Research Report

Growing Talented People Through Cooperative Education: A Phenomenological Exploration

Thomas Groenewald

Professional Educational Services, *Technikon South Africa*, *Private Bag X6*, *Florida*, *1710*, *South Africa*

Internationally, talent is regarded a key success factor for global competitiveness. However, organizational talent is challenged by continuous change. The Apartheid heritage in South Africa further presents major challenges with regard to the growing of the talent of people. Cooperative education, a structured educational strategy that progressively integrates academic study with learning through productive work experiences, presents itself as a means to grow the talent of the South African people. The literature review identifies the core properties of cooperative education and the study has attempted to distil the core principles of a phenomenological research design. The specific 'phenomena' which the research focused on are existing joint ventures between higher education institutions and business enterprises aimed at educating people and growing talent. A selection of the voices of the research participants are presented in this article. Although the present study identifies several shortcomings regarding the practice of cooperative education, it pioneers the notion that the growing of talent can be enhanced through a cooperative education strategy. (*Asia-Pacific Journal of Cooperative Education, 2003,4(2), 49-61*).

During the past decade major changes have taken place in the corporate landscape, such as globalization, aggressive competition and cross-penetration of markets, as well as the introduction of virtual work teams (Barner, 2000). The Centre for Work Performance (Rand Afrikaans University, 2002) identified, among a number of current issues for debate, the need for "effectively attracting, *growing* and retaining talent" (emphasis added). Figura (2000), Retention (2001) and Johnson (2000) share the view that retaining the correct mixture of human talent ensures a competitive advantage. It is recognized internationally (Retention, 2001; Johnson, 2000; Liebmann, 2000; Ridderstråle and Nordström, 2000; Vicere, 1991; Ziarati, Griffiths, Bennett & Payne, 1995) that the talent of people is a key success factor in global competitiveness.

Cataldo et al. (2000, p. 55) remark that the "current skills sets are proving to be inadequate to meet the rapidly changing fast-paced world of technical and business needs". Retention (2001, p. 14) reports that "eighty percent of white collar jobs would be obsolete in five years." Because of the birth of new first-time technologies and competitors emerging from unexpected fields (Barner, 2000), leading enterprises experience a need for new talent to staff 'jobs' that did not previously exist. In this regard Cataldo et al. (2000) remark that it is no longer strange to lay off people, in order to eliminate obsolete positions, while simultaneously hiring people to acquire new talent.

There is, however, some doubt concerning talent as an inborn gift (Simonton, 2001; Sunoo, 2001). However, the need for developing latent talent is uncontested (Bals, 1999; Lunn, 1995; Mayo, 2000).   Because of the fierce competition in attracting and retaining talent, prudent enterprises proactively develop leadership and grow talent to ensure a best-in-class workforce (Barner, 2000; Figura, 2000; Freedland, 2000; Greene, 2000; Hammett, 2001; Matthew, 2000; McDonald, 1999; Seligman, 2000; Shoebridge, 2000; Tulgan, 2001; United States of America, 2000; Voros, 1999; Way, 2000).   While the individual's responsibility is emphasized (El-Tannir, 2000; Greene, 2000; Johnson, Geroy & Griego, 1999; Maloka, n.d.; Radebe, 2001; Seligman, 2000), the duty of employers (El-Tannir, 2002; Garavan, Moreley, Gunnigle & Collins, 2001; Johnson, 2000) is also crucial if they wish to attract and

Correspondence to: Thomas Groenewald, email: TGroenew@tsa.ac.za

retain talent. Mentoring programs (Conway, 1995; Johnson et al., 1999; "Mentoring", 1997), graduate programs (Cross, 1999; Doherty, Viney & Adamson, 1997; Smith & Smith, 1990) and mutually advantageous partnerships with education providers (Barnes & Phillips, 2000; Berkeley, 1998; Blackburn & Fryer, 1996; Brindley & Ritchie, 2000; Davies, 1998; Dealtry, 2001; Doncaster, 2000; Gericke, 2001; Rosenbaum, 2000; Sandelands, 1998; Stephen, Jones & Huntington, 1997; Teare, 2000; Ziarati, Griffiths, Bennett & Payne, 1995) are further prominent in literature.

The Need for Growing the Talent of People in South Africa

The report of the Black Economic Empowerment Commission ([BEEC], 2001, p. 13) states that "Colonial and Apartheid policies had a devastating impact on the development of black human capital." This neglect of part of South Africa's "most important economic resource - its people" will for a long time restrict the potential growth rate and will render many South African enterprises less competitive. In this regard Ziarati, Griffiths, Bennett and Payne (1995) observe that for enterprises to continue to prosper in the international marketplace, where competition is fierce, enterprises can no longer afford mediocrity. In other words the situation presents a major challenge to both education providers and to enterprises to grow or develop the talent of South Africans. In this regard BEEC (2001, p. 17) argues the need for "an integrated national HRD [i.e., human resource development] strategy" published in April 2001, i.e. the Human Resource Development Strategy for South Africa - A Nation at Work for a Better Life for All (Department of Education [DoE], 2001).

