New Challenges for South African Development and Training — Linkages to Empirical Research

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With the introduction in South Africa of the Skills Development Act (1998) and the Skills Development Levies Act (1999) respectively, employer organizations are obliged to set aside a portion of their annual payroll for the internal training and development of their workforce. The function of the statutory National Skills Authority (NSA) is to implement the skills development strategy, monitor its performance and report the progress made by the Sector Education and Training Authorities (SETAs). In the South African context, training and development has only recently received attention as a means of addressing critical personnel development initiatives. The focus is now shifting towards fast tracking skills development, which is being integrated into the overall business plan of organizations. Strategies need to be initiated to harness knowledge workers as competitive resources for the new global economy and for world-class competitiveness. This article accentuates the importance of the skills development strategy and offers a systems approach to skills development for organizations. It also highlights some empirical research and its linkages to the emerging challenges of the skills development strategy in South Africa. The article concludes with implications for skills development and training and maps the way for future research.

Skills training and development programs initiated by organizations recognize the need to keep employees abreast of technological and social changes in order to sustain a competent and productive workforce. According to Cascio,[1] they provide opportunities for employees to improve their abilities, skills and potential.

Anthony, Perrewe and Kacmar[2] reinforce this view, stating that every organization should ensure its skills training programs meet its human resources needs in terms of skills and competencies required. They contend that an organization should systematically determine its needs for training and development and dovetail this plan with that of the overall organizational and human resource strategy. In this way, needed skills are identified within occupational skill categories linked to organizational growth strategies. According to Hellriegel, Slocum and Woodman,[3] skill variety, task identity and task significance strongly influence the experienced meaningfulness of work.

The Problem Statement

It is recognized by most South African business organizations that there is a shortage of highly skilled personnel. The World Competitiveness Report, in collaboration with the World Economic Forum, ranked South Africa last out of a total of 48 countries profiled as far as people or human resources development was concerned.[1] Of equal concern was the ranking given to the availability of skilled labour (48th), the adequacy of the educational system (47th) and the motivation to retrain (43rd). Recent surveys reveal that there is a paucity of competently skilled black managers and this trend is likely to reach critical mass in the 21st century. In a further paradox, the Global Competitiveness Report (1999) compiled by the World Economic Forum and the Harvard Institute for International Development, ranked South Africa 47 out of 55 nations based on a set of multi-criteria for global competitiveness[5]. For the past two years, the World Competitiveness Yearbook has ranked South Africa at the bottom of a league of 47 countries in terms of skilled labor, economic literacy, education systems, unemployment levels and IT skills.[7] The poor development of skills training in South Africa also underpins the lack of competitiveness in the global village.

Discussion

In terms of the Skills Development Levies Act,[8] employer organizations must set aside a levy on the annual company payroll to finance training. The levy is to be paid to the South African Revenue Service (SARS), which then apportions it to 25 Sector Education and Training Authorities (SETAs). The SETAs then plough the funds to registered trainers for high power skills development. There are reciprocal benefits as employers claim from the SETAs up to half the levies paid. Recent media articles highlight that employers set aside 1 percent of their annual payroll and accrue a 70 percent tax rebate for training. Employer organizations are also required to sit down with identified employees to develop a skills profile matrix for upgrading needed skills. In terms of the Skills Development Act[9], skills training would take the form of learnership, where the training program is accredited and recognized as being of high quality. The accreditation of any skills training program would be sanctioned by the relevant SETAs.

Value-added Learnerships in the Context of Skills Development

Current projections by the National Skills Authority (NSA) show that there are only 3 million skilled people in South Africa, as opposed to the 7 million in semi/unskilled work.[9] South Africa has an acute shortage of professional managers and technicians compared with industrialized countries. Pretorius[10] illustrates (**Appendix A**) the survey findings of the Human Science Research Council citing the skills shortages in the South African labor market. Morotoba[11], executive officer for the National Skills Authority, asserts that the skills strategy would make a significant contribution in a four-year trajectory to build capacity in the undernourished skills pool in South Africa[12].

