Exploring Factors that Influence the Effective Implementation of Professional Development Programmes on Invitational Education

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Professional development (PD) has emerged over that last decade as a recognised area of study (Evans 2002). PD of teachers is seen as an essential ingredient for creating effective schools and raising students' performance (Rhodes & Houghton-Hill 2000; Wood & Millichamp 2000; Birman, Desimone, Porter & Garet 2000). Since teachers have the most direct contact with students as well as a considerable control over what is taught and how it is taught, it is reasonably assumed that enhancing teachers' knowledge, skills and attitudes is a critical step in improving learner performance (King & Newman 2001; Ribisch 1999; Anonymous 2001/2002). It is necessary to realise that teachers 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).

Introduction

The ultimate aim of professional development (PD) is increased student performance, but individual student outcomes and teachers' use of instructional strategies are profoundly affected by the school culture in which teachers work (King & Newman 2001). Professional learning communities, in which teachers and leaders work together, appears to be necessary for educators to focus on student learning (Purkey & Strahan 1995; Sparks 2000b). However, individual factors, outside school factors and the PD itself can also play an important role in creating successful learning communities. From this perspective designing a PD programme should be grounded on the way teachers learn, but must also con-

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sider the factors which influence the effective implementation of PD. Programmes and materials can not bring about effective change without the skilled involvement of the people in the education system. If we strive for quality in schools and school improvement, we should centre our attention and energies on the factors required to bring about effective change. This implies a focus on the knowledge, skills and attitudes people need to implement and sustain human interaction.

Invitational Education (IE) is an appropriate approach to address successful PD since it is the product of conscious and well-planned thought as well as regular evaluation, based on a strong commitment to certain basic values about people and how they should be educated. Professional development programmes focus on the development of knowledge, skills and attitudes of people. There are, however, certain factors that will influence the effective implementation and sustainability of any development programme. Thus, the main research question motivating this research project is: What are the factors that influence the effective implementation and sustainability of Invitational Education? The theoretical foundation of IE serves as a basis for empirical research as employed in several inviting schools in the United States of America.

Background to the study

During 1992 the researcher studied 11 schools in the United States of America that received the Invitational Award from the Invitational Alliance. However, the *process* of how Invitational Education had been implemented was not investigated during the previous project. The focus during the previous study was on how these schools function as inviting schools. After conducting a number of

these awareness programmes in South African schools the researcher has realised that having an effect on people's knowledge, skills and attitudes is difficult. She has also realised that there are certain factors that influence the implementation and sustainability of Invitational Education. This implies that the whole *process* should be carefully analysed. The article attempts to outline key factors that may influence the effective implementation of PD. The purpose is not to outline all the factors that influence PD, but to suggest that diverse factors may have an influence 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 develop a suitable model to indicate such factors.

Research design

The following methods of research were employed:
- A revisit of literature on Invitational Education
- A qualitative study to address the research problem. This included interviews with role players (principals, staff and students).

The researcher visited the USA during April 2004. Her sample for the study consisted of eight schools: two elementary schools, one ninth grade school and one high school in Scott County, Kentucky as well as three elementary schools and one early childhood centre in New Mexico.

What is Professional Development (PD)?

It is universally acknowledged that a teacher's professional training does not end at the initial pre-service education (Ho-Ming &

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Ping-Yan1999; Somers & Sikorova 2002). Over time the knowledge and skills of staff members in schools are subject to deterioration while developments in educational thinking can also indicate that their skills can become outdated or inefficient (Campbell 1997). Moreover, teachers will not change the way they teach unless they learn new ways to teach. The focus of PD is the continuous updating of professional knowledge, skills and attitudes required of staff so that all students can learn and perform at higher levels (Browell 2000; Ho-Ming & Ping-Yan 1999; Somers & Sikorova 2002). It is difficult for students to attain high levels of learning unless educators are continuously learning (Sparks & Richardson 1997). It implies that educator learning and student learning go hand in hand (Wood & Millichamp 2000).