Mulemfo (2000) highlights the need for growing talent in view of the lagging productivity in South Africa and in Africa as a whole. He asserts that low productivity is evident and cites examples such as workers sitting idle when the boss is absent; teachers chatting rather than doing their work; a variety of illnesses invented by government officials to miss work; and go-slow attitudes promoted by unions. Mulemfo (2000, p. 90) submits that "people who will work hard to produce more" are needed.

Hadland and Rantao (1999, p. 135) capture the need for growing talent in South Africa by quoting the profound words of Patti Waldmeir subsequent to the first democratic elections of 1994: the country "emerged in the real world, where poverty is the biggest challenge to all democratic governments, and where there are tougher problems to solve than apartheid." Hadland and Rantao remark that the more than 50 years of apartheid marginalized and disempowered black people. South Africa shares this predicament of decolonization and deracialization with the rest of Africa, according to Mamdani (1999).

This idea of the socio-economic legacy of apartheid was referred to by President Thabo Mbeki's 'Two Nations' speech of 29 May 1998. In this regard Mamdani (1999, p. 126) observes that "if white South Africa were a country on its own, its per capita income would be 24th in the world, next to Spain; but if black South Africa were a separate country, its per Capita income would rank 123rd globally,

just above the Democratic Republic of the Congo." Mamdani (1999, p. 129) is appealing for "an intellectual rebirth, a reawakening of the mind" and asserts that "renaissance is first and foremost a reawakening of thought" (p. 130) and claims that the driving force "is inevitably the intelligentsia." [1]

According to the article "Education for an 'African Renaissance'" (2000, p. 14) "education is the *sine quo non* for empowering the people of Africa to participate in and benefit more effectively from the opportunities available in the globalized economy of the 21st century." James (1997) cautions that the Renaissance in South Africa must not be simply celebrated as an event or serve as symbolic rhetoric (Fourie, n.d.; Maloka, n.d.) or merely represent hopes and ideals (University of Witwatersrand, 1999). The African Renaissance must be carefully nurtured in order to succeed. Fourie (n.d.), Mbeki (1998a, 1998b), Netshitenzhe (1998), Radebe (2001) and the African Renaissance and International Co-operation Fund Act (DoE, 2000) emphasize factors such as the importance of good education and human development to succeed in the immense challenge.

Maloka (n.d.) refers to an article by Vusi Maviembela, President Mbeki's political advisor. He portrayed the 'African Renaissance' as the third moment in the post-colonial history, after decolonization and the democratic upsurge of the 1990s. Kofi Annan, Secretary General of the United Nations, according to James (1997), refers to three waves similar to these moments. The second wave was marked by civil wars, tyranny of military rule and economic stagnation.

The key elements, according to Maloka (n.d.) of the 'African Renaissance' are sociopolitical democratization, economic regeneration and improvement of geopolitical standing in world affairs. These elements represent a globalist perspective. Further perspectives are Pan Africanist perspective (Pax Africana: African problems solved by African solutions) and a culturalist perspective (an ethnophilosophy of returning to the roots of the people of Africa).

Cooperative Education and the Growing of Talent

Cooperative education as educational philosophy that advocates the formal integration of work experience (or community service) into the theoretical curriculum (Pratt, 1996) presents itself as a means to grow the talent of the South African people. Cates and Jones (1999) define co-operative education 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. This experiential learning is not an add-on to the curriculum, but an integral part of the educational process.

In essence, the construct cooperative education can be reduced to four core dimensions: (a) the integrated

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[1] Mamdani uses the word 'intelligentsia' in the original broad Russian sense: "All those that drive forward creative thought and frame debate, whether in the arts or culture, whether in philosophical or social thought" (p. 130).

curriculum, (b) learning derived from work experience, (c) cultivation of a support-base and (d) the logistical organisation and co-ordination of the learning experience (Accreditation Council for Cooperative Education, n.d.; Ellison, n.d.; Eshbach, 1947; Ferris, 1969; Freund, 1947; Furco, 1996; Geier, 1947; Jones, 1999; Kerka, 1999; Longford & Cates, 1997; Pratt, 1996; Reuss, 2001; Smith & Lancaster, 1995; Sovilla, 1998; University of Cincinnati, 1996, 1998; United States of America, 1914; Wilson, Stull & Vinsonhaler, 1996). An illustration of the four core dimensions of cooperative education is provided in Figure 1.

A large degree of conceptual drift of the construct co-operative education occurred. Smith and Lancaster (1995, p.1) remark: "[a] recurrent theme in the co-op literature is the identification of strategies for integrating cooperative education into the 'academic mainstream' of colleges and universities." They observe the persistence of this theme since 1980. In this regard the Accreditation Council for Cooperative Education (n.d.) also emphasises faculty involvement as one of the required attributes of cooperative education programs at colleges and universities.

The original goal of cooperative education was to enhance student learning. Sovilla (1998) remarked that the leaders of many institutions do not seem to appreciate the mission of co-operative education or else choose to ignore it. The coordinating and administrative support service must be an integral part of the academic program that aids the achievement of the curriculum outcomes. However, Kerka (1999) cautions that too much emphasis is placed on job placements instead of learning and calls for a redesign and/or reconceptualization of cooperative education (i.e., learning from work experience *integrated* into the curriculum). Kerka along with Wilson, Stull and Vinsonhaler (1996) suggests a fresh perspective and definition of cooperative education as a curriculum model, affirming work-based learning based on sound adult learning theories and principles such as self-directed learning, reflective learning/practice and transformative learning. Duwart and Canale (1997) recommend a three-phase educational process: preparation, experience and reflection. However, Finn (1997) suggests it is necessary to go beyond 'reconceiving' to adopting cooperative education as educational strategy.