The skills strategy document proposes that 85 percent of beneficiaries from learnerships and other skills development programs should be black and that 54 percent of them be women. It further suggests that 4 percent of those trained in the four years should be disabled. In order to attain the objectives, the NSA[13] has evolved a set of key success factors for evaluation, namely:

- A minimum of 100,000 people under the age of 25 should complete learnerships by 2004.

- About 50 percent of these should have found jobs within six months of completing their training.

- At least 15 percent of all workers should have progressed to at least one level on the National Qualification Framework (NQF) in keeping with the objectives of the South African Qualification Authority.[14]

- 70 percent of the South African economically active workforce should have a level-one qualification by 2004.

- No less than 90 percent of enterprises employing over 150 workers should be able to claim skills development rebates relevant to national, sector and departmental priorities.

According to Msomi,[15] employer organizations have cited various labor legislation as being too rigid in the face of a shrinking economy and only 30 percent of employers have failed to comply with the legislation governing the Skills Development Act.[16] Blumental[17] reveals that some companies are not even aware of the rebate allowed for skills training in terms of the Act. The Minister of Labor, Membathisi Mdladlana[18] has urged organizations to show tangible commitment to the strategy outlined. It is necessary to review the literature with regard to training in the context of the skills development strategy and the challenges facing South African organizations.

The Importance of Skills Development and Training

Recognition of the importance of skills training has been further influenced by the increase of international competition and the success of economies like those of Japan, China and Germany. Beardwell & Holden[19] claim that further technological developments and organizational change have led some organizations "to the realization that success relies on the skills and abilities of their employees, and this means considerable and continuous investment in training and development." As pointed out by Nel, Gerber, van Dyk, Haasbroek, Schultz, Sono & Werner,[20] South Africa faces a human resources crisis with the shortage of skilled employees exacerbated by the high rate of unemployment among unskilled workers. South Africa is therefore also faced with the enormous challenge of training and development of its workforce to increase productivity. It is essential for all skills training and development interventions to be fully explored to alleviate the shortages experienced by South African organizations.

Schutte's[21] study highlights the severe skills shortage and the need to address the deficit by training more black people for skilled occupational groups. He asserts that 70 percent of the economically active population comprises black workers who are in the main, semi-skilled, unskilled or unemployed. In crystallizing the human resources dilemma, Schutte[22] indicates that there is one manager for every 42 workers, whilst 5.5 percent of the economically active population falls "in the category of professional, technical, administrative and managerial workers." The trend is of particular significance when seen from the perspective of the shortage of supervisory and middle managers, "with blacks accounting for no more than 1.64 percent of the positions in the category [of] managerial, executive and administrative employees" (Schutte[23]). He concludes that "the shortage of supervisory and middle management is acute, not least because of the lack of trained black manpower to fill the posts available."

Training Needs Analysis and Assessment

In citing the Institute of Personnel Management (IPM) Fact Sheet 156, Van Dyk, Nel & Loedolff[24] contend that a needs analysis is a detailed investigation of an apparent performance problem in order to establish real causes, and to determine which of these may be addressed by training. Needs may be general or specific, objective or subjective in nature. There may be wants or diagnosed deficiencies. According to Van Dyk, Nel, Loedolff & Hassbroek,[25] a need is defined as "a discrepancy or gap between the way things are and the way things ought to be" in the organization.

Boydell[26] points out "although there is agreement that we are talking about a shortfall capable of being put right by training, confusion arises because of lack of agreement over the area to which this shortfall applies." Armstrong[27] supports this view, adding that "it is, or should be, more concerned with identifying and satisfying development needs — multi skilling, fitting people to take on extra responsibilities and increasing all-round competence." Training and development has to be planned to improve and acquire new skills, knowledge and attributes building on the existing competence level of employees in an organization. The ability to fulfill these functions depends on the quality of personnel; hence, the development and application of their full potential can be attained only through training and development. Training needs analysis is partly concerned with defining the gap between "what is happening and what should happen" (Armstrong[28]), as illustrated in **Figure 1.**

Figure 1. The Training Gap

What is	Training gap	What should be
Corporate or functional results Knowledge and skill possessed Actual performance of individual	←	Corporate or functional standards Knowledge and skill required Targets of standards of performance

Source: Armstrong, M. 1993. "A Handbook of Personnel Management Practice." 4th Edition. London: Kogan Page, p. 429.

