

Teachers' Professional Development Model for effective Teaching and Learning in Schools: What Works Best for Teachers?

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ABSTRACT While there are models for professional development of teachers advocating for the promotion of effective teaching and learning, these have not been successful in improving the quality of teaching in public secondary schools. The majority of such professional development models tend to look good on the paper, and are based on assumptions and theories about teachers' needs and what teachers should do in class, but lack applicability in the context of teachers' place or country of work. The aim of this research was to develop an empirically based professional development model for effective teaching and learning in schools. A quantitative survey research was conducted through close-ended self-administered questionnaires for data collection. Two hundred teachers were sampled through the simple random sampling procedure. The study concludes that professional development of teachers should be planned, conceived and implemented by teachers themselves. A model to enhance teachers' skills and quality of teaching, through teacher development, was developed. The model shows that teachers must be involved in the planning, conception and implementation of their professional development to promote their own learning. Teachers' professional development, when linked to promotional development, has the capability of improving the quality of teaching and learning. The model promotes the teacher observation process while teaching in class to improve skills. The paper recommends that the teacher-based professional development model should be developed with specific focus on helping teachers with their classroom activities.

INTRODUCTION

Villegas-Reimers (2003) notes that there are different kinds of models that have been and are still being developed and implemented in different countries to promote and support teachers' professional development from the beginning of their career until they retire. Smith et al. (2007) mention the two models of teacher professional development (TPD) that can be used to assist teachers to gain the needed knowledge, skills and strategies to bring about quality teaching and learning. These two TPD models are traditional professional development and job-embedded professional development (Smith et al. 2007). Visscher et al. (2002) note that the underlying assumption is that in order to sustain quality teaching and learning in schools, teachers should be provided with opportunities to claim ownership and control over their own professional practices. The idea is to remedy the deficiencies that they have experienced and are still experiencing in order to bring a holistic change which turns into improvement in teaching and learning (Visscher et al. 2002). The understanding is that once teachers are equipped appropriately and efficiently through TPD programmes, the results should always be quality teaching in the classroom that link to quality teaching and learning in order to culminate into learner success. Porter et al. (2000) state that in order to carry out the demands of education reform, teachers must be immersed in the subjects they teach, and have the ability both to communicate basic knowledge and to develop advanced thinking and problem-solving skills among their students.

MODELS FOR PROFESSIONAL DEVELOPMENT OF TEACHERS

Traditional Professional Development Model.

Elmore (2002) and Smith et al. (2007) note that traditional teachers' professional development model is mainly standard and entails workshops, conference sessions, seminars, lectures, and other short-term training events, most of which are of a short period of time. Traditional professional development trainings are often criticised as typical 6-day workshops on effective teaching that end up leaving teachers able to apply only one third or few of the new strategies that they have gained (Smith et al. 2007).

Job-Embedded Professional Development Model

Smith et al. (2007) articulate that in a job-embedded professional development (PD) model, teachers are involved in study circles or inquiry groups that allow them full and all-out involvement in exhibiting, as well as mastering skills about the content of the instructions. Such study circles are like groups, or inquiry groups which are mostly made up of teachers from the same school or division (Smith et al. 2007). It is in those groups where teachers are able to explore and discover problems associated with student learning more closely related to their own contexts. Sparks et al. (1989) proposed five models of teachers' professional development which are as follows:

Individually-guided professional development model: This refers to a process through which teachers design and pursue activities they believe will promote their own professional learning. The underlying assumption, with regard to individually-guided staff development, is that teachers are capable of self-initiated and directed learning (Sztajn et al. 2011).

Observation or assessment model: This kind of a model affords teachers with objective data and feedback regarding their classroom performance. This is a diligent process that may yield growth and provides information that may be used to select areas for growth, as well as areas of weakness to improve on.

Development and improvement model or Involvement process model: This kind of model engrosses teachers in developing curriculum, planning programmes, and engaging in a school improvement process to solve general or particular problems.

Teachers' training model: This kind of model entails the acquisition of knowledge or skills through appropriate individual or group instruction.

