How do professionals develop? Lessons for the effective implementation of the South African Skills Development Act

G.M. Steyn
Faculty of Education, University of South Africa, P O Box 392, Unisa, 0003 South Africa
steyngml1@unisa.ac.za

The Skills Development and Skills Development Levies Acts, passed in 1998 and 1999, and the subsequent National Skills Development Strategy (NSDS), have been initiatives to develop the people of South Africa and to provide educational and economic opportunities for all. In order to implement NSDS, 25 Sector Education and Training Authorities (SETAs) have been established within different economic sectors that cover the South African economy. The SETA Education, Training and Development Practices, known by the acronym ETDP SETA, is responsible for promoting and facilitating the delivery of education, training, and development. Delivering quality education and training is currently one of the most important endeavours for the restoration of the culture of teaching and learning. Professional development (PD) of educators is seen as an essential ingredient for promoting the delivery of education and training and improving learners’ performance. Despite research findings, the development of many PD programmes rests on faulty assumptions of such research or on no research at all. The purpose of the paper is twofold: to explain why some PD programmes have been unsuccessful, and to outline key factors that may influence the effective implementation of PD in schools and ultimately the effectiveness of the NSDS in educational circles. Specific categories that are highlighted include learning styles of educators, educator commitment, transformational leadership, out-of-school conditions, in-school conditions, and requirements of programmes. According to the model for PD, the design of PD requires a new way of thinking and interacting and, most importantly, should be a step towards improved educator and learner performance for the sake of effective knowledge and skills development.

Introduction

Education and development of human resources in organisations have never before been so important to society (Vincent & Ross, 2001:36; Ho-Ming & Ping-Yan 1999:32). It may be attributed to changes in societies that force adaptations in economies and labour markets (National Skills Development Strategy, 2001:5). In many countries the economy and labour market are challenged by poverty and unemployment (Tager, 2003:90). Globalisation also pressurises markets to provide the necessary knowledge and skills to be economically, politically and socially competitive in a rapidly changing environment. The Skills Development and Skills Development Levies Acts were passed in 1998 and 1999 to develop the people of South Africa and to provide educational and economic opportunities for all citizens. The legislation charged the Minister of Labour to prepare the National Skills Development Strategy (NSDS) which was announced in February 2001 by the Minister of Labour (National Skills Development Strategy, 2001:1). The NSDS aims to increase the overall level of skills in the country; to increase access to and the quality of learning; and to ensure that the learning system is more responsive to the needs of commerce and industry (Mahanyana, 2003:128). This initiative recognises that human capital is vital to economic development (Tager, 2003:91). The acknowledgement of the human factor in economic development places tremendous emphasis on the importance of delivering educational opportunities to as wide a sector of the population as possible (Tager, 2003:91). A great challenge, however, is to implement the NSDS effectively.

Twenty-five Sector Education and Training Authorities (SETAs) have been established to implement the NSDS within different economic sectors that cover the South African economy. The SETA Education, Training and Development Practices, known by the acronym ETDP SETA, is responsible for promoting and facilitating the delivery of education, training and development (Mahanyana, 2003:128). The ETDP SETA can play an important role in investigating ways to get the large numbers of underqualified and unqualified educators enrolled in courses to upgrade their qualifications, and in identifying skills required in the sector, including those of school managers, governors and educators (Mahanyana, 2003:128). The legacy of apartheid has left South Africa with an education system that is characterised by inequity in provision, demise of a culture of learning and teaching in many schools and a resistance to changing the way things have been done in the past. While it does not take a long time to break down a healthy learning environment, it will take a long, hard effort to rebuild it (Hartsorne, 1993:340). The restoration of the culture of teaching and learning after the breakdown during the apartheid era is currently one of the most important endeavours aimed at improving the quality of education in South African schools (Garson, 2000:4).

The concept “culture of learning and teaching” is widely used in the South African education context. It refers to the attitude of educators and learners towards learning and teaching, as well as their spirit of dedication and commitment to the schools (Lethoko, 1999:12). The breakdown of the culture of learning and teaching in schools may partly be understood in terms of the organisational breakdown (Christie, 1998:293). It manifests itself in the disruption of classes, the malfunctioning of management, the collapse of authority in schools and the disruption of disciplined learning and teaching.

