies	42	37.5
Others	1	0.9
Home town		
Urban	53	56.4
Peri-urban	30	31.9
Rural	11	11.7
Total	94	100

Over 70% of the participants indicated a high level of satisfaction with their experiential training. The result pattern was consistent across the first four statements. An average mean score of 4.17 showed that the combined ratings of the quality of experiential training were high in relative terms. Overall, mean rating for the four assessment categories ranged from 4.16 to 4.35 on a five-point scale, indicating that the overwhelming majority of participants perceived experiential training positively and, therefore, as relevant to the course they are studying. The high mean ratings also indicated that the majority of participants felt experiential training gave them enough hands-on experience and, after completing the training, it equipped them sufficiently well to join the world of work. Regarding the link between the academic programme; entrepreneurial training and apprenticeship training skills; business information and business management skills offered at the college or during apprenticeship training, the research found a weak link between the three components. A mean score of 3.35(sd = 1.397) on a five-point scale meant a relatively low number of participants are of the opinion that entrepreneurship forms part of their course modules. Similarly, a mean score of 3.64 was an indication that few participants perceived entrepreneurship training in their course. In addition, a mean score of 3.83 was an indication that apprenticeship (experiential training) offered by the employers actually gives them few entrepreneurial skills. The result suggests that most students have low entrepreneurial skills and competencies. They felt that their education paid more attention to the academic programme than to the entrepreneurial skills and competencies required to become self-employed.

Ironically, the findings suggest that Motheo FET College appears to be paying enough attention to entrepreneurship, as well as to the required skills. In practical terms, this does not result in the level of competencies they think they have, as over a third of all respondents indicated that scarce attention is paid to entrepreneurship in their education. The findings therefore suggest that the apprenticeship environment appeared less able to provide relevant entrepreneurial knowledge and skills to most apprentices. One of the objectives of the study was to determine the perceptions of

Table 2. Means and standard deviations of overall relevance of Further Education and Training (FET) college training: empowering effect.

	Statements (N = 112)	Mean	Std. deviation	Std. error Mean
1	I am expected to do my experiential training during my studies.	4.19	.954	.098
2	I am expected to do my experiential training in an existing company.	4.16	1.071	.110
3	I feel it is necessary for me to do experiential training before I graduate.	4.35	1.055	.109
4	I feel the programme gives enough hands-on experience.	4.12	1.066	.110
5	I feel I will be ready and competent enough to join the world of work.	4.21	.993	.102
6	Entrepreneurship is part of the modules.	3.35	1.397	.144
7	I feel my programme gives me enough entrepreneurial skills.	3.64	1.217	.126
8	I feel my apprenticeship gives me enough entrepreneurial skills.	3.83	1.012	.104
9	I feel I have everything I need to start my own business after completion of my studies.	2.93	1.132	.131
10	I feel I have the necessary tools to successfully manage any business.	3.66	1.173	.101
11	I feel my apprenticeship gives me opportunities to discover my talents.	4.11	.989	.102
12	I feel my apprenticeship gives me enough business information.	3.72	1.072	.111
13	I feel my programme exposes me to the necessary business management skills.	3.44	1.103	.114
14	I feel I now know the relationship between apprenticeship and entrepreneurship.	1.56	1.339	.162
15	I feel we get enough exposure to industry needs/ requirements.	3.60	1.148	.118
16	I feel I know what type of skills and knowledge industry expect.	3.98	1.173	.121
17	I feel there is a constant interaction with industry by my programme.	3.46	1.152	.119
18	I regret choosing the programme I am doing.	1.97	1.291	.133
19	I regret coming to a FET college for my further education.	2.09	1.292	.133
20	If I had a choice I would not have come to a FET college for further study.	2.46	1.563	.161

the participants towards the study at FET colleges. The combination ratings on study at FET colleges were the lowest in relative terms. Overall, the mean score for items 14–16 ranged from 1.95 to 2.46, indicating that the majority of the respondents were very negative about studying at any FET college in South Africa. In particular, the majority of the participants indicated they regretted choosing the subject they were doing at a FET college. Over two-thirds of the participants also indicated regret in coming to Motheo FET College for further studies and indicated that if they had had a choice, they would not have come to study at the college.

Table 3. Participants' reasons why they chose to study at a Further Education and Training (FET) college.