The PD process suggests that staff review, renew and extend their commitment and serve as change agents to the moral purposes of teaching (Evans 2002). This comparatively longitudinal process of staff's behaviour change is guided by and focussed upon practical application of suggested innovation and also prepares staff for their responsibilities which enables the organisation to attain the set goals (Browell 2000). Considering this, it seems as if PD has changed from a way for teachers to update their professional knowledge to a tool for change (Professional staff development: A key to school improvement 1999; Rhodes & Houghton-Hill 2000).

PD is most effective when it is an ongoing process that includes suitable properly planned training and individual follow-up through supportive observation and feedback, staff dialogue and peer coaching (Ho-Ming & Ping-Yan1999; Moore in Robinson & Carrington 2002; Professional staff development: A key to school improvement 1999; Bernauer 2002; Moore 2000). There is a ten-

dency to underestimate the long-term commitment of professional development that is required for effective change to happen (Robinson & Carrington 2002; Richardson 2003). In this process teachers develop a greater sense of collaboration, share common problems, and assume greater responsibility for their own professional development (Ribisch 1999; Bernauer 2002; Browell 2000).

Considering the above PD relates to life-long development programmes which focus on a wide range of knowledge, skills and attitudes in order to educate students more effectively. It includes both formal and informal activities carried out by an individual or an organisation to enhance staff growth. In this complex process teachers improve and develop their teaching skills, and their curriculum development, implementation and evaluation skills (Conners in Campbell 1997).

PD programmes have the potential to influence teacher 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).

A Suggested Model for Professional Development

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

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Learning styles of teachers

For effective PD, the different learning styles of participants should be identified (Burke 1997). Teachers are individuals with specific learning needs and learning styles (Robinson & Carrington 2002; Somers & Sikorova 2002). Teachers who learn in programmes that accommodate their preferences will acquire more skills, become more motivated and use what they learn in the classroom (Burke 1997). 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; Ribisch 1999).
- *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; Badley 1992; Ho-Ming & Ping-Yan1999; Bernauer 2002).
- *Sociological factors*. Although lecturing has long been an acceptable mode of instruction, it has to include other techniques except for auditory, listen-alone students (Burke 1997). For Burke (1997) and Ribisch (1999) 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, teachers' learning experience is enhanced (Robinson & Carrington 2002; Ho-Ming & Ping-Yan1999).
- *Psychological factors*. When planning for PD the different physiological needs of teachers should be considered, such as the time of the day, type of food and beverage preferences

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(Burke 1997).

- *Physiological factors*. Learning styles are also related to physiological factors: Auditory (hearing); Visual (seeing); and Kinaesthetic (touching) (Vincent & Ross 2001). Staff developers should design auditory, visual, tactual and kinaesthetic material and match them with each student's strengths (Burke 1997; Vincent & Ross 2001). Tyrell (2000) supports this view by stating that programmes should be individualised and fully differentiated.

Apart from the variables listed above, Ashworth in Smith and Coldron (1999) identifies four key features of learning:

- *Being attuned to others' discourse*. The way in which teachers participate in PD from the standpoint of their own backgrounds needs to be acknowledged (Smith & Coldron 1999; Somers & Sikorova 2002). The background includes the tradition in the particular school and the subject they are teaching, as well as personal beliefs and values. Teacher learning most likely occurs when PD takes the diverse needs of teachers' students in the specific context of their classrooms into account (Robinson & Carrington 2002; Bernauer 2002; Sachs 1999; Mashile 2002).
- *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; Somers & Sikorova 2002).
- *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 PDP (Smith & Coldron 1999; Somers & Sikorova 2002).
- *Being relatively unthreatened concerning ones identify*. Many teachers faced with changes in curricula may feel that their