Professional development (PD) of educators is seen as an essential ingredient for creating effective schools, promoting the delivery of education and development, and improving learners’ performance (Rhodes & Houghton-Hill, 2000:424; Wood & Millichip, 2000:513; Birman, Desimone, Porter & Garet, 2000:32). Since educators have the most direct contact with learners as well as considerable control over what is taught and how it is taught, it can be assumed that enhancing educators’ knowledge, skills and attitudes is a critical step in improving learner performance (King & Newman, 2001:87; Rubisch, 1999:121; Anonymous, 2001/2002:17). It is necessary to realise that educators cannot hope to use the most sophisticated approach to student learning unless they have both the skills to use it and the desire to implement it (Shaw, 2003:39). Unfortunately, many global reform initiatives have ignored the people involved and concentrated primarily on the systems in which they work (Brinon, 1996:81). Leading companies in the world are, however, reaping the benefits of investing in people. The National Skills Development Strategy in South Africa also aims at building this commitment and culture in South Africa.

The ultimate aim of PD is increased learner performance, but individual learner outcomes and how educators teach learners are profoundly affected by the school culture in which educators work (King & Newman, 2001:87). This implies that there is a need for professional learning communities in which educators and leaders work together and focus on student learning (Parkey & Strahan, 1995:4; Sparks, 2003b:55). However, individual factors, factors external to the school and the PD itself could also play an important role in creating learning communities. From this perspective designing a PD programme should not only be grounded on an abstraction in the way educators learn, but...
should also consider the factors which could influence the effective implementation of PD, and ultimately of skills development as advocated by the NSDS.

This paper is an attempt to satisfy two objectives: firstly, to explain why some PD programmes have been unsuccessful; and, secondly, to outline key factors that may influence the effective implementation of PD and ultimately the effectiveness of the NSDS in educational circles. The purpose is not to outline all the factors that influence PD, but to suggest that diverse factors may impact on PD, not necessarily directly, but through the influence they have on school capacity. In order to identify significant factors, it is important to survey existing research in this regard and to develop a suitable model to indicate such factors.

**What is professional development?**

All professions require a continuous update of knowledge and skills, and teaching is no exception (Sparks & Richardson, 1997:2; Somers & Sikorova, 2002:103). It is universally acknowledged that an educator's professional development does not end with the initial pre-service training (Ho-Ming & Ping-Yan, 1999:32; Somers & Sikorova, 2002:96). Over time the knowledge and skills of staff members in schools are subject to deterioration, whilst new developments in educational thinking render their skills outdated or inefficient (Campbell, 1997:27). Moreover, educators will not change the way they teach unless they learn new ways to teach (Sparks & Richardson, 1997:3).

Since PD has become more diverse than ever, it covers a variety of activities that are designed to enhance the growth and professional competence of staff members (Campbell, 1997:26; Adams, 1997:4). Research also indicates that longer-term, team-oriented development approaches are replacing passive workshops and lectures by experts (Sachs, 1999:23; cf. Rhodes & Houghton-Hill, 2000:433; Brandt, 2003:13). The focus of these development approaches is the continuous updating of the professional knowledge, skills and attitudes required of staff so that all learners can learn and perform at higher levels (Browell, 2000:57; Sparks & Richardson, 1997:2; Ho-Ming & Ping-Yan, 1999:39; Somers & Sikorova, 2002:103). It is difficult for learners to attain high levels of learning unless the staff themselves are continuously learning (Sparks & Richardson, 1997:2). The South African Qualifications Authority also regards lifelong learning as one of the key principles for development (National Skills Development Strategy, 2001:7).

PD is most effective when it is an ongoing process that includes suitable, well-planned development and individual follow-up through supportive observation and feedback, staff dialogue and peer coaching (Campbell, 1997:26; Ho-Ming & Ping-Yan, 1999:40; Moore in Robinson & Carrington, 2002:239; Professional staff development: a key to school improvement, 1999:390; Bernauer, 2002:89; Moore, 2000:14). The National Skills Development Strategy (2001:6) also values success indicators because they enable progress to be measured and assessed.