	Participants' reasons	*N*	%
1	Transition to higher education	21	24.1
2	Training to get a job	11	12.6
3	To upgrade Matric results	18	20.7
4	FET colleges offer quality education	6	6.9
5	FET colleges are affordable	6	6.9
6	FET colleges allow me to learn more about entrepreneurship	2	2.4
7	FET colleges allow me to acquire practical skills	10	11.5
8	FET colleges offer a career in the engineering trade that I need for employment	13	14.9
	Total	**87**	**100**

Table 4. Participants' reasons why they want to do apprenticeship (experiential) training.

Statements	*N*	%
Get used to workplace	4	6.0
Get work experience	49	73.1
Put into practice what I have learnt at college	8	11.9
Train for higher education	4	6.0
To become a graduate before looking for a job	1	1.5
Raise money to pay for my school fees	1	1.5
Total	**67**	**100**

Impact of perceived programme benefits of FET college choice

Career aspirations, or occupational goals and preferences, under ideal circumstances, are an important factor in the transition from education or training to the world of work (Rojewski, 2005). The reasons for choosing Motheo FET College were assessed using an open-ended question in the questionnaire. The responses to the open-ended question are presented in Table 3.

Table 4 findings show that participants had various reasons for choosing to study at a FET college. Of significance are transition to higher education (24.1%); training to get a job (12.6); and to upgrade Matric results (20.7%). Only 2.4% of participants chose to study at a FET college because it provided them with an opportunity to learn more about entrepreneurship. The results of this study illustrated some similarities and differences between this study and the one carried out in Australia by Velde and Cooper (2000), which showed that students' main reason for undertaking a vocational education programme was the opportunity to gain 'hands-on' experience and a 'head-start' to employment.

A total of 73.1% indicated that apprenticeship (experiential) training provided them with work experience. From the responses provided, there was no indication that apprenticeship training offered entrepreneurship or business skills. This finding strengthened the reason why only 2.4% of the participants feel their FET college provided them with an opportunity to learn about entrepreneurship skills. The demands of the labour market of ensuring that graduates employed have the necessary experience seem to be the reason some of the youth opt for FET colleges.

Discussion

Our study aimed to examine the extent of entrepreneurial knowledge and skills acquired by FET college students who undergo apprenticeship training as part of their work-integrated learning in terms of: (a) entrepreneurial knowledge and skills acquired by FET college students during their apprenticeship training; (b) the knowledge and skills gap between apprenticeship and entrepreneurship training in the FET curriculum; and (c) the level of interest of FET college students, who complete their apprenticeship training, have for self- employment. The findings reveal that there is little evidence to show that apprenticeship (experiential training) offered by Motheo College provides entrepreneurial training or prepares the majority of students for self-employment. It is evident from the findings that the majority of students join FET colleges as a last resort, which probably explains why they are sceptical about the effectiveness of the education and training offered at the institutions. FET colleges are strategically established to provide vocational training, balancing theory and practice through various pedagogical approaches, with apprenticeship being at the centre of this endeavour.

The study was informed by the apparent mismatch between the knowledge and skills offered by FET colleges and the market demand. Critics argue that vocational education and training in many African countries is less innovative in its core skills offering and, as a result, fails to respond to dynamic markets. However, ILO work over the years shows long recognition of the fact that apprenticeship training coupled with enterprise development by young people represents an essential source of employment for this age group (Freedman, 2005: 46–48). Bidwell et al. (2004) report that apprenticeship, often termed industrial training, can play an important role in providing youth with an entry into the job market. It is also an opportunity to work in an existing business and learn directly from an established craftsman or worker. Exposure to the workplace also improves youths' core skills, as well as professionalism, work ethic and business skills. It is evident from the findings of this study that although the majority of participants perceived apprenticeship training positively, both apprenticeship and entrepreneurship training does not provide the adequate skills and competencies required for the world of commerce and industry.