Furco (1996) and Kerka (1999) indicate that although service learning (learning derived from rendering services related to the course of study) and cooperative education have different goals the following apply to both: active engaging in meaningful work renders the best learning; active learners produce knowledge; contextual learning in real situations as instructional strategy; integration of the two forms of learning; and, formal partnerships with real-life learning providers. Kerka (1999, p. 3) declares that partnerships should be developed into a supportive culture where "employer support does not have to be repeatedly obtained and there are clearly understood long-term expectations." The Accreditation Council for Cooperative Education (n.d.) furthermore emphasises employer involvement as one of the required attributes of cooperative education programs and Reuss (2001) sees partnerships as a key component.

The Research Aim and Questions

A study was undertaken to explore the value of cooperative education in the growing of people talent. To achieve this, existing joint ventures between higher education institutions and business enterprises formed the focus for the research. The central research question of the study was: What is the contribution that cooperative education can make, in the growing of talent of the South African people? Bentz and Shapiro (1998) and Kensit (2000) caution that the researcher must allow the data to emerge stating that 'doing phenomenology' means capturing "rich descriptions of phenomena and their settings" (p. 104). For this reason the actual research questions that were put to participants (both academics and enterprise representatives involved) were:

1. How did/do you experience the joint educational venture?
2. What value, if any, has been derived from the collaborative effort?

Kvale (1996) draws a similar distinction between the research question and the interview question. Jon Kabat-Zinn, referenced by Bentz and Shapiro (1998, p. 39) states that "inquiry doesn't mean looking for answers."

Method

A qualitative research design was decided upon in order to achieve the goal of this study. The type of qualitative research determines the research design (Creswell, 1998; Mason, 1996). This is now described in detail.

Research Paradigm

In view of the plethora of qualitative research designs, it is advisable for a qualitative researcher to qualify her/his scientific beliefs and research paradigm, in other words what constitutes her/his ontology (beliefs and perceptions about the nature of reality), her/his epistemology (where the researcher stands in relation to reality and in which way s/he will go about searching for truth) and her/his methodology (the methods and techniques that will be used to research reality) to those with an interest in the research (Denzin & Lincoln, 1998; Mason, 1996; Schurink, 2002). Creswell (1994, 1998) as well as Denzin and Lincoln (2000) add a fourth concept - the researcher's axiology (i.e., ethics and values). This latter concept is particularly important since it differs from quantitative research endeavours, which typically claim to be value-free and unbiased, in that qualitative research is value-laden and biased.

From an ontological position or perspective, qualitative researchers believe that reality is constructed by individuals, that is, different personal versions of the nature and the essence of things (Mason, 1996). A multitude of realities therefore exists. Creswell (1994, p. 4) observes that for "the qualitative researcher, the only reality is that which is constructed by the individuals involved in the research situation," and the researcher is dependent upon the voices
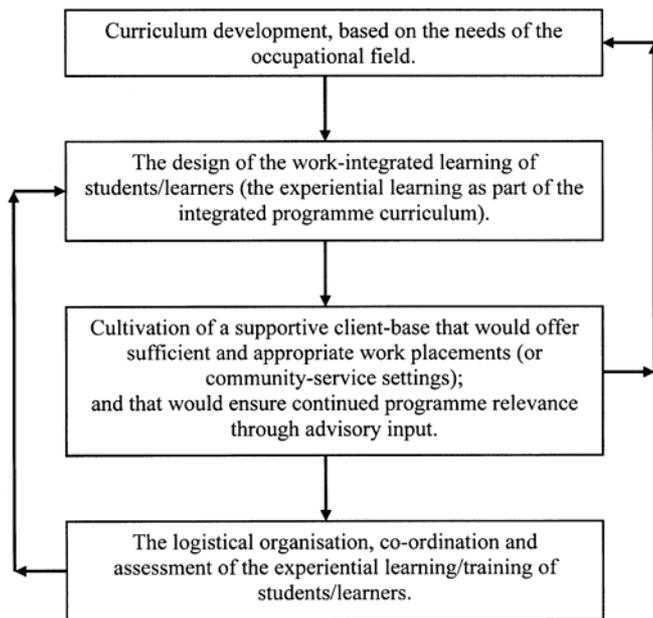
Curriculum development, based on the needs of the occupational field.

The design of the work-integrated learning of students/learners (the experiential learning as part of the integrated programme curriculum).

Cultivation of a supportive client-base that would offer sufficient and appropriate work placements (or community-service settings);
and that would ensure continued programme relevance through advisory input.

The logistical organisation, co-ordination and assessment of the experiential learning/training of students/learners.

Figure 1

An illustration of the core components of cooperative education

(quotes and themes in words) and informant or participant interpretations to understand a given reality (Creswell, 1994, 1998).