Considering the above, we see that PD relates to lifelong development programmes which focus on a wide range of educators' knowledge, skills and attitudes in order for them to educate learners more effectively. Development programmes include both formal and informal activities carried out by an individual or an organisation to enhance staff growth. These programmes have the potential to influence educator learning, but the reality is that there have been many wasteful workshops, conferences and seminars which have led to little sustained change in classrooms (Russell, 2001:3).

**Conventional models of PD: Why don’t they work?**

For the NSDS to have an impact on educator learning, it is important to consider lessons from professional development programmes. Unfortunately many conventional PD programmes have not substantially improved learner performance because these approaches violate key principles for educator learning. The key principles are as follows:

- Educator learning is most likely when educators can concentrate on teaching and learner outcomes in the specific contexts they teach (King & Newman, 2001:87). Educators often view PD material as unrelated to student learning in their particular setting, and therefore do not apply what PD offers. They dislike PD courses on ever-changing topics, and prefer programmes that are more practical in nature and aim to meet their specific needs (Tyrell, 2000:15; Robinson & Carrington, 2002:239; Smith & Lowrie, 1998:7; Somers & Sikorova, 2002:108).
- Educator learning is most likely to happen when educators have sustained opportunities to learn, to experiment with and to receive feedback on specific changes they make (King & Newman, 2001:87; Moore, 2000:14; Redding & Kamm, 1999:29; Robinson & Carrington, 2002:239). Unfortunately most PD programmes are brief workshops, conferences, or courses that do not allow for follow-up sessions (King & Newman, 2001:87; Richardson, 2003:401). Such workshops may be valuable to promote awareness of new practices and provide opportunities for educators to network and to share, but the outcomes of the process are questionable (Robinson & Carrington, 2002:239; Somers & Sikorova, 2002:111).
- Educator learning is most likely to happen when educators have opportunities to work with professional peers, both inside and outside their schools, and have access to the expertise of researchers and programme presenters (King & Newman, 2001:87; Robinson & Carrington, 2002:240; Ho-Ming & Ping-Yan, 1999:36). Peer collaboration and support are required for PD to be effective (Rhodes & Houghton-Hill, 2000:431; Anon., 2001:2018; Brandt, 2003:10; Richardson, 2003:401; Bernauer, 2002:89; Washington, 1993:252; cf. Gerber, 1998:170). One of the most important things that professionals can do in successful schools is to learn from one another (Bernauer, 2002:89). Conventional PD programmes rely almost exclusively on outside specialists controlling learning, without incorporating these resources into delegates' existing knowledge and systems of peer co-operation (Robinson & Carrington, 2002:239).
- Educator learning is most likely to happen when educators have influence over the content and process of PD (King & Newman, 2001:87; Badley, 1992:17; Ho-Ming & Ping-Yan, 1999:36; Bernauer, 2002:91). By empowering educators it facilitates a sense of ownership or "buy-in" which promotes internalisation of learning (King & Newman, 2001:87).

Although experts acknowledge the importance of PD in school reform efforts that seek high levels of learning for all learners, many PD programmes continue to leave educators' knowledge and skills untouched (Sparks, 1997:20). PD programmes should therefore be changed if they are to prepare staff to meet certain academic standards successfully and to improve learner performance.

**Factors influencing professional development**

A crucial question is: What factors play a role in the effective implementation of PD programmes for educators? Figure 1 provides an outline of some factors that will influence the effectiveness of a PD programme. The following major categories are identified: educators' commitment to change; learning styles; transformational leadership; personal factors; out-of-school conditions; in-school conditions; and personal factors. How each of these categories impacts on PD is briefly described in the following paragraphs.

Since PD in effect means that staff are learning and developing new knowledge, skills and attitudes, for the sake of enhancing learner performance, such programmes need to consider the learning styles of individual staff members. Research reveals the existence of individual differences between adult learners that may impact their learning (Burke, 1997:299).

**Learning styles of educators**

For effective PD, the different learning styles of participants should be identified (Burke, 1997:299). This implies personalising development...
Learning styles include a number of variables, such as an individual's environmental, emotional, socio-ecological, psychological and physiological processing preferences.

- Environmental factors. Environmental factors include a comfortable and well-equipped venue (Burke, 1997:300; Ribisch, 1999:119).