While survey data indicate that participants are graduating with the necessary skills to navigate a successful transition into the workforce, data from the open-ended questions suggest a need to strengthen the link between apprenticeship and entrepreneurship skills. The lack of an integrated programme that includes entrepreneurship skills hinders participants who wish to become self-employed. Other emerging views from the respondents show some of the following issues as major challenges facing FET colleges in their efforts to integrate apprenticeship and entrepreneurship in their training programme: limited time provided for skills training; financial/budgetary constraints; few instructors with relevant skills; lack of role models of successful former trainees who are practising entrepreneurs; courses being too theoretical, lacking the component of field studies; and courses being boring, compared to other mainstream courses. Research findings in the Netherlands by Onstenk (2003) indicate a contradictory image of entrepreneurship and a lack of practical preparation of students from vocational schools. Moreover, in the logical continuation of preparatory vocational education apprenticeship, there is little attention given to entrepreneurship training.

The results of this study indicate that while most students are satisfied with the apprenticeship training they receive, there is evidence to suggest that there are many problems in aligning the training with the needs of business and industry. Our findings are thus similar to those of Brockmann et al. (2010), who found critical shortcomings in the approach to apprenticeship in England and argue that the proposed Apprenticeship Framework is unlikely to fulfil its stated aims of enhancing

quality and quantity. The key weaknesses identified in both studies are as follows: a lack of a clear definition of what constitutes the apprenticeship framework; the education component; limited time; and a lack of recognition of an alternative college-based route. Regarding the image and students' loyalty towards FET colleges, the research findings support the view that many students still have a poor perception of careers in the technical and vocational fields, both of which need to be improved in line with the country's national skills training policy. In support of our research findings, The Guardian (2008) reports that the image of vocational training in countries such as Australia, Canada, Denmark, Germany, India, Malaysia and the United Kingdom is seen by many people to be generally poor. In contrast, most employers attach a positive image to vocational qualifications in terms of work readiness and adequate income (The Guardian, 2008).

As in other findings, factors such as the transition to higher education, training to get a job and education to upgrade Matric results, appear to have influenced students' decision to pursue a vocation training programme. The image of vocational training is one of the factors that have played an influential role in students' decisions to enrol at Motheo College. Unfortunately, many have a negative view of vocational education as being a suitable educational path for low academic achievers and school dropouts who wish to go directly into the workforce (Hoxter, 2002). Furthermore, vocational education is often considered suitable for high-risk youths and does not have a challenging curriculum (Beltram, 2007) compared to the mainstream academic path that most bright students choose to follow. These negative views can impact students' decisions on whether or not to pursue vocational training, which will consequently impact on South Africa's agenda of skills development. Based on the findings of this study, it is important to take into account the different skills training needs of students as indicated in their responses: technical skills and entrepreneurial competencies that are key to (self-) employability. An important result of the research is the broadly shared opinion, both in the literature and by students, that learning in and of a practical nature is essential at every level of vocational education and training.

Conclusion and recommendations

In light of the national imperative of addressing two of the socio-economic problems, namely jobs creation and poverty reduction, FET colleges are a critical part of the solution to this challenge. The findings of this study show some weaknesses and challenges in the FET curriculum. Evidently, some students feel ill-equipped to start their own businesses and be self-employed, while others regret the decision to pursue vocational training. It can therefore be concluded that the negative perception towards FET qualifications still persists and government will have to devise strategies to eradicate this pessimism and instil a new sense of entrepreneurship within the vocational training curriculum. In addition, the study makes the following recommendations.

1. Vocational training programmes offered at FET colleges should include instruction to develop proper attitudes towards work, including attitudes towards self-employment and entrepreneurship.
2. In vocational training programmes, self-employment and entrepreneurship concepts should complement instruction in vocational skills. Technical ability, managerial ability and entrepreneurial ability are the three essential components of successful enterprise operation. Technical and managerial skills can be taught through vocational and managerial training courses. Entrepreneurial ability, however, is different; it is a behaviour pattern that should be developed in those individuals who want to succeed in business.

3. The implementation of self-employment programmes can take place in several distinct phases. The first two years of vocational training for a self-employment programme should focus on teaching vocational skills (80%) and business skills (20%). Additional components could include the following: a business apprenticeship programme (one year); an entrepreneurship skills development programme (two months); and enterprise support institutions, both public and private, that are part of the programmes' networks that provide training and assistance in initiating, maintaining and expanding new enterprises. During each phase, vocational students will acquire a discrete set of skills.

Finally, a policy proposal is put forward: the regulation of apprenticeship-based trades and professions in order to better fulfil the two main tasks of VET. The aim of this intervention is to provide high-quality education and training to meet today's labour market demand.

Funding

This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

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