Identifying a symptom or deficiency may not necessarily be solved by training alone, as the situation or the environment in which the organization exists may be subjected to other factors. The solution to some of the problems could, for example, lie in the behavior of people in the organization or it may involve reshaping stereotyped mind-sets of management to manifest a type of synergy for strategic action. According to Lear,[29] the climate of an organization and resistance to change can impede progress when identifying correct training needs for black employees. Schutte[30] claims that constraints related to cultural differences are one of the crisis components in the human resources problems related to the development of black employees.

According to Margolis & Bell,[31] needs analysis sets the stage for action, and "its essence and by-product pervade the remaining acts of the training drama." Ferdinand[32] states that training needs analysis is a process that can be used by an organization to determine what its employees will have to do differently or more effectively in order to achieve its objectives, and specify the appropriate development or training they need to become more effective. He further contends that training needs analysis requires skill, perception and judgement.

Watts,[33] in her research study of 34 black managers and their work colleagues, identified fundamental perceptual differences attributed to work problems. An interesting finding emanating from this research is that "the largest interpersonal differences existed between black manager-boss dyads." The findings also revealed that the black managers' perceptions diverged significantly from those of their white bosses, whose perceptions were closer to those of white peers. Watts[34] contends that studies have examined either the black manager or white employees without exploring "both groups' perspectives and perceptual differences."

Thus, the training needs analysis is the starting point for development interventions, occurring at different levels in an organization. It is important when conducting a needs analysis for black employees to be assessed separately by the manager. Specific areas of deficiency could then be more readily identified. This strategy is more effective than generalized routine training interventions. Hofmeyr[35] contends that meaningful individual training needs should be identified jointly by the manager and the subordinate. Macdonald[36] in his study suggests the use of a systematic approach to assess training competencies required for the present and future managerial positions. It is contended that the systems approach to identifying training needs facilitates the skills development function in an inter-active manner.

Systems Approach to Skills Training

Stoner and Freeman[37] view the systems approach to training "as a unified, purposeful system composed of interrelated parts." Cocheu[38] observes that "as the challenge of improving product quality and customer service looms ever larger for all organizations, so does the challenge to the training and development profession — to give people the knowledge and skill they need, when they need them, to improve quality." In using the systems approach to training, Sherman and Bohlander[39] assert that "since

the primary goal of training is to contribute to the organization's overall goals, training programs should be developed with an eye to corporate strategy." According to Gibson, Ivancevich and Donnelly,[10] "systems theory emphasizes the importance of responding to the feedback information." Armstrong[11] proposes the following as a successful systematic approach to training:

- Identifying and analyzing training needs.

- Defining training objectives — training must aim to achieve measurable goals expressed in terms of improvements and changes in behavior, which lead to better performance.

- Preparing training plans that will meet objectives.

- Implementing training plans.

- Monitoring and analyzing results.

- Feeding back the results of evaluation so that training can be improved.

More specifically, effective and well-set-out training and development objectives underscore the integration of a meaningful needs analysis. Carrell, Elbert and Hatfield[12] caution that training objectives should be framed to reflect what the participants should be able to do on completion of the training. "T & D objectives indicate the kinds and levels of skills, knowledge, abilities, and attitudes the participant should possess after the program has been completed."

Setting Strategic Objectives for Skills Development

Effective training objectives underlie the identification of training priorities and lend impetus to the successful implementation of training programs. Byars and Rue[13] state that "when clearly defined objectives are lacking, it is impossible to evaluate a program effectively." Gerber, Nel and Van Dyk[14] point out that despite high unemployment, there is still a shortage of trained people in South Africa. Intensive skills training is needed to provide South African corporate organizations with competent personnel who can improve performance and productivity. One of the major spin-offs from the perspective of the state is the implementation of the Skills Development Act[15] and Skill Development Levies Act,[16] which enforces South African organizations to give serious attention to skills training of its internal workforce.