threshold of competence has been threatened by having to adjust their methods.
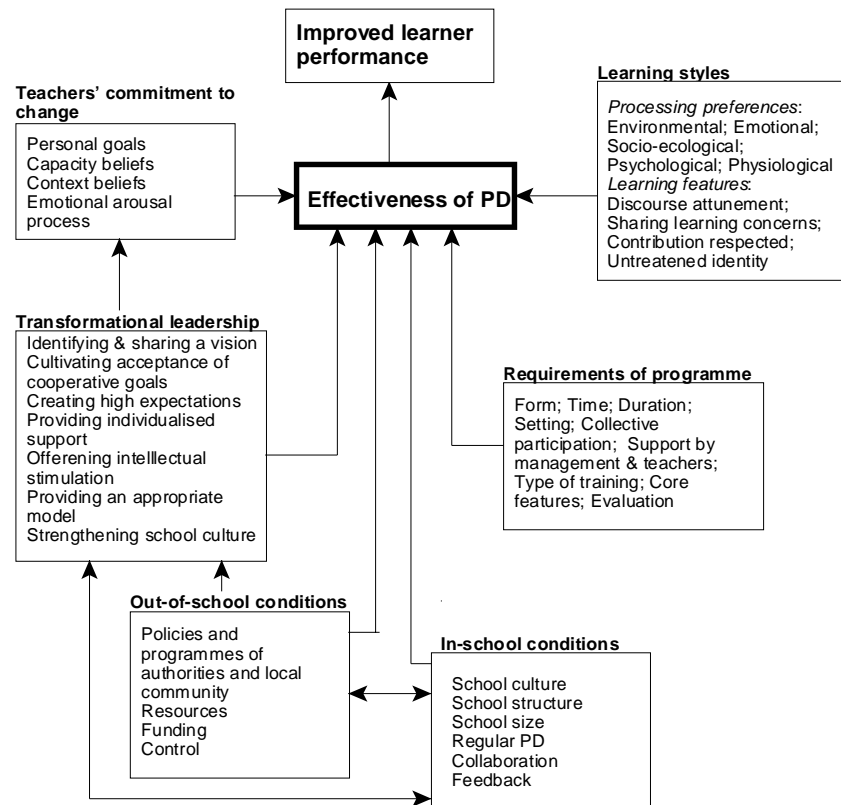

Figure 1: Factors influencing professional development

It is clear from the above that different contexts and different learning styles may require different techniques (Guskey 2002). Consequently, professional learning should offer various opportunities for teachers to construct their own meaning and theories in a collaborative setting (Novick in Robinson & Carrington 2002).

Since the focus of PD programmes is on teacher learning, teacher commitment will play a crucial role in their development (Yu, Leithwood, & Jantzi 2000; Bernauer 2002).

Educator commitment

Compared to the school's commitment to change, teachers' commitment is equally if not more important for the success of PD (Ho-Ming & Ping-Yan1999; Pehkonen & Törner 1999; Blackmore 2000). According to Ho-Ming and Ping-Yan (1999) PD will be futile without teachers' whole-hearted commitment, even if such programmes are well designed. Yu, Leithwood, and Jantzi (2000) describe the different aspects of teachers' commitment to develop professionally as follows:

- *Personal goals.* These goals refer to the desired future states internalised by an individual. As an important source of teacher commitment, they must be observed by teachers 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. Teachers must also believe that they are capable of accomplishing goals. The study of Lam & Pang (2003) reveals that when teachers 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 will provide funds, professional

development or other resources for teachers 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.

Law as found in Rhodes and Houghton-Hill (2000) suggests a model for exploring the relationship between staff commitment to PD and leadership. A collaborative culture in schools is considered to be conducive to both PD of teachers (Rhodes & Houghton-Hill 2000). Yu, Leithwood and Jantzi's model (2000) on teachers' commitment to change explicitly identifies the effect of leadership on teacher commitment.

Transformational leadership

Quality leadership is required for effective PD in schools (Bernauer 2002). It provides an orderly and nurturing environment that supports teachers and stimulates their efforts. A skill of an effective leader is to inspire people to work more effectively and to obtain ownership (Mahoney 1997). Mahoney (1997:96) says: Successful leaders are able to commit people to action.