The ontological dimension of the study is the sub-discipline of human resource development, which overlaps with education as a discipline. Generally individuals are held responsible for the growth of their own talent. However, planned and coordinated educational programs, especially those which alternate theoretical learning with real-life application, result in synergy; that is, the whole is more than the sum total of the parts. The value that an individual will derive from an educational program is dependent on her/his own efforts and abilities, as well as the management of the program. The value that is derived is further influenced by the extent to which the curriculum succeeds in integrating theory with real-life application.

A researcher's epistemology according to Creswell (1994), Mason (1996) and Holloway (1997) is literally her/his theory of knowledge, which serves to decide how the social phenomenon will be studied. Our epistemological position can be formulated as: (a) data are contained within the perspectives of people that are involved with cooperative education programs, either in a coordinating capacity or as program participant, and, (b) because of this we engaged with the participants in collecting the data.

A phenomenological methodology was identified as the best means for this type of study. Phenomenologists, in contrast to positivists, believe that the researcher cannot be detached from her/his own presuppositions and that the researcher should not pretend otherwise (Hammersley, 2000). In this regard Mouton and Marais (1990, p. 12) state that individual researchers "hold explicit beliefs." The intention of this research, at the onset (preliminary focus), is to gather perspectives regarding the phenomenon of the growing of talent and the contribution of cooperative

education to this process.

Phenomenology

According to Giorgi (Stones, 1988) the operative word in phenomenological research is 'describe'. The aim of the researcher is to describe as accurately as possible the phenomenon, refraining from any pre-given framework, but remaining true to the facts. According to Welman and Kruger (1999, p. 189) "phenomenologists are concerned with understanding social and psychological phenomena from the perspectives of people involved." A researcher applying phenomenology is concerned with the lived experiences of the people (Greene, 1997; Holloway, 1997; Kruger, 1988; Kvale, 1996; Maypole & Davies, 2001; Robinson & Reed, 1998) involved, or who were involved, with the issue being researched. The words of Van den Berg, translated by Van Manen (1997, p. 41) profoundly capture what is stated in this notion:

> [Phenomena] have something to say to us - this is common knowledge among poets and painters. Therefore, poets and painters are born phenomenologists. Or rather, we are all born phenomenologists; the poets and painters among us, however, understand very well their task of sharing, by means of word and image, their insights with others - an artfulness that is also laboriously practiced by the professional phenomenologist.

Locating the Research Participants

According to Hycner (1999, p. 156) "the phenomenon dictates the method (not vice-versa) including even the type of participants." Purposive sampling was chosen in determining the primary participants: the sample was based on our judgment and the purpose of the study (Babbie, 1995; Greig & Taylor, 1999; Schwandt, 1997), that is, those who "have had experiences relating to the phenomenon to be researched" (Kruger, 1988 p. 150). Program managers at higher education institutions in Gauteng, who are responsible for educational programs that are tailored to the needs of and offered in collaboration with commerce, industry and/or government, were identified. Interviews were arranged, with the 'informed consent' (Bailey, 1996; Arksey & Knight, 1999; Street, 1998) of these program managers.

In order to trace additional participants or informants snowball sampling: a method of expanding the sample by asking one informant or participant to recommend others for interviewing (Babbie, 1995; Miller & Crabtree, 1992), was used. The purposive sample interviewees were requested to give, at their discretion, the names and contact details of persons based in commerce, industry and/or government who: (a) were co-responsible for the educational programs, and (b) who had participated in the program presented.

Because Creswell (1998, pp. 65, 113) recommends "long interviews with up to 10 people" for a phenomenological study, a sample size of 10 managers, five responsible for educational programs and five at collaborating enterprises, were selected. Table 1 reflects the range of participants that

Table 1
The range of participants interviewed

Educational institution based interviewees represented the following fields or disciplines:	Commerce, industry and/or government based interviewees represented the following fields or disciplines:
a Human resources/personnel management and general middle management education b Project management c Senior and middle general management development d Marketing and management sciences e Information technology	f General management development for local government g Commercial and financial accounting services h Construction and civil engineering Science, technology, i engineering and minerals research j Travel, tourism and public transportation.

were interviewed. In addition to the 10 interviewees, one group of program participants (learners or students) was requested to write essays on their experiences. With another group of program participants some participated in a focus group discussion, while others wrote essays. The purpose of collecting data from three different kinds of informants was to effect a form of data triangulation, to contrast the data and 'validate' the data if it yields similar findings (Arksey & Knight, 1999; Bloor, 1997; Holloway, 1997).

Procedure

Unstructured in-depth phenomenological interviews were conducted with both the educational institution-based program managers and with the enterprise-based representatives. These interviews were conducted as follows: The questions were "directed to the participant's experiences, feelings, beliefs and convictions about the theme in question" (Welman & Kruger, 1999, p. 196). Husserl according to Bentz and Shapiro (1998), called this bracketing, where the inquiry is performed from the perspective of the researcher. Bracketing (Caelli, 2001; Davidson, 2000; King, 1994; Kruger, 1988; Kvale, 1996) in this study entailed asking the participants or informants to set aside their experiences about the collaborative educational program and to share their reflection on its value. Data were obtained about how the participants "think and feel in the most direct ways" (Bentz & Shapiro, 1998, p. 96). The focus was on "what goes on within" the participants. Participants were asked to "describe the lived experience in a language as free from the constructs of the intellect and society as possible." This is one form of bracketing. There is also a second form of bracketing, which, according to Miller and Crabtree (1992, p. 24) is about the researcher that "must 'bracket' her/his own preconceptions and enter into the individual's lifeworld and use the self as an experiencing interpreter."