An inquiry model: This model necessitates that teachers find an area of instructional interest, collect data, and make changes in their instruction based on an interpretation of that particular data (Sparks et al. 1989).

Constructing a Tentative Model for Teachers' Professional Development

Olivier (2004) states that models are often proposed as the major thrust of a project. The same can be said of this paper where one of its focuses is to come up with a model for professional development for effective teaching in rural dysfunctional schools. This is informed by the understanding that a model tends to capture the essential aspects of a system or process, while it ignores the non-essential aspects. Maskit (2011) indicates that various models of professional development share denominators with regard to constituents influencing the individual teachers' profile. These constituents are informed, professional and psychological components (Maskit 2011). Olivier (2014:45) adds: '*it serves as a blueprint for*

new systems or processes, or may be used to evaluate existing systems or processes'. Olivier (2004) further states that if one has to propose a new model, it has to include at least some of the following characteristics in order for it to be accepted by peers or readers: *Simplicity and Comprehensiveness*. Olivier (2004) notes that a model should be unpretentious to make it conceivable to grasp the crux of the demonstrated concept. Furthermore, the proposed models should methodically and systematically articulate clearly all or most aspects of a problem to be addressed or solved. Most notably, the model should cover more aspects of the problem. *Generality, Exactness and Clarity*. Olivier (2004) states that a model should address more variations of a problem, and that will make it better and more effective in addressing the problem that it is designed for, and should fit the perceived problem and have the facts to solve the problem at hand. The purpose of all the components or facets of a model, the operation or use of each facet, and the interaction or flow between components should be evident. Special care should be taken to avoid ambiguity in the model (Olivier 2004).

METHODOLOGY

This paper adopted a quantitative survey design. The population for this study consisted of curriculum specialist level 1 (CS1) teachers, Heads of Departments (HODs), deputy principals and principals from schools in the Vhembe District of the Limpopo Province. The simple random sampling strategy was utilised to sample teachers as they were considered to be a representative of the population which was studied in order to acquire some knowledge regarding the entire population regarding the study (Bless et al. 2009). Two hundred (200) teachers from both primary and secondary schools around Luvuvhu, Dzindi, Sibasa and Mutale Circuits of the Vhembe district were sampled. A five-point Likert scale, self-designed questionnaire was constructed to establish how teachers can make a difference on effective teaching in rural dysfunctional schools through promotion of quality teaching and learning. The five-point Likert scale measures ranged from strongly disagree (0) through disagree (1), not sure (2) agree (3) to strongly agree (4). The five-point Likert scale questionnaire consisted of 32 close-ended questions was constructed and guided by the researcher's personal experience and literature review. The data was analysed through a statistical package software (SPSS) using simple statistics such as percentages and frequencies.

ANALYSIS OF RESULTS AND DISCUSSIONS

The respondents' age ranged from 27 to 51 years and above with teaching experience ranging from 1-16 years and more. The majority of (40 percent) of respondents who participated in the study, as shown below have either Primary / Secondary Teachers' Diploma as their highest professional qualification. At least 36 percent of respondents have Standard Tenor Grade Twelve as their highest academic qualification, while 34.5 percent of the respondents have B.Ed.(Hons) as their highest academic qualifications. Tables and figures are used to present data in this paper. Data analysis is presented in tables and figures interchangeably.