Current trends in leadership show a shift from bureaucratic managerial styles to different leadership styles that reflect human dignity and promote collaboration in decision-making (Asbill & Gonzalez 2000). With such leadership styles principals are visionaries, form collegial relationships with staff and share knowledge with them (Edwards, Green & Lyons 2002). According to Fullan (Sparks 2000b) creating and sharing knowledge is central to effective leadership. If principals do not share leadership with teachers,

development and staff empowerment will unlikely occur (Bernauer 2002).

Transformational forms of leadership fundamentally aim to make events meaningful, cultivate professional development and higher levels of commitment to organisational goals on the part of staff (Yu, Leithwood, & Jantzi 2000; Bernauer 2002). The model used in the Canadian study done by Yu, Leithwood and Jantzi (2000) include various transformational leadership dimensions which could influence teacher commitment and have an effect on PD. These dimensions are 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 (Dreher 2002). Charismatic leadership also provides a vision and a sense of mission (Mester, Visser, Roodt & Kellerman 2002).
- *Communicate the mission*: The mission must be clear and emphasise a vision for PD (Professional staff development: A key to school improvement 1999).
- *Assess the school's readiness for change and the level of staff resources*: Each school has its individual culture and resources. A scan of the staff's status reveals staff members' specific PD needs to that training can be tailored accordingly (Somers & Sikorova 2002). In Gordon's study (1999) he found that schools with effective PD devoted time and energy to ensure readiness among staff members.
- *Coordinate priorities*: To plan appropriate PD also implies assessing the school's financial and programmatic resources (Partee & Sammon 2001). To achieve maximum success principals and those who train and support must coordinate staff

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development and school reform efforts, laying out the mission, the skills of the staff, the activities of programme developers, the time frames, the deliverables, the tools and the objectives.

- *Set the PACES*: The last step involves Plan, Act, Create/Catalogue, Evaluate and Sustain (PACES).
- *Plan*: A plan should be developed and communicated to all stakeholders that meets the mission of the school and the current needs of the staff (Professional staff development: A key to school improvement 1999).
- *Act:* Act on the plan and follow through with commitments and training required. This shows the seriousness of a commitment to change and improved results (Pehkonen & Törner 1999).
- *Create/Catalogue*: Create an atmosphere that cultivates success for teachers and fosters a PD approach that truly develops professionalism (Bernauer 2002). Catalogue the results of staff's work by using a library of best practices, best resources and best examples of work.
- *Evaluate*: Evaluate the success of the PDP and changes in staff (Bernauer 2002).
- *Sustain:* Sustain changes, improvements and lessons learnt (Somers & Sikorova 2002).
- C*ultivating the acceptance of cooperative goals*: Creating a community of students 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; Bernauer 2002). The shared values of members in a school community affect their actions which subsequently has an influence on the school culture (Smith & Coldron 1999; Robinson & Carrington 2002; Wood & Millichamp 2000).

- *Creating high performance expectations*: They refer to leaders' expectations for excellence, quality and high performance on the part of staff (Anonymous 2001/2002).
- *Providing individualised support:* he way in which teachers are supported through the process of change is important (Sachs 1999; Brandt 2003; Gerber 1998; Richardson 2003). It is also important to provide emotional, psychological and logistical support to teachers for them to continue developing new habits during the implementation dip that reduces effectiveness before the new procedures become routine (Sparks 2000a; Pehkonen & Törner 1999; Somers & Sikorova 2002).
- *Offering intellectual stimulation*: It challenges teachers to re-examine certain assumptions of their practices and rethink how they could be accomplished (Yu, Leithwood & Jantzi 2000). Such stimulation creates a gap between the current and desired practices and could enhance emotional arousal processes (Somers & Sikorova 2002; Mester, Visser, Roodt & Kellerman 2002).
- *Providing an appropriate model.* Examples are set for staff to follow which are consistent with values leaders advocate (Yu, Leithwood & Jantzi 2000).
- S*trengthening school culture*: A school's culture has far more influence on life and learning in schools that the president of the country, the department of education, the principal, teachers and parents can ever have (Barth in Sparks 2000b). Leadership is overwhelming important in establishing a positive school culture (Campbell 1997). Strengthening school culture refers to leaders' behaviour aimed at developing shared norms, values and beliefs and attitudes among staff and enhancing mutual caring and trust among staff (Yu, Leithwood & Jantzi 2000).