Kvale (1996, pp. 1-2) remarks with regard to data capturing during the qualitative interview that it "is literally an inter view, an interchange of views between two persons conversing about a theme of mutual interest." The researcher attempts to "understand the world from the participants' point of view, to unfold meaning of peoples' experiences." At the root of phenomenology "the intent is to understand the phenomena in their own terms - to provide a description of human experience as it is experienced by the person herself" (Bentz & Shapiro, 1998, p. 96) and allowing

the essence to emerge (Cameron, Schaffer & Hyeoun, 2001). The maxim of Husserl was "back to things themselves!" (Kruger, 1988, p. 28).

In addition to the 10 interviews conducted in this study, the educational institution-based program managers in two instances arranged access to program participants. Depending on the circumstances, the researcher either talked directly to the program participants and asked them to write essays or worked through the program manager and presented the following request:

Write down your viewpoints, perspectives or feelings of the program you are undergoing, or have completed. You need not give your name. You need not concern yourself with grammar or spelling. If possible, compare this program with others you may have done, which are not offered through collaboration between an employer and an educational institution (or purely academic programs known to you from talking to other students).

Explicitation of the Data

The phenomenological explicitation [2] process that was used comprised five stages:

Bracketing and Phenomenological Reduction

The term reduction, coined by Husserl, is regarded by Hycner (1999) as unfortunate, because it has nothing to do with the reductionist natural science methodology. It would do a great injustice to human phenomena through over-analysis, removal from the lived contexts of the phenomena and worse possibly reducing phenomena to cause and effect. Phenomenological reduction "to pure subjectivity" (Lauer, 1958, p. 50), instead, is a deliberate and purposeful opening by the researcher to the phenomenon "in its own right with its own meaning" (Fouche, 1993; Hycner, 1999, p. 144). It

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[2] The term 'data analysis' is deliberately avoided here because Hycner (1999, p. 161) cautions that 'analysis' has dangerous connotations for phenomenology and "usually means a 'breaking into parts' and therefore often means a loss of the whole phenomenon". The term 'explicitation' implies an "investigation of the constituents of a phenomenon while keeping the context of the whole". Coffey and Atkinson (1996, p. 9) regard analysis as the "systematic procedures to identify essential features and relationships". It is a way of transforming the data through interpretation.

further points to a suspension or 'bracketing out' (or epoche) "in a sense that in its regard no position is taken either for or against" (Lauer, 1958, p. 49) the researcher's own presuppositions, and not allowing the researcher's meanings and interpretations or theoretical concepts to enter the unique world of the informant/participant (Creswell, 1998, Moustakas, 1994; Sadala & Adorno, 2001). This is a different conception of the term bracketing used when interviewing to bracket the phenomenon researched for the interviewee. Here it refers to the bracketing of the researcher's personal views or preconceptions (Miller & Crabtree, 1992).

Based on Holloway (1997) and Hycner's (1999) recommendation, the audio recording of each interview were repeatedly listened to, in order to become familiar with the words of the interviewees/participants and to develop a holistic sense, the 'gestalt'. Zinker (1978, p. 77) explains that the term phenomenology implies "that process which one experiences as uniquely one's own; adding the dimensions of here and now gives personal phenomena existential immediacy."

Delineating Units of Meaning

This is a critical phase of explicating the data, in that those statements that are seen to illuminate the researched phenomenon are extracted or 'isolated' (Creswell, 1998; Holloway, 1997; Hycner, 1999). The researcher is required to make a substantial number of judgment calls while consciously bracketing her/his own presuppositions in order to avoid inappropriate subjective judgments.

The list of units-of-relevant-meaning that were extracted from each interview were carefully scrutinized and the clearly redundant units eliminated (Moustakas, 1994). To do this the literal content was considered, the number (the significance) of times a meaning was mentioned and also how (non-verbal or para-linguistic cues) it was stated. The actual meaning of two seemingly similar units of meaning might be different in terms of weight or chronology of events (Hycner, 1999).

Clustering Units of Meaning to Form Themes

With the list of non-redundant units of meaning in hand the presuppositions of the researcher was again bracketed in order to remain true to the phenomenon. A rigorous examination of the list of units of meaning followed and the essence of meaning within the holistic context elicited. Hycner (1999) remarks that this calls for even more judgment and skill on the part of the researcher. Colaizzi, quoted by Hycner (1999, pp. 150-151), makes the following remark about the researcher's 'artistic' judgment here: "Particularly in this step is the phenomenological researcher engaged in something which cannot be precisely delineated, for here he is involved in that ineffable thing known as creative insight."

Clusters of themes were formed by grouping the units of meaning together (Creswell, 1998; King, 1994; Moustakas, 1994) and significant topics identified, also called units of significance (Sadala & Adorno, 2001). Both Holloway

(1997) and Hycner (1999) emphasise the importance of the researcher returning to the recorded interview (the gestalt) and forth to the list of non-redundant units of meaning to derive clusters of appropriate meaning. There were several overlaps in the clusters, which can be expected, considering the nature of human phenomena. By interrogating the meaning of the various clusters the central themes were determined, "which expresses the essence of the cluster" (Hycner, 1999, p. 153).