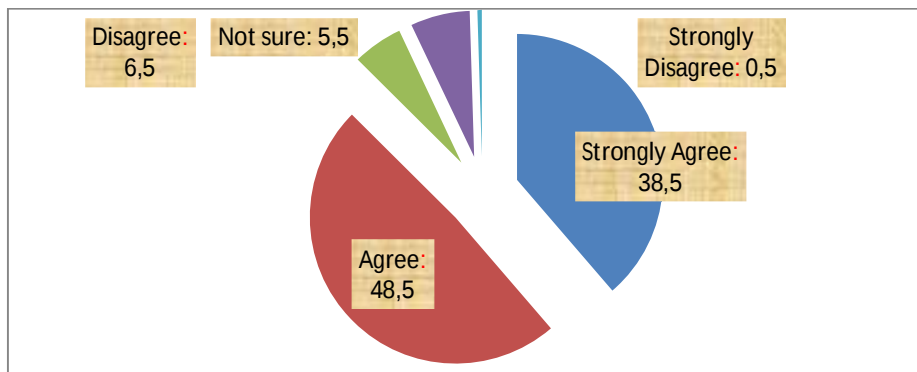


Figure 1: Attendance of professional development (PD) workshops should take into consideration teachers' classroom needs

The findings in Figure 1 above show that the majority, which is 87 percent of respondents, agree that the selection for attendance of workshops should take into consideration teachers' classroom needs. In line with these findings, Berry et al. (2010) suggest that in order to have effective professional development for more effective teaching, such PD initiatives or programmes should be teacher-led, selected by individuals or groups-based on needs related to the subjects and students that the trained teachers offer. In addition, one of the primary focuses of such PD programs should be on issues related to student learning, as stated (Hawley et al. 1999).

Teachers' needs should always take priority because without identification of teacher needs, poorly directed and inadequately focused interventions may emerge, which might be perceived as inadequate with regards to meeting the needs of the teachers (Baird et al. 1989;

Rhodes et al. 2003). However, Rodríguez et al. (2010) cautioned that experienced teachers are likely to need professional development that affirms the knowledge, experience, and intuitive judgment they have cultivated during their careers. Webster et al. (2012) indicate that new teachers can feel isolated and ill-equipped for what will face them since the induction of new teachers is not consistently implemented as part of their PD. In addition, such teachers would also need to be selected in order to attend such PD workshops that would take into consideration their classroom needs. These results suggest that one of the strategies which is crucial in making professional development more effective for teachers is taking into consideration different teaching experiences, teaching levels, and different academic qualifications of teachers. This will ensure that PD workshops do benefit teachers with regard to their classroom needs, and would serve to avoid what Baird et al. (1993) call ‘the unsatisfactory objectives of PD programmes’ which are always not congruent with teachers’ personal and classroom needs.

Table 1: *Teachers should plan their own professional development initiatives to promote their own learning*

Response	Frequency	Percent
Strongly Agree	57	28.5
Agree	107	53.5
Not sure	15	7.5
Disagree	19	9.5
Strongly Disagree	2	1.0
Total	200	100.0

The majority (82 percent) of respondents in Table 1 above indicate that teachers should plan their own professional development initiatives to promote their own learning. These results suggest that teachers should be the ones who should plan their own professional development initiatives rather than having those initiatives planned by the other people. In addition, such initiatives should take into consideration the teachers’ classroom needs, as shown in Table 1 above. In line with the findings in Table 1, Milondzo (2003) proposed that the school-based in-service training, as part of professional development of teachers, must ensure that teachers are involved in the identification and articulation of their own training needs. McDiarmid

(1995) concurred with this and noted that for teachers to make progress in their developmental process of learning new practices, they need to feel that they can critically assess their own practice. In order for this to happen, teachers need to be part of a larger learning community that is a source of support and ideas, thereby developing a community that consists of administrators, students, parents, school councils, school boards and business people (McDiarmid1995). Herzberg (1959) articulated that teachers need to feel or to have a feeling that there are opportunities for growth and promotion for them to stay motivated in undertaking their own PD initiatives. These results suggest that professional development of teachers should not, by any means, be planned by someone else, but teachers themselves. It is quite surprising that most of professional development initiatives in South Africa are not planned by the teachers and do not involve teachers in their plenary processes,even though they have to be undertaken and implemented by teachers