A training program with effective feedback and evaluation techniques enables employees to reach the required performance level in their jobs in a relatively short time. Carrell *et al.*[17] contend that training and development objectives help determine which methods are appropriate by focussing on the areas of employee performance requiring change. They assert further that well-formulated written training and development objectives should focus on three considerations:

- A statement of outcome behavior — what the employee will be able to do on the completion of training.

- A description of the conditions under which the outcome behavior is expected to occur.

- A statement of the minimum level of achievement that will be accepted as evidence that the employee has accomplished what was required.

Within the South African person power *milieu*, the major objectives are determined by defining future training needs that are influenced by a multicultural workforce and the magnitude of skills shortages experienced at higher occupational levels. According to Gerber *et al.*,[48] the short- and long-term aims of training and development, impacting on a national level should embrace the following:

- Short-term aims:

    To design a national training strategy, formulate a structure for its implementation, and to revise this strategy regularly.

    To formulate a model for financing training by the state as well as the private sector, for training to be optimally promoted.

- Long-term aims:

    To equip the workforce, including disabled persons, with the skills, values and attitudes required to support the development of the economy in the formal and informal sectors.

    To design a qualification structure for training to be administered by a certification body in order to ensure acceptable training standards.

    To create effective mechanisms for liaison between training and education, which could complement and support each other.

The implementation of the Skills Development Act,[49] the Skills Development Levies Act[50] and the role of SETAs add value to both the short- and long-terms aims articulated by Gerber *et al.*[51] An important determinant is the role played by the Sector Education and Training Authorities in accrediting learnerships whilst encouraging and monitoring training interventions. By developing its human resources, an organization will gain the competitive edge to meet current and future person power needs. According to Armstrong,[52] training means investing in people "to enable them to perform better and to empower them to make the best use of their natural abilities." He advocates the following training objectives:

- To develop the competencies of employees and improve their performance.

- To help people grow within the organization in order to meet its future needs for human resources from within.

- To reduce the learning time for employees starting new jobs on appointment, transfer or promotion, and ensure that they become fully competent as quickly and economically as possible.

Milkovich and Boudreau[55] state that "assessing needs is important because other decisions hinge on it." McKenna and Beech[56] assert that training delivery is concerned with improving the skills of employees and enhancing their ability to cope with the demands of the work environment. Thus, a properly conducted needs analysis acts as a rejoinder to improve skills and identify training needs.

Implications of Research Findings on Training and Skills Development

According to the National Manpower Commission and the National Training Board (NMC/NTB)[57] research study in the training and development of managers in South Africa, "the survey did suggest one disturbing conclusion, namely, a large section of the business sector (even among large organizations) do no management training at all or to a limited extent only." With regard to both the business sector and training institutions, the survey reflected an over-concentration in the field of general management, whilst human relations and technical skills were lacking. The most significant overall finding of the survey was that 87 percent of the small, medium and large firms that responded did not do any management training. This criticism demonstrated that training initiatives were not linked to strategic planning or to emerging issues such as the subsequent impact of state legislation, globalization and world-class competitiveness.

Training needs differ at various levels in the organizational hierarchy and are intrinsically linked to various occupational categories. In South Africa, as in developed Western countries, corporate organization survival is characterised by downsizing, restructuring and or rightsizing. Van Aardt[58] highlights the training needs for South Africa and reports on the research findings of the World Bank (Economic Development Institute):

- Increased managerial training, particularly the training of blacks to ensure black advancement in the private sector, is of vital importance.

- The training capacity of existing black institutions (i.e. the Black Management Forum and the National African Federated Chamber of Commerce) needs to be strengthened by training instructors and developing existing courses.

- Training in entrepreneurship is important to combat unemployment.

- Any training program to be instituted in South Africa should be tailored for the needs of the transitional period and the short- to medium-term period after transition.

- When designing training programs, South African institutions should liaise with international training and training advisory organizations to learn from their experience in order to improve local standards.