- Emotional factors. Since adults prefer to be involved in their own learning for the sake of personal ownership, they should participate in setting goals, priorities, processes and the evaluation of PD (Burke, 1997:300; Badley, 1992:17; Ho-Ming & Ping-Yan, 1999:36; Bernauer, 2002:91). Educator learning is most likely to occur when PD provides continuous opportunities for educators to be involved in the process of development, to experiment, and to receive constructive feedback on particular innovations (Robinson & Carrington, 2002:240; Moore, 2000:14).

- Sociological factors. According to Burke (1997:300) and Ribisch (1999:117), effective PD means maximising staff interaction through small-group discussions that could stimulate their learning and provide motivation. By collaborating with professionals within and outside their schools in order to gain expertise from research, educators' learning experiences are enhanced (Robinson & Carrington, 2002:240; Ho-Ming & Ping-Yan, 1999:36; Bernauer, 2002:91). In Tyrell's view (2000:16), educators do not want to be lectured, but prefer to be inspired by observing an expert performing a task.

- Physiological factors. When planning for PD the different physiological needs of educators should be considered, such as their probable alertness at the time of the day and their food and beverage preferences (Burke, 1997:300). Learning styles are also related to physiological factors: auditory (hearing), visual (seeing) and kinaesthetic (touching) (Vincent & Ross, 2001:41). Staff developers should therefore design auditory, visual, tactual and kinaesthetic materials, and match them with each learner's
strengths (Burke, 1997:300; Vincent & Ross, 2001:41). Tyrell (2000:16) supports this view by stating that programmes should be individualised and fully differentiated. Unfortunately such programmes can be costly and time-consuming to implement. Apart from the variables listed above, Ashworth (in Smith & Coldron, 1999:255) identifies four key features of learning:

- Attunement to others’ discourse. The way in which educators participate in PD programmes from the standpoint of their own backgrounds should be acknowledged (Smith & Coldron, 1999:255; Somers & Sikorova, 2002:108). An educator’s background includes the tradition in their particular school and the subject they are teaching, as well as personal beliefs and values (Smith & Coldron, 1999:255). Educator learning most likely occurs when PD takes the diverse needs of learners in the specific context of their classrooms into account (Robinson & Carrington, 2002:240; Ho-Ming & Ping-Yan, 1999:36; Bernauer, 2002:91; Sachs, 1999:26; Mashile, 2002:174; Somers & Sikorova, 2002:108; cf. Guskey, 2002:50).

- Sharing emotionally in concerns relevant to learning. An essential feature of participation is that individuals see themselves as having the right to voice their opinions and to be listened to (Smith & Coldron, 1999:255; Somers & Sikorova, 2002:104).

- Being assured that they can contribute appropriately and worthily. Participants need to feel that respected for what they know and can do and they should be treated accordingly in PD programmes (Smith & Coldron, 1999:255; Somers & Sikorova, 2002:104).

- Being relatively unthreatened concerning one’s identity. Many educators faced with changes in curricula may feel that their threshold of competence has been threatened because they have had to adjust their methods. For some it could be a source of growth; support and sensitivity are, however, needed from those instigating change (Smith & Coldron, 1999:255).

It is clear from the above that different contexts and different learning styles may require different techniques (Professional staff development: a key to school improvement, 1999:388; Guskey, 2002:50). PD must therefore be individualised to the extent that it builds on each educator’s experience and expertise while also providing the basic knowledge that developing professionals require to succeed (Partee & Sammon, 2001: 15).

Since PD programmes also focus on the educator’s learning, it can be deduced that educator commitment will play a crucial role in their development (Yu, Leithwood & Jantzi, 2000:369; Pehkonen & Törner, 1999:262; Blackmore, 2000:3; Bernauer, 2002:90).

Educator commitment

The educators’ commitment is as important as the school’s, if not more so, for the success of PD (Ho-Ming & Ping-Yan, 1999:38; Pehkonen & Törner, 1999:262; Blackmore, 2000:3). According to Ho-Ming and Ping-Yan (1999:38), PD will be futile without educators’ wholehearted commitment, even if such programmes are well designed.

Yu, Leithwood and Jantzi (2000:369) describe the different aspects of educators’ commitment to develop professionally as follows:

- Personal goals. These goals are the desired future states internalised by an individual. As an important source of educator commitment, they must be acknowledged by educators in order to energise action.