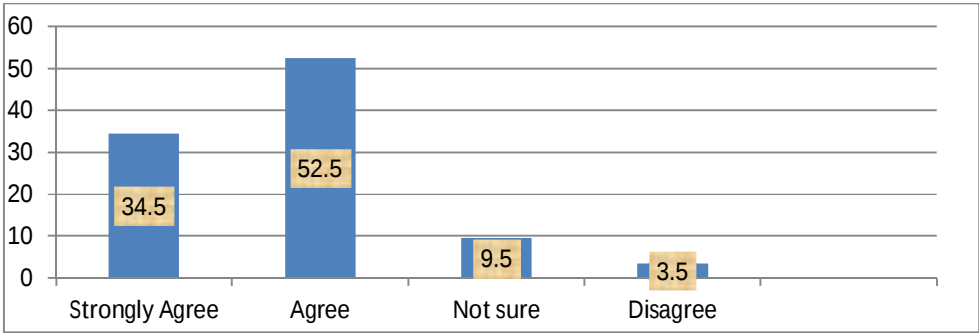


Figure2:*School administrators should provide guidance to teachers' professional development*

The majority of respondents (87 percent) in Figure 2 above indicate that school administrators should provide guidance to teachers' professional development. These results show that teachers think that even though they should plan their own professional development initiatives, as shown in Table 1, and in accordance to their classroom needs (Figure1), it is the school administrators who should provide guidance to such professional development initiatives. In line with these findings in Figure 2, Jones (1990) indicated that school administrators, in their efforts to improve teachers' professional development, need to advocate for state and local policies and programs that reflect current consensus on professional development.

School administrators should also create public support for long-term, sustained professional development (Jones, 1990). Looking at the results in Figure 2 and the results in Table 1, the

researchers are of the opinion that when teachers are planning their own professional development initiatives, such planning should be guided by the school administrators. This is to ensure that whatsoever is being undertaken by teachers as professional development initiatives, will serve to advance the curriculum needs of the school.

Table 2: Teachers must be involved in the conception and implementation of teachers' professional development programmes.

Responses	Frequency	Percent
Strongly Agree	75	37.5
Agree	108	54.0
Not sure	15	7.5
Disagree	2	1.0
Total	200	100.0

An overall (91.5 percent) majority of respondents in Table 2above agreed that teachers must be involved in the conception and implementation of teachers' professional development programmes. The results may indicate that teachers want to plan their own professional development initiatives as shown in Table 2 with an 82 percent majority, and not only be supported financially by the Department of Education, schools or school management, but that they want to be involved in the conception and implementation of such initiatives, and that attendance of professional development workshops had to take into consideration their classroom needs (Table 1, as shown with a 87 percent majority). In line with these results in Table2, a study by Du Preez et al. (2008) show that sometimes teachers feel that new ideas about curricular are being imposed on them without them being offered an opportunity to contribute, even if only to share their experience of what works in their practice and what does not.

Pierce et al. (1996) state that when teachers are involved in the conception and implementation of teachers' professional development programmes, such PD will require teachers' actions for it to be more effective. Such an initiative will be considered to be professional development for the teachers, by the teachers and of the teachers, where teachers are involved in initiating and designing their own professional development (Pierce et al. 1996).

The involvement of teachers in the conception and implementation of teachers' professional development programmes will enable them to share materials and ideas as well as discuss challenges and solutions (Hooker 2010). This will also help teachers to become models of lifelong learners (Hooker 2010). However, research by Du Preez et al. (2008); Pierce et al. (1996); Hooker (2010), and Ryan (2007) show that in South Africa, teachers do not enjoy complete autonomy over curriculum development and are not, in any way, involved in the conception of the PD programmes, whether in the form of the new curriculum or a PD programme aimed at the promotion of quality teaching and learning (Ryan 2007). These results may suggest that involving teachers in the conception and implementation of teachers PD programmes can be one of the key strategy towards sustaining positive perception of teachers on their PD. This could also help to allay fears and to avoid making teachers feel that they are left out or are being isolated from the processes that involve them when it is supposed to be undertaken and implemented by them and for their benefit, especially for the benefit of their institutions. Boyd (1993) urged and advised that if a PD programme is not developed directly by teachers themselves, they should at least have a high degree of input.

Table 3: Teachers' professional development should be linked to better financial rewards.