In preparing for the future, Kubr and Prokopenko[59] maintain that "managers need to develop competencies (in forecasting, planning, analysis and understanding of future prospects) that broaden their horizons, acquaint them with new trends in

technology and society and prepare them for facing new realities." In training high-level personnel, the development of essential competencies is concomitant with performance within a proper time frame. The flattening of organizational structures and the corresponding elimination of levels of middle management "have blurred some of the traditional boundaries between management and non-management personnel."[58]

At the operating level, it was associated with the acquisition of technical skills. At the management level, it has been linked to educational courses and seminars to enhance the skills of future managers. In all organizations, managers — regardless of their position in the corporate ladder — deploy a mixture of technical, conceptual and human-relations skills. **Figure 2** depicts the mix of these skills and how they vary according to the scope of competence and the nature of training needs at each level of the organizational hierarchy.

Figure 2. A different mix of skills required at each level of management

Top Management			
Middle Management	Technical Skills	Conceptual Skills	Human Relation Skills
First-line Management			

Source: Carrell, M.R., Elbert, N.F. & Hatfield, R.D. 1995. "Human Resource Management — Global Strategies for Managing a Diverse Work Force." 5th Edition. Englewood Cliffs: Prentice Hall, p. 401.

According to Carrell *et al.*,[59] the first level — or top management — is characterized by a fair amount of conceptual skills with an emphasis on skills required for strategic vision and the management of the total organization. Human relations skills are also important at this level, including the ability to communicate with employees, establish strong interpersonal relations, and build cooperative, satisfying relationships among work-group members. Robbins[60] asserts that human skills should be aligned with the ability to work, understand, and motivate other people, both individually and in groups.

Lear,[61] in her study, recommends the linking of training initiatives aimed at upgrading employees' technical, conceptual and human skills to aid in black advancement by:

• Improving the application of knowledge, skills, behavior or problem-solving techniques.

• Bringing the employee up-to-date with organizational objectives and processes.

• Preparing the potential employee for advancement into more responsible positions.

Macdonald's[62] survey of 83 respondent organizations reveals that human skills are necessary for the development of competent managers, particularly when the

progression is made from the non-managerial to the managerial occupational category. His findings revealed a strong need for the possession of managerial human skills at all management levels.

The second level — or middle management — encompasses a wide variety of functions coupled with differences in the degree of specialization. Conceptual skills are required to coordinate and execute a variety of delegated tasks for meeting organizational goals, with some involvement in corporate strategic planning and management.[93] Robbins[94] supports this view by contending that managers must have the mental ability to analyze and diagnose complex situations. Hofmeyr's[95] findings from a questionnaire-based survey of 140 potential black managers, on the identification of training needs for management development, revealed the following:

- The most important managerial dimensions were identified to be job knowledge, oral communication, analytical ability, problem solving, dependability, initiative, decision-making, planning and an understanding of company systems and processes.

- Potential black managers performed least well in the dimensions of planning, decision-making, time management and control.

- The management functions of planning, analytical ability, control, and decision-making were identified by both the management group and the potential black manager group as the most important training needs.

Macdonald's[96] research study revealed that conceptual managerial skills were rated as being most important by the factory manager, followed by the department manager, then the foreman and lastly the supervisor, for whom it was considered unimportant.

The third level of first-line or operating management concerns employees at the lower rung of the corporate hierarchy, who drive the defined company objectives and activities to ensure operational efficiency. At this level, technical skills and specialization are important, although the required skills are defined for particular activities. Robbins[97] states that "technical skills encompass the ability to apply specialized knowledge or expertise." These skills are more important for first-level management than for middle or top management. Management of people at this level is important and human relations play an integral role in worker motivation, team building, maintaining morale, effective communication and organizational skills. Carrell *et al.*[98] assert that there is a move to redesign jobs "that can be seen as an effort to empower employees and to bring the responsibility to the customer down to the lowest levels in the organization."

On the technical dimension, Macdonald's[99] findings revealed a distinct variability on the importance it is accorded. Managerial technical skills were regarded as not very important by the departmental and factory managers respectively, whilst at the supervisor and foreman levels it was regarded as being important. It is clearly necessary, therefore, to examine the training needs analysis at various levels in an organization and synchronize these with the skills development strategy advocated by the National Skills Authority.