- Capacity beliefs. These beliefs refer to psychological states such as self-efficacy, self-confidence, academic self-concept and aspects of self-esteem. The study by Lam and Pang (2003:90) shows that when educators are more confident about themselves they are more prepared to be involved in learning.

- Context beliefs. They refer to whether the school environment, such as the school governance structure, will provide funds, professional development or other resources for educators to effectively implement changes in their classroom practices.

- Emotional arousal process. The functions of this process are to create a state of readiness, to activate immediate action and to maintain action.


Transformational leadership

Quality leadership is required for effective PD in schools (Bernauer, 2002:89). It provides an orderly and nurturing environment that supports educators and stimulates their efforts (Bernauer, 2002:90). Transformational forms of leadership fundamentally aim to make events meaningful and to cultivate professional development and higher levels of commitment to organisational goals on the part of staff (Yu, Leithwood & Jantzi, 2000:370; Bernauer, 2002:90). The model used in the Canadian study done by Yu, Leithwood and Jantzi (2000) includes various transformational leadership dimensions which could influence educator commitment and have an effect on PD. These dimensions and their usefulness are also supported by other researchers. They are:

- Charismatic leadership: identifying and sharing a vision. Charisma is a characteristic that describes leaders who are able to exert a profound influence on followers, the school’s performance and climate by the force of their personality, abilities, personal charm, magnetism, inspiration and emotion (Dubin & Ireland, 1993:280; Dreher, 2002:207). Charismatic leadership also provides a vision and a sense of mission which is critical for PD effectiveness (Mester, Visser, Roott & Kellerman, 2002:73; Professional staff development: a key to school improvement, 1999:388; Richardson, 2003:401).

- Cultivating the acceptance of co-operative goals. Creating a community of learners requires the cultivation of shared values and the development of an appreciation for the value of working together and caring about each other (Robinson & Carrington, 2002:241; Bernauer, 2002:90).

- Creating high performance expectations. These are leaders’ expectations for excellence, quality and high performance on the part of staff (Anon., 2001/2002:18).

- Providing individualised support. The way in which educators are supported through the process of change is important (Sachs, 1999:26; Robinson & Carrington, 2002:239; Brandt, 2003:10; Gerber, 1998:170; Richardson, 2003:401). It is also important to give educators psychological and logistical support for them to continue developing new habits during the implementation dip that reduces effectiveness before the new procedures become routine (Sparks, 2003a:43; Somers & Sikorova, 2002:103; Pehkonen & Törner, 1999:260; Professional staff development: a key to school improvement, 1999:388; Somers & Sikorova, 2002:103; Anon., 2001/2002:18; Washington, 1993:252).

- Offering intellectual stimulation. Such stimulation creates a gap between the current and desired practices and could enhance emotional arousal processes (Somers & Sikorova, 2002:111; Mester et al., 2002:73). It challenges educators to re-examine certain assumptions of their practices and rethink how they could be accomplished (Yu, Leithwood & Jantzi, 2000:370).

- Providing an appropriate model. Examples are set for staff to follow which are consistent with the values their leaders advocate (Yu, Leithwood & Jantzi, 2000:371).

- Strengthening school culture. Leadership is overwhelmingly important in establishing a positive school culture (Campbell, 1997:27). Without effective leadership, particularly transformational leadership, efforts to change the school culture and influence educator commitment will most likely fail (Bernauer, 2002:90).
In-school conditions
The Canadian study done by Yu, Leithwood and Jantzi (2000) includes mediating variables such as school culture, school structure, strategies for change and school environment that may affect educator commitment to change. Since educator commitment will impact PD, it can be deduced that these variables may also impact PD. Research also reveals some other variables concerning in-school conditions that may influence the effectiveness of PD.