Summarize Each Interview, Validate and Modify

A summary that incorporates all the themes elicited form the data gives a holistic context. Ellenberger, quoted by Hycner (1999, pp. 153-154), captures this as follows:

> Whatever the method used for a phenomenological analysis the aim of the investigator is the reconstruction of the inner world of experience of the participant. Each individual has his own way of experiencing temporality, spatiality, materiality, but each of these coordinates must be understood in relation to the others and to the total inner 'world'.

At this point 'validity checks' were conducted and the 'analyses' returned to the participants to determine if the essence of the interview has been correctly 'captured' (Hycner, 1999). A few modifications were made as result of this 'validity check'.

General and Unique Themes for all the Interviews and Composite Summary

After the process outlined from (a) to (d) was completed for all the interviews "themes common to most or all of the interviews as well as the individual variations" we looked for (Hycner, 1999, p. 154). Care was taken not to cluster common themes if significant differences existed. The unique or minority voices are important counterpoints to bring out regarding the phenomenon researched.

The explicitation was concluded by writing a composite summary, which reflects the context or 'horizon' from which the themes emerged (Hycner, 1999; Moustakas, 1994). According to Sadala and Adorno (2001, p. 289) the researcher, at this point "transforms participants' everyday expressions into expressions appropriate to the scientific discourse supporting the research." However, Coffey and Atkinson (1996, p. 139) emphasize that "good research is not generated by rigorous data alone … [but] 'going beyond' the data to develop ideas." Initial theorizing, however small, is derived from the qualitative data.

Results

Composite Summary

A wide spectrum of perspectives was found regarding the phenomenon of joint educational ventures and the perceived value derived from such collaborative efforts. Among others, the significant role of mentors and the importance of

a suitable mentor supervising work-based learning stood out. Associated with this was the importance of commitment by employers and the capacity to devote managerial energy. However, difficulty is generally experienced in finding sufficient suitable experiential learning opportunities. There is a perception that experiential learning does not add value because of its deficiencies and the constraints experienced regarding its proper management. Furthemore, based on the good results derived from in-service training and satisfaction with the integration of theory and practice, we encountered an opposing perspective. Learnerships as element of the national skills development strategy were further perceived important and contributing to society at large. Another important perspective was the required responsiveness by educational institutions to the needs of enterprises. Although some educational partnerships tailored to organizational needs existed, the failure of educational institutions and inflexibility of partnerships were also prevalent.

Unique Themes

The composite summary above only reflects the themes that are common to most or all of the interviews. As already indicated individual variations or unique themes (Hycner, 1999) are equally important. Several themes emerged from this study, and these are reflected in Table 2. The themes that emerged are in column 1 in the table and the research participants from which the themes originated are indicated by 'ticks' in the relevant columns.

With regard to the importance of collaboration between enterprises and educational institutions, Participant J declares that "institutions have their curriculum outlined and corporate world has certain expectations, but the two do not really meet, however, we experienced that we could sit down with the staff and tell them what we as an organization need." Participant A proclaims, "programs developed specifically for industry … came about as result of the inflexibility of the institution's formal programs in relation to the changing needs in the market." Participant A asserts that inflexible national educational structures do not accommodate rising industry needs and mentions that "one of the biggest problems currently in South Africa is the inflexibility of formal programs." Participant G experiences institutions as inflexible and remarks that "[u]nfortunately the technikons do not see the urgency as the companies see it, technikons are quite happy to carry on until they hit a brick wall and then they change." Participant A motions that "a culture of entrepreneurship needs to be established at Higher Education institutions" and a consulting mindset espoused among academics. Participant A explains that the curriculum of formal programs may serve as 'spine' or broad mental framework with which to approach the client. This idea is echoed by the views of Participant F.

According to research participants the functioning of technikon advisory committees leaves a lot to be desired.

Participant H observes the following "[a] diverse grouping of people, representing diverse organizations, attends [a advisory committee meeting] and needs to arrive at decisions, as a result people waffle" and often experiences that the "attendees of advisory committee meetings as being ill-informed about preceding actions." It appears that advisory committees primarily serve the purpose of sharing technikon information with commerce and industry. It is the experience of Participant G that advisory committees primarily serve the purpose of sharing technikon information with commerce and industry. Participant E corroborates this by acknowledging that although an advisory committee exists for their program it sometimes "meets once a year or once every two years, you tell industry what you are doing and they say 'great'" Participant E admits that the interaction has not been close and that involvement should be closer. From the data collected it is evident that the Committee of Technkion Princpals with regard to the functioning of advisory committees, do not necessary materialize. However, in contrast, Participant B (university-based) claims that regarding their research advisory board "members are consulted in the research strategy of the departments involved and what needs to be researched."

Participant B submits that the "principle of work integrated learning is laudable and the concept is sound" but that significant "industry experience at undergraduate level is practically problematic." Participant B further contends that an "extremely sensitive and willing industry partner is necessary to make reaching out activities, practical projects and vacation work successful" and observes that "the success of learning from work experience is fully dependent on the fact if an industry partner is supportive and available, that has the time and energy at management level to make this learning happen." Participant D finds that "the institution struggles to place students." Their experience is that "employers no longer want to take students, due to resource constraints, mainly no longer having money to remunerate students but also not having people available/willing to mentor students."