Responses	Frequency	Percent
Strongly Agree	84	42.0
Agree	88	44.0
Not sure	16	8.0
Disagree	10	5.0
Strongly Disagree	2	1.0
Total	200	100.0

At least 86 percent of respondents in Table 3 above agreed that teachers' PD should be linked to better financial rewards. These results show that teachers felt that their professional development should be linked to and have better financial rewards. Therefore, teachers think that any professional development should be aimed at improving the learners' performance. These results suggest that teachers want to see professional development linked to better

financial rewards and salary progression so that they may be motivated to develop their teaching skills. These findings are consistent with OECD (2010)'s findings which show that teachers' continuous professional development in Poland, Portugal, Slovakia and Slovenia are clearly linked to career advancement and salary increase. The same can also be said of countries such as Luxembourg and Spain, where teachers who enrol for a certain amount of training are eligible for a salary bonus while in some other countries, credits may be acquired via participation in CPD programmes and are taken into account for purposes of promotion (OECD, 2010).

However, in South Africa, teachers' professional development is not linked to better financial rewards. This is clearly shown in The Public Service Coordinating Bargaining Council (PSCBC) Resolution of 2012/13-2014/15 salary agreement, Clause 7, sub-clause 7.2: *Recognition Of Improved Qualification*, which states: *Upon attainment of the said qualifications, the employee will receive a once-off cash bonus of 10 percent of his/her annual salary notch, provided this does not exceed the minimum notch of salary level 8; (sub-clause 7.5), Employees who have received state-funded bursaries for the attainment of an improved qualification are not eligible for the once-off cash bonus referred to in sub-clause 7.2.*

The cash bonus is limited to the attainment of one additional qualification. This sub-clause can easily be interpreted as: when teachers complete their Master's or doctoral degrees, they will receive one cash bonus, which is by far not equivalent to the amount of money one pays as tuition fees. These results may suggest that one of the strategies that can be utilised to make teachers' PD more effective is by linking better financial rewards with it, as financial deficiencies are factors which affect teachers' educational productivity (Guvén 2003).

Classroom observation of teachers as part of TPD

Table 4: *Teachers should be subjected to classroom observation as part of professional development*

Responses	Frequency	Percent
Strongly Agree	73	36.5
Agree	91	45.5
Not sure	26	13.0
Disagree	6	3.0

Strongly Disagree	4	2.0
Total	200	100.0

The results in Table 4 above show the majority (82 percent) of respondents agreed that teachers should be subjected to classroom observation as part of professional development. These results show that teachers felt that as part of their professional development, they need to be subjected to classroom observation where they should be observed and given feedback on how they facilitate teaching and learning of their learning areas, in their own classrooms. In line with the results in Table 4, 87 percent majority, suggest that teachers are willing to be observed and be provided with guidance by the school administrators, as they teach in order to promote teaching quality and learning. Consistent with these findings, Birman et al. (2000; Bourke, 2001) suggested that PD should incorporate active learning, for teachers, which includes opportunities to observe and be observed while teaching; to plan classroom implementation, such as practicing in simulated conditions and developing lesson plans; to review student work; to present, lead and write, for example, present a demonstration, lead a discussion or write a report. In line with these results in Table 4, Israel (2012) indicates that the most positive benefit of teacher-to-teacher observation is that it makes teaching a public rather than a private act (Israel, 2012). Therefore, teacher observation should be part of a pool of professional development opportunities wherein teachers acquire new skills or ideas at conferences, and then model those new approaches for their colleagues in the classroom, watching one another teach, and providing regular feedback to one another. The results suggest that classroom observation could also be utilized as one of the key strategies in promoting quality teaching and learning in schools.