- School culture. It refers to the norms, values, beliefs and assumptions which are shared by role players of an organisation and which shape decision-making and practices (Yu, Leithwood & Jantzi, 2000:370; Duff in Smith & Lowrie, 1998:7). The initial condition for effective PD should be a positive school culture, otherwise valuable time and resources will be spent in achieving only minor growth on the part of staff (Campbell, 1997:27). The school culture should be humane, i.e. psychologically comfortable with warm human relationships, and also professionally supportive so that people have the resources they need and opportunities to collaborate and learn from others (Brandt, 2003:15; Partee & Sammon, 2001:15; Somers & Sikorova, 2002:103; Anon., 2001/2002:18).
- School structure. This variable refers to opportunities for educators in decision-making concerning classroom and school-wide practices. If the school structure supports shared and distributed leadership, then educators can believe that they are empowered to shape meaningful and feasible changes in the school (Campbell, 1997:27; Washington, 1993:252).
- School size. The size of the school appears to be an important factor for planners of PD (Smith & Lowrie, 1998:14; Smith & Coldron, 1999:252). In larger schools where there is a large amount of staff development activity, many individual educators appear to be relatively uninvolved with development (Smith & Lowrie, 1998:14). On the other hand, educators appear to be more involved in smaller schools. The professional background of educators and cultural norms may, however, also have an influence.
- Regular PD. Since ongoing development is a characteristic of effective PD, it is obvious that such programmes should be presented on a regular basis.
- Collaboration. Educator collaboration and support are required for PD to be effective (Rhodes & Houghton-Hill, 2000:431; Anon., 2001/2002:18; Brandt, 2003:10; Richardson, 2003:401). Unfortunately the traditional culture of educator isolation in many schools and the limited time available for interaction within schools have not encouraged educators to cooperate as colleagues (Ribisch, 1999:116; Trent, 1997:108; Collinson, 2001:267). PD should provide opportunities for educators to discuss their achievements and problems in employing new strategies (Robinson & Carrington, 2002:240; Bernauer, 2002:90). In this way, collaboration will contribute towards the development of a positive school culture that is committed to change and the creation of better learning opportunities for all (Robinson & Carrington, 2002:240; Rhodes & Houghton-Hill, 2000:431).
- Feedback. Staff development is most effective when it is a continuous process that includes individual follow-up through supportive observation and feedback, staff dialogues, mentoring and peer coaching (Moore, 2000:14; Robinson & Carrington, 2002:239; Richardson, 2003:401; Moore, 2000:14; Redding & Kamm, 1999:29; Lam & Pang, 2003:87; Birman et al., 2000:29; King & Newman, 2001:87).

Schools do not operate in a vacuum, but are part of a larger system in which they have to meet goals set by authorities.

Out-of-school conditions
Conditions outside schools have the potential to influence how the schools function; this can impact PD in schools. The following factors are highlighted:

- Policies and programmes of authorities. Schools are strongly influenced by changing control patterns, enrolment fluctuations and policy directives from the education department (Lam & Pang, 2003:92). This implies that national and departmental legislation and policies, such as the Skills Development Act and The National Skills Development Strategy, may be profoundly influential.
- Resources. The quality of teaching and learning depends on people and structural and technical resources which are influenced by community context and the policies and programmes of other external role players (King & Newman, 2001:88). They may include human and social resources such as parent support; resources such as family income and school funding; technical resources such as equipment, materials and technology; organisational structures; time for educators to plan; and school bureaucracy.
- Funding. Planning for continuous PD implies the availability of necessary funding. Funds to support PD may be provided by educational authorities or outside agencies, or raised by individual schools.
- Control. Responding to change through PD can keep educators seemingly busy, but makes them dependent if others control their actions (Smith & Lowrie, 1998:7). This is in contrast to empowerment, where educators take control of change processes (Richardson, 1992:287; Smith & Lowrie, 1998:7; Edwards, Green & Lyons, 2002:68; Englehardt & Simmons, 2002:45).

The preceding paragraphs have outlined numerous factors that may impact on the effective implementation of PD. The influential role of PD itself cannot be ignored.

Requirements for PD programmes
For PD to be effective certain structural aspects are important:

- Form. Traditional approaches are criticised for not giving educators the time, activities and the content to improve their knowledge and skills (Birman et al., 2000:29). For PD to be effective, programmes need to be longer and to have more content focus, active learning and coherence (Birman et al., 2000:29).
- Time. Quick fixes may not produce the desired results (Blackmore, 2000:4). Educators need blocks of time without responsibilities for optimal learning to take place (Professional staff development: a key to school improvement, 1999:388). Staff themselves should determine the appropriate time for PD. To treat time as a linear, uniform concept may lead to a misdirected PD effort and a lack of meaningful educator participation (Collinson, 2001:267).
- Duration. PD should take place over an extended period of time (Birman et al., 2000:29; Blackmore, 2000:3; Richardson, 2003:401; Russell, 2001:3).
- Collective participation. Collective participation can contribute to a shared professional culture where educators develop the same values and goals (Birman et al., 2000:30; Bernauer, 2002:90; Cullen, 1999:46; Drejer, 2000:208). Sharing stimulates educators' reflection and broadens their perspective (Ho-Ming & Ping-Yan, 1999:40; Dixon, 1998:164; Blackmore, 2000:3; Shelton & Jones, 1996:100). PD also expects staff to share knowledge and expertise (Browell, 2000:59). Shared learning is regarded as the key to sustaining momentum (Ignoring your learning approach how to encourage deeper learning in your organization, 2003:21).

Table 1 presents a summary of the relationship between components of PD and the impact on work performance of educators (Rhodes & Houghton-Hill, 2000:432). Without putting theory into practice, any PD is limited to being superficial (Ho-Ming & Ping-Yan, 1999:39). It is interesting to note that high transfer is only achieved when coaching is added to the equation (Rhodes & Houghton-Hill, 2000:431; Ho-Ming & Ping-Yan, 1999:40). A barrier here is the lack of educator collaboration and support from leaders or other colleagues in realising the impact of successful PD in the classroom (Rhodes & Houghton-Hill, 2000:431; Anon., 2001/2002:18; Brandt, 2003:10). It implies that
principals have a crucial role to play in offering effective leadership in PD aimed at lasting changes in classrooms (Bjork, 2000:25; Lam & Pang, 2003:84).

**Table 1** The relationship between components of training and impact on teachers' performance (Rhodes & Houghton-Hill, 2000:432)

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<th>Training components and combinations</th>
<th>Impact on teachers' job performance</th>
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<tr>
<td></td>
<td>Knowledge</td>
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<td>Theory</td>
<td>Low</td>
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<td>Theory and demonstration</td>
<td>Medium</td>
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<td>Theory, demonstration and practice</td>
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According to Dixon (1998:164) it is the responsibility of each team and individual staff member to make what they have learnt available to others, in other words, to share their knowledge. Studies indicate that although educators value the sharing of their knowledge, finding available time is a great barrier (Dixon, 1998:166). This is also supported by Collinson (2001:270). Collinson (2001:271) therefore suggests that designated time for learning and sharing should be instituted in schools to improve the quality of the dissemination of information.

- Support of management and educators. For programmes to be effective, both management and educators have to support them (Richardson, 2003:401). Washington's study (1993:252), however, indicates that educators felt that principals' involvement in PD should be limited to a supportive role as participants in PD programmes. This variable also implies senior educators' conscious commitment to programmes, and that they also gain ownership of programmes (Russell, 2001:3; Richardson, 2003:401; Blackmore, 2000:3; Campbell, 1997:28; Washington, 1993:252).

- Type of development. The type of development should be applicable to educators' practice (Shelton & Jones, 1996:99). Outside providers often use inappropriate activities which are not geared to classroom learning (Shelton & Jones, 1996:99). Although it is widely acknowledged that learners learn differently, schools neglect to apply this concept to PD, using a one-size-fits-all approach (Shaw, 2003:40). Educators, like learners, may be at different stages of mastery of certain skills. Some models of PD are also more appropriate to some outcomes than others. A successful PD programme will comprise a variety of different models, each meeting the needs of different educators and achieving different outcomes (Shaw, 2003:40; Somers & Sikorova, 2002:108). Some models include the following (Shaw, 2003:40):
  - Topical seminars at the professional day. In this model one or two days are devoted to the goal of PD. The one-off staff day of the 1970s and early 1980s can still be relevant, for example, for the presentation of topics such as emergency care or new administrative procedures (Campbell, 1997:26; Rhodes & Houghton-Hill, 2000:429). Unfortunately, little time or structure is provided for follow-up.
  - Full staff presentations: In this model lectures and demonstrations are presented to the entire staff of a school. It may be useful to introduce new approaches that will influence the whole staff.