Participant G complains "there is a big gap between the tertiary institutions and business with regard to what is expected and what happens in experiential learning." With regard to the monitoring of experiential learning, Participant G further observes that the institution sends "somebody out once during a semester to interview, talk about and see if experiential learning takes place correctly … students are essentially cheap labour … training is consequential and production the purpose. There is a big deficiency." When comparing the five scenarios (i.e., views of Participants C & D that are institution-based, and Participants F, G & I that are enterprise-based) with the fundamentals of cooperative education, only Participant F's scenario represents good cooperative education practice. Only the scenarios of Participants F and J are indicative of managed integration of

Table 2
The scope of the qualitative data collected

Themes that emerged	Research participants (see Table 1)									
	a	b	c	d	e	f	g	h	i	j
Curriculum adaptation to fit corporate needs is enabled by collaboration between Higher Education institutions and enterprises. Formal bureaucracy disempowers, whereas entrepreneurial freedom empowers	✔					✔	✔			✔
The functioning of advisory committees leaves a lot to be desired		✔			✔		✔	✔		
The benefits of learning from work placements are undermined as a result of a lack of opportunities and support from providers		✔		✔	✔					
Views varied regarding the certification of in-service training providers. Monitoring of experiential learning providers seems problematic. Structured in-house programs appear to work fine			✔	✔		✔	✔		✔	✔
A 'talent pool' is formed by offering in-service training programs									✔	✔
'Learnerships' are an important element of the South African government skills development strategy			✔			✔	✔	✔		✔
Mentoring plays a significant role in work-based learning, as well as at post-graduate level	✔	✔		✔				✔		
Learning is accelerated when real work is expected from learners						✔	✔		✔	✔
Work-based learning offers learners the opportunity to clarify their career choice								✔		✔
Educators and mentors should always take into consideration that although they are synchronously in a situation with learners from another generation their world-views are dissimilar to those of the learners.								✔		

theory and practice. It is important to note that both are enterprise-based. Instead, one would have expected that the views of institution-based participants would have reflected good co-operative education practice.

Both Participants I and J remarked that in-service training programs offer enterprises the opportunity to get to know the performance of people in training. This knowledge enables enterprises to make informed choices regarding who to consider for future employment. Participant J takes pride in saying "[w]e created a talent pool, if there is a vacancy we know whom to employ" and asserts that "[w]e further do not have to use strangers because we know that we already have a pool of people." The money that would have been spent on recruiting is rather spent on training.

Participant H professes that "learnerships are part of the national skills strategy, which is about human development … [it is] the vehicle (karretjie om mee te ry) … learnerships offer certain incentives from government and opportunities for enterprises." Participant G indicates that the "hot subject at the moment is learnerships" and Participant C asserts that in-company programs, which are still very popular in South Africa, are gaining interest from sectoral education and training authorities." Participant F claims that certificates issued by enterprises are no longer adequate, people want more substantial acknowledgement, which a learnership qualification offers. Participant G believes

that it is feasible to convert an existing formal qualification to unit standards and that it can then become a learnership, which will make it easy for an enterprise to recover bursary funding and increase available opportunities.

Mentoring and mentorship come into play in educational programs with the application of the theory studied and how the theory is applied in reality, according to Participant H, who states "it brings out the 'know how' of a person." This 'know how' (or talent) represents the person's value to an employer. Regarding the importance of mentors, Participant C states "mentors play a significant role … they are expected to fulfill their role as mentor or face the possibility of being surpassed by the would-be mentee … this keeps mentors on their toes … requirements include both theoretical know-how and practical competence … the mentor facilitates the experiential learning of participants." Regarding the importance of the mentor in the work-based learning setting, Participant E remarks "[y]ou have to evaluate the mentor as well, because if you place a third year student in a company the mentor should be adequately experienced and qualified." At postgraduate level, according to Participant B, it is often the practice that the "participant has a study leader (academic person at university) and a mentor, in industry. The mentor considers the relevance of what is taught, if it addresses the problems experienced in industry, and if what is

taught is applicable." It is important that the reader realizes that this type of research differs from other postgraduate research conducted at universities in that it is concerned with truth ('die waarheid').

Participant E reinforces that "cooperative education is an educational model that integrates classroom theory with real-life work placements. To be most effective, a work placement has to be managed by the educator and not just something left up to the company." Participant G remarks that it is their experience as employer that:

> students during the first half of their experiential leaning do not contribute much, they are very raw and do not know anything. They do very basic stuff. During the second half they are very productive. The money spent on them is a good return on investment. However, the value of the individual depends very much on her/his own curiosity and drive. Some require pushing.

With regard to the second-year of company-specific training and the productivity of in-service trainees during the second half, Participant I declares that "[a]n in-service training student becomes fully a member of a design or pilot campaign, which is carefully thought out." Participant J points out the unfortunate reality that in South Africa people from disadvantaged communities often do not have access to gaining work experience.