Apart from the crucial effect of leadership on PD, the conditions within a school can play an important role in the effective of PD.

In-school conditions

The Canadian study done by Yu, Leithwood and Jantzi (2000) include mediating variables such as school culture, school structure, strategies for change, and school environment that may affect teacher commitment to change. Since teacher commitment will impact PD, it can be deduced that these variables may also impact PD. Research also reveals some other variables in in-school conditions that may influence the effectiveness of PD.

- *School culture*: It refers to the shared norms, values, beliefs and assumptions shared by role players of an organisation that shape decision-making and practices (Yu, Leithwood, & Jantzi 2000; Duff in Lowrie & Smith 1998). This definition has particular implications for PD since it implies not only that PD needs to be congruent with the school culture…therefore PD programme is involved in transmitting the school culture (Somers & Sikorova 2002). The school culture should be humane, that is psychologically comfortable with warm human relationships and professional supportive where people have the resources they need and where they have opportunities to collaborate and learn from others (Brandt 2003; Partee & Sammon 2001; Somers & Sikorova 2002).
- *School structure*: This variable refers to opportunities for teachers in decision making concerning classroom and school-wide practices. The school structure supports shared and distributed leadership which has the potential for teachers to believe that they are empowered to shape meaningful and feasible changes in the school (Washington 1993).

- *School size*: The size of the school appears to be an important factor for planners of PD (Lowrie & Smith 1998; Smith & Coldron 1999). In larger schools where there is a large amount of staff development activity, many individual teachers appear to be relatively uninvolved with development. On the contrary, teachers appear to be more involved in smaller schools.
- *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*: Teacher collaboration and support are required for PD to be effective (Rhodes & Houghton-Hill 2000; Anonymous 2001/2002; Brandt 2003; Richardson 2003). Unfortunately the traditional culture of teacher isolation and the limited interaction within schools has not encouraged teachers to cooperate as colleagues (Ribisch 1999; Trent 1997; Collinson 2001). In the absence of such interaction, the possibility for change and development in the organisation is limited. Teachers also miss out on any competent feedback with working alone (Ribisch 1999; Bernauer 2002).

PD should provide opportunities for teachers to discuss their achievements and problems in employing new strategies (Robinson & Carrington 2002; Bernauer 2002). By doing so, the 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; Rhodes & Houghton-Hill 2000). Collaboration as an end in itself should not be the goal, but rather whether people in the organisation have added knowledge and contributed towards other people's development (Sparks 2000b; Rhodes & Houghton-Hill 2000).

Professionals in collaborative schools view each other as resources with the collective value of providing high quality education for all students (Robinson & Carrington 2002;Shelton & Jones 1996). They utilise strengths and complement each others' knowledge and skills, which create more effective teaching and ownership of their own professional learning (Robinson & Carrington 2002; Bernauer 2002; Blackmore 2000. According to Barth in Purkey and Strahan (1995) the most powerful predictor of student performance is the quality of relationships among staff.

- *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; Robinson & Carrington 2002; Richardson 2003). The importance of feedback to teachers on their development is widely supported (Redding & Kamm 1999; Birman, et al 2000;).