Conclusion and Implications

The importance of training and development in the light of the shortages experienced in South Africa is accentuated by the trend evident in other industrialized countries where there is a large pool of skilled employees at the operating management level. The converse applies in South Africa, where there is a large undernourished low-level skilled personnel base. Van Aardt[70] maintains that "if South Africa is to become more competitive globally, it should in the long-term assume the skills pattern already established in the USA."

Blumental[71] states that "continued failure to comply with the requirements of the Skills Development Act[72] could be tantamount to committing business suicide. The same could apply if companies neglect to exploit the benefits of the Skills Development Levies Act"[73] Msomi[74] aptly summarizes the five fundamental objectives outlined by the National Skills Authority that were to have been achieved by employers by the year 2004:

- The development of a culture of high-quality lifelong learning by encouraging employers to accept skills development as an investment rather than a cost.

- Fostering skills development in the formal economy to ensure productivity and employment growth.

- Stimulating and supporting skills development in the small, medium and micro enterprises (SMME) sectors.

- Promoting opportunities for skills development in social upliftment initiatives.

- Assisting new entrants into employment.

Increased global competition and the impact of state legislation have caused corporate organizations to reconceptualize their business mission in an attempt to improve organizational effectiveness and increase productivity. The imperatives for employer organizations in South Africa are clearly articulated in this article, showing linkages to empirical research for skills training and development in order to sustain a developing economy. According to Sherman and Bohlander,[75] as organizations downsize, the skills and competence of the available pool of employees assume critical importance.

The national skills development strategy aims to encourage growth through investment in people and where human resources are seen to be the most valuable assets in organizations. According to Haasbroek as cited by Van Aardt,[76] "a high economic growth rate and the empowerment of people are two of the most compelling challenges facing the future of South Africa, if it is to become a winning nation." Both these challenges underpin the commitment of top management of organizations towards the skills development vision.

According to the White Paper on Human Resource Management in the Pubic Service,[77] developing a human resource management strategy is an imperative. A comprehensive human resource capacity building strategy should be drawn up to close

the gap between existing policies, practices and capacity as against those currently prevailing in most national departments and provincial administrations. The White Paper on human resource management suggests that the strategy should include the following:

- Clearly articulated objectives, aligned to the organization's strategic and operational goals.

- Time-bound targets for the transformation of individual human resource management practices.

- Assignment of responsibilities and resources for implementation.

Thus, the training and development of human resources should be the preoccupation of all organizations in South Africa in order to remain globally competitive. Labour Minister Membathisi Mdladlana[ ] has encouraged businesses to support the initiatives of the skills development strategy as a national unified business imperative. He states that, "we need to change attitudes about skills development in this country. The skills development legislation has introduced new organizations, an incentive funding system and an innovative programme designed to make SA more competitive."[ ]

Finally, future research could examine what progress has been made by employer organisations with regard to the key objectives outlined by the National Skills Authority as well as the guidelines set out in the White Paper on human resource management in the Public Service.

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Appendix A

Skills Shortages in the South African Labor Market
Human Science Research Council (HSRC)
Business Survey — 1999

The Human Science Research Council (HSRC) study early in 1999 revealed the following:

- 76% of the 273 organizations involved in the study did not have adequate skilled human resources.

- 54% of 113 organizations that employ engineers have problems in recruiting professionals — especially mechanical, civil, electrical and industrial engineers.

- 25% of 65 organizations experienced shortages in engineering technicians.

- Half of the 116 organizations that employ IT professionals reported shortages — computer programmers, system analysts and software engineers.

- 17% of organizations employing accountants and related professionals experienced shortages.

- Shortages in economics: economists, financial analysts, investment specialists.

- Shortages in medicine: practitioners, trauma, intensive care and thereafter nursing staff.

- Shortages in mathematics: actuarial occupations.

- 22% of organizations said that they had shortages in the managerial occupational group — in the administrative and technical areas of management and a combination of technical, business and financial skills.

- 10% of the organizations had difficulties in recruiting managers, professionals and artisans.

Source: Pretorius, C. 1999. "The life and times of all skilled South Africans." *Sunday Times: Business Times*, 5 December 1999, p. 1.

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