Participant J emphasizes that "students partaking in a joint venture program are really advantaged because they can see if this is what they really want. They can see is what they will really be going through when they completed their degree, diploma or certificate." With regard to the matter of choices Participant H presents a personal theoretical construct which he calls 'synchronous dissimilarity' (gelyktydige ongelykheid). He asserts that different generations are simultaneously in the same time frame but are dissimilar ('synchronous dissimilarity') with regard to values and approach to work, learning and life. He emphasizes that when growing talent through collaboration between educational institutions and employers, it should be taken into consideration that the world-views of learners are likely to be different from those of the educators or trainers.

Perspectives of Program Participants

In one case, 29 learnership participants wrote essays about their points of view, feelings about and/or perspectives on the program they were undergoing. In another case four participants wrote essays and three participated in a focus group interview. Many express a great deal of optimism and gratitude, whereas others indicate some measure of stress, and a few express pessimism or convey criticism. The word 'talent' was used spontaneously in three essays. Selected perspectives are presented here:

The program is considered a great opportunity for people seeking to take up a particular career. The program "gives young people hope for the future" in that it helps learners to obtain tertiary qualifications from reputable institutions. Employers look for people with experience, which a learnership offers.

The program gives you an opportunity to realize your God-given potential and *talent*.

The program is a *talent* scout to society as a whole, but more specifically benefits the most under-privileged people, who cannot afford to learn and need assistance. The program helps to improve the well-being of society.

The system of learnerships, where employers and educational institutions work together, should be taken down to school leavers to jumpstart their careers and to help those people with the love for and *talent* towards a specific job.

The program exposes one to many things, including the employer, the educational institution, team-building, getting to know yourself and your capabilities, grooming, discipline, responsibility and the drive to work hard. Participants are most fortunate.

The program prepares us for times ahead when we will actually be involved in the workplace.

The program is very good, but stressful with regard to all the things that need to be learned. The program offers opportunities to practice what you have been taught. You acquire good communication and telephone skills, as well as knowledge of e-mail, and you learn good grooming and how to dress for work.

You are learning under pressure, and you learn about time management and the more efficient use of time.

Employers should pay attention to the way they inform their staff about the learnership program, as some departments were disorganized.

Too much time is spent in some departments, as it is possible to understand what is going on in a shorter period.

The program schedule makes provision for lectures and working experience only, not for study time, for which provision should be made. Guidance and supervision in the workplace are further lacking, and there should be dedicated staff in each department to teach students.

The stress related to working late or night shifts and the restrictions that this places on study time make the program difficult, especially if one is writing an examination the following day. Concerns were also expressed about safety if working abnormal hours. The examination performance expectations set by the employer are threatening and create anxiety. Participants sometimes felt like leaving the program.

[A]part from the technical skills that some subjects are offering me I learn a lot on how to work with people".

The participant felt that the technikon program is far better than some purely academic programs in that it shaped him/her to be a professional person able to slot into a strategic management, planning, and even admin-related position in addition to performing purely technical duties, "thus making me extremely versatile, flexible and giving me a solid enough base to expand on in future

I have basically learned all my practicals at work … it has been quite embarrassing for me when I couldn't do the most basic things … [i]t's a very sad situation when you meet other students from other institutions having a clear understanding of basic stuff.

The experience and training that I have been privileged enough to receive [where I worked] has been invaluable … I firmly believe that I learned more about the [xx] field in the 8 months that I have been [working] than I learned in 2½ years at [the technikon].

Conclusion

The 10 participants interviewed (five education institution-based program managers and five enterprise-based representatives) shared a comprehensive range of perspectives. From these shared perspectives, although the findings cannot be generalized, one may conclude with some confidence that cooperative education has the potential to serve as an educational paradigm to grow the talent of people in South Africa. However, from these perspectives it also seems reasonable to conclude that there are currently several shortcomings and/or restraining factors with regard to the practice of co-operative education.

From this study, it is clear that not all program participants are equally satisfied; some are more satisfied than others. In order to optimize the learning of those program participants who are less satisfied, appropriate interventions are recommended, such as, for example, making the necessary arrangements that program participants do not work nightshift prior to a test. Other interventions may include stress management training by the institution's student counseling services. From the perspectives of participants it is further evident that the logistical organization and coordination of programs may require improvements.

However, the study found that bureaucratic processes refute the core principles of cooperative education. These bureaucratic processes obstruct needs-focused (where experiential learning is integrated) curriculum design. The study found that advisory committees do not function the way they are intended.

The study found that major difficulties are experienced in finding sufficient experiential learning placement opportunities for students. It appears that supportive and reliable partners are crucial and must be nurtured.

Learnerships appear from the findings of this study to be exemplary of good co-operative education practice.

It is important to note that the benefits derivable from experiential learning are largely undermined, according to the research findings, as a result of inadequate arrangements, coordination and monitoring. From the findings it is clear that the appropriate level of supervision and/or mentoring of experiential learners is key to the success of cooperative education.

On a more positive note, cooperative education programs are instrumental in creating a talent pool, and afford program participants the opportunity to clarify their career choices by being exposed to workplace realities.

From a limited degree of data triangulation that was feasible, it is clear that the notion of an integrated curriculum is highly valued by cooperative education program participants, but that the organizational logistics may be problematic.

From the positive experiences of research participants of joint educational ventures and/or the perceived value derived from collaborative efforts, it can be concluded that cooperative education presents itself as an educational strategy to enable higher education institutions to contribute significantly to the talent growth required among the people of South Africa.

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