Out-of- school conditions

Conditions outside schools have the potential to influence the functioning of schools which may impact PD in schools the following factors are highlighted:
- *Policies and programmes of authorities*: Schools are strongly influenced by changing of control patterns, enrolment fluctuations and policy directives from the education department (Lam & Pang 2003). Schools that were regulated by the education department in the past, have to readjust their working procedures with decentralisation, which may impact PD.
- *Resources*: The quality of teaching and learning depends on people and structural and technical resources which are influ-

enced by community context and policies and programmes of other external role players (King & Newman 2001). Factors 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; and organisational structures; time for teachers to plan and school bureaucracy. Coordination of school resources may assist in developing a coherent, systematic PD strategy but also in identifying multiple objectives that can be supported by a collection of training programmes (Partee & Sammon 2001).

• *Funding*: Planning for continuous PD implies the availability of necessary funding. Funds to support PD may be provided by educational authorities, outside agencies or raised by individual schools.

• *Control*: Responding to change through PD can keep teachers seemingly busy, but makes them dependent where others control their actions (Lowrie & Smith 1998). This is in contrast to empowerment, where teachers take control of change processes (Edwards, Green & Lyons 2002; Englehardt & Simmons 2002).

Requirements for PD Programmes

For PD to be effective certain structural aspects are important.

• *Form*: Traditional approaches are criticised for not giving teachers the time, activities and the content to improve their knowledge and skills (Birman, et al 2000). For PD to be effective, programmes are longer, have more content focus, more active learning and increased coherence.

• *Time*: Quick fixes may not produce the desired results (Blackmore 2000). Teachers need blocks of time without responsibilities for optimal learning to take place (Professional staff devel-

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opment: A key to school improvement 1999). There seems to be different views on the time provided for PD. According to Shelton and Jones (1996) time for PD should be provided after school hours. They found that training at the end of a school day has been proven useful for follow-up sessions to focus on special topics. This is in contrast to the findings of Washington (1993) where teachers prefer to have workshops during school hours. After school, weekends and holidays were viewed as the least desirable times to offer PD (Washington 1993).

- *Duration:* PD should take place over an extended period of time (Blackmore 2000; Richardson 2003; Russell 2001).
- *Collective participation*: Collective participation may contribute to a shared professional culture where teachers develop the same values and goals (Birman, et al 2000; Bernauer 2002; Cullen 1999; Drejer 2000). A study done by Ho-Ming and Ping-Yan (1999) indicates that the establishment of a culture of learning and sharing is more conducive to PD. Sharing stimulates teachers' reflection and broadens their perspective (Dixon 1998; Blackmore 2000; Shelton & Jones 1996). According to Dixon (1998) it is the responsibility of each team and individual to make what they have learnt available to others. It means to assume the responsibility as staff member or team for sharing knowledge. Studies indicate indicates that although teachers value the sharing of their knowledge, finding available time was a great barrier (Dixon 1998).
- *Support of management and teacher:* For programmes to be effective, both management and teachers have to support them (Richardson 2003). Washington's study (1993), however, indicates that teachers felt that principals' involvement in PD should be limited to a supportive role and that of a participant in PDP. Principals' attendance communicates they value the

programme. This variable also implies teachers' conscious commitment to programmes and that they also gain ownership of programmes (Russell 2001; Richardson 2003; Campbell 1997; Washington 1993). Teacher ownership is crucial for PD effectiveness (Professional staff development: A key to school improvement 1999; Blackmore 2000).

- *Type of training;* The type of training should be applicable to teachers' practice (Shelton & Jones 1996). Outside providers often used inappropriate activities, which are not geared to classroom learning. Although it is widely acknowledged that students learn differently, schools neglect to apply this concept to PD, using a one-size-fits-all approach (Shaw 2003). Teachers like students may be at different stages of mastery certain skills. A successful PD programme will comprise a variety of different models, each meeting the needs of different teachers and achieving different outcomes. Some models include topical seminars and full staff presentations. In the topical seminar 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 to present topics such as emergency care or new administrative procedures (Campbell 1997; Rhodes & Houghton-Hill 2000). This model works well to explore new approaches and provides an overview of their strengths and weaknesses. Unfortunately little time or structure is provided for follow-up. In the full staff presentations model, lectures and demonstrations are used to the entire staff of a school (Shaw 2003). It may be useful to introduce new approaches that will influence the whole staff. When these presentations fail, it is usually because there is too much detail and not enough time is used to promote the big picture.
- *General guidelines that make good training programmes* (Vincent & Ross 2001; Moore 2000): trainers should be well pre-

pared; outcomes should be clear to everybody; the learning styles of students should be determined before training; an outline of the lesson could provide structure and organisation; different teaching aids should be used and student participation should be encouraged (Sparks 1997); and continuous feedback should be provided (Redding & Kamm 1999).