- Core features of PD programmes themselves. The following features may be identified:
  - Content focus. Programmes must be contextualised and fit for the school (Mashile, 2002:175; Sparks, 1997:21; Ho-Ming & Ping-Yan, 1999:39; Guskey, 2002:50). Educators do not find generic PD effective, such as grouping methods, and prefer a PD activity on a specific aspect in teaching, such as increasing educators' understanding of the way learners solve story problems in mathematics (Birman et al., 2000:30).
  - Active learning. Educators need to be actively involved during the presentation and obtain feedback on their teaching afterwards (Birman et al., 2000:29; Blackmore, 2000:3; Moore, 2000:14; Redding & Kann, 1999:29). Active learning encourages staff to become involved in meaningful discussions, planning and practice as part of the PD programmes (Birman et al., 2000:31).
  - Coherence. Programmes should encourage continued communication among staff (Birman et al., 2000:29).

- Evaluation. Programme evaluation is a critical and integral part of PD (Professional staff development: a key to school improvement, 1999:39; Vincent & Ross, 2001:37; Russell, 2001:3). Guskey (2002:46-49) distinguishes between five critical levels of PD evaluation. Each level builds on the previous one, and success at one level is therefore necessary for success at higher levels.

- Level 1: Participants' reactions. On this level it is necessary to focus on the participants' experience of the programme. Aspects such as their experience of the material, the presentation, usefulness of the programme, convenience of the set-up, etc., all receive attention.

- Level 2: Participants' learning. Apart from participants' positive experience of the workshop, it is also important to determine whether they have learnt something from the programme. The type of assessment will depend upon the purpose of the programme. The measures should, however, indicate the attainment of specific learning outcomes.

- Level 3: School support and change. In this level the focus shifts to the school as organisation. According to Pekkonen and Törnér (1999:261), support given to educators in schools is crucial for educator change. Lack of support on organisational level can ruin any PD programme. At level 3 it is necessary to focus on questions regarding the characteristics of the organisation necessary for success. Collecting information at this level is more difficult than for previous levels. Methods for data collection include school records, structured interviews with participants, and questionnaires.

- Level 4: Participants' use of new knowledge and skills. On this level, we must ask the question "Have the new knowledge and skills attained made a difference to educators' practice?" Enough time must pass before such information can be gathered through questionnaires, structured interviews with participants and supervisors, and participants' portfolios. This information will help to restructure future PD programmes to facilitate more effective implementation.

- Level 5: Student learning results. Level 5 addresses the bottom line: how did the PD affect learner performance? Measures of student learning include portfolio evaluation and average marks in tests and examinations. In addition, it is possible to include learners' affective outcomes and psychomotor outcomes. Examples include better school attendance, homework completion rates and classroom behaviours. Questionnaires and structured interviews can also be used to determine the perceptions of staff, principals, learners and parents.

One should, however, consider that such evaluations of PD programmes do not necessarily prove that PD is effective. The relationship between PD and improvement in student learning is much too complex and includes many variables (Guskey, 2002:49).

**Conclusion**

Much of the research on PD has made valuable contributions to our understanding of PD, but little attention has been devoted to addressing the serious question: What are the major factors which influence
the effectiveness of PD? If it is not addressed satisfactorily, many other PD issues may be inadequately examined. Knowledge of such factors has the potential to inform and influence policy and practice, and hopefully also the NSDS instituted in South Africa. It may give rise to questions such as: What does the PD process involve? and What are the effects of PD on educators, learners, and ultimately the education system? (Evans, 2002:135).

The focus on learners' capabilities to succeed post-school as lifelong learners, contributing citizens and employees in a globalised marketplace has pressurised both educators and educational managers (Partee & Sammon, 2001:14). Furthermore, an enhanced knowledge of learning provides a foundation and a challenge for individual educators and education managers to design and deliver PD programmes that not only influence the participants of the programme, but also transform theory into practice. It should be noted that carefully designed, structured and planned PD programmes can and do change the culture of the school, the performance of learners and the morale and motivation of staff (Campbell, 1997:35). As such, the role of PD programmes moves well beyond improving teaching practice, which implies that the significance of the process should not be underestimated.

In conclusion, the direction and requirements of effective PD programmes have to be set within the wider context of discourses on education professionalism (Blackmore, 2000:4). Unfortunately, many educators still do not have control over their own profession. The issue for the future is therefore that the profession should take responsibility for the ongoing development of its own staff members and develop its own standards for recognition and censure (Blackmore, 2000:4-5).

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