Enforcing teachers to furthering studies as part of TPD

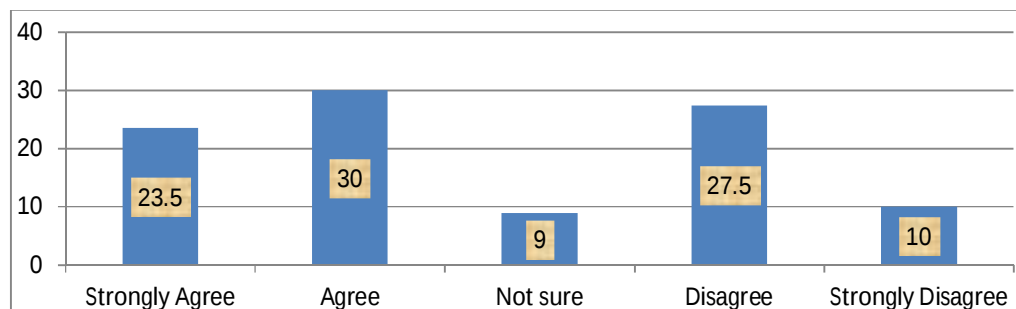


Figure 3:*Teachers must be forced to further their studies as part of professional development*

The results reflected in Figure 3 above show that the majority (53.5 percent) agreed that teachers must be forced to further their studies as part of professional development in promoting quality teaching and learning in schools. In line with these results in Figure 3, in South Africa, even though it is not increasingly accepted that members of a profession must maintain their professional standing through continuing professional development, with the introduction of the CPTD system in the teaching profession, it will be necessary to apply rewards and sanctions (DoE, 2006). However, Noh et al. (2004) and Baird and Rowsey (1989) note that imposing a training programme on teachers without considering their needs makes little sense, as teachers always complain that a lot of time being spent during in-service programmes and activities is wasted as such programmes did not meet their respective classroom needs. Broad and Evans (2006) cautioned that teachers, as adult learners, might be much less likely to be motivated to learn if they feel disconnected from the content, or that their prior, personal knowledge and experience is not valued, or when there is no investment or engagement in the activity, or if they believe it is not relevant to their needs, therefore there has to be some form of engaging and encouraging them to further their studies. Looking at the incentives that are attached to the attainment of higher qualifications such as a master's or doctoral degree, it could be difficult for teachers to be encouraged, let alone be enforced to further their studies. The reason behind this is that there is tangible financial support (no bursaries) rewards that are available to encourage teachers to further their studies.

Linking TPD with promotional opportunities

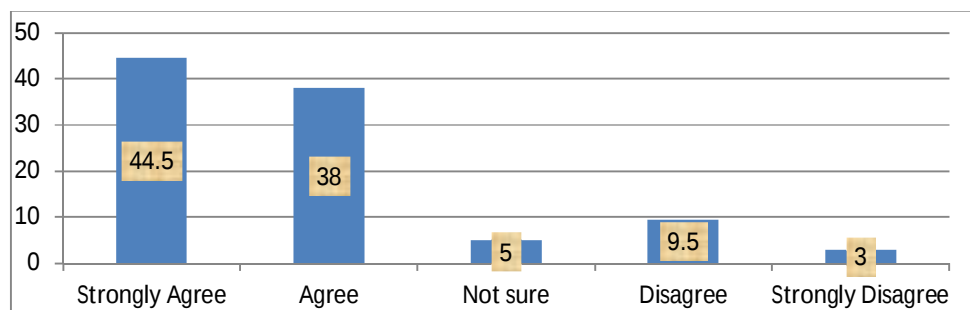


Figure 4:*Teachers' professional development must be linked to teachers' promotion*

The majority (82.5) percent of respondents in Figure 4 above, indicated that teachers' professional development should be linked to teachers' promotion. These results are

consistent with the results in Table 4 which shows that the majority, 83 percent, of respondents felt that linking teachers' PD initiatives with teachers' salary progression encourages teachers to develop their teaching skills through involvement in those PD initiatives. These findings show that teachers want to see professional development being linked with promotion in their workplace.

The results may suggest that teachers want to be rewarded through promotion and also salary progression upon completion of a PD training, as reflected in Table 4 whereby 86 percent responded that this will encourage teachers to develop their teaching skills. In line with these results in Figure 4, Eurydice (2008) notes that in some