- *Core features of PDP itself*: The following features may be identified:

  Content focus: Programmes must be contextualised and fit for the school (Mashile 2002; Sparks 1997; Ho-Ming & Ping-Yan1999; Guskey 2002). They should also deepen teachers' knowledge and skills of a particular topic (Birman, et al 2000; Somers & Sikorova 2002). Teachers do not find generic PD effective, such as grouping methods and prefer a PD activity on a specific aspect in teaching, such as increasing a teacher's understanding of the way students solve story problems in mathematics.

  Active learning: Teachers need to be actively involved during in the presentation and obtain feedback on their teaching afterwards (Birman, et al 2000; Blackmore 2000; Moore 2000; Redding & Kamm 1999). Active learning encourages staff to become involved in meaningful discussions, planning and practice as part of the PDP. It also includes opportunities to observe other teachers, present a programme or lead a discussion.

  Coherence: Programmes should encourage continued communication among staff (Birman, et al 2000).

Evaluation

Programme evaluation is a critical and integral part of PD (Professional staff development: A key to school improvement 1999; Vin-

cent & Ross 2001; Russell 2001). Guskey (2002) distinguishes between five critical levels of PD evaluation. Each level builds on the previous one, and the 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, et cetera 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 goals.
- Criteria for PDP evaluation on Level 1 and Level 2 include (Professional staff development: A key to school improvement 1999):
- Clarity: Simple and clear statements should be used.
- Decision focus: Concentrate on three categories: content, activities and logistical management.
- Brevity: Use as few as possible items. Such items will likely draw thoughtful responses.
- Anonymity: Construct at least part of the evaluation form to be anonymous.
- Suggestions: Provide opportunities for suggestions regarding the programme.

Level 3: School support and change. In this level the focus shifts to the school as organisation. According to Pehkonen and Törner

(1999) support given to teachers in schools is crucial for teacher change. Lack of support on organisational level can ruin any PD. At level 3 it is necessary to focus on questions regarding the characteristics of the organisation necessary for success (Guskey 2002). To collect information at this level is more difficult than previous levels. Methods for data collection include school records, structured interviews with participants and questionnaires.

Level 4: Participants' use of new knowledge and skills. Did the new knowledge and skills attained make a difference to teachers' practice? Enough time must pass before such information can be gathered through questionnaires, structured interviews with participants and supervisors and participants' portfolios (Guskey 2002). This information will help to restructure future PDP to facilitate more effective implementation.

Level 5 Student learning outcomes. This is the "bottom line" (Guskey 2002). How did the PD affect student performance? Measures on student learning include portfolio evaluation and average marks in tests and examinations. In addition it is also possible to include students' 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, students and parents.

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

Conclusion

Ongoing professional development is essential if quality education to students is to be provided (Louw, 1992). Drucker in DuFour and Berkey (1995) elaborates on this view by stating that successful organisations of the twenty-first century will be learning organisations that build continuous learning into jobs at all levels. No pre-service training programmes can effectively prepare staff members for a lifetime in organisations. Moreover, the skills and knowledge of teachers can decline over time. As such there is a need for teachers to be regularly if not continually involved in quality programmes of development for the sake of improving student performance. Unfortunately many programmes that are offered to teachers are inadequate and do not attain their goals. This implies that it is necessary to revisit PD in order to identify factors that will influence its effectiveness.

This article examined factors which may impact the effectiveness of PD for teachers. Specific categories that were highlighted include learning styles of teachers, 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 in the direction of improved student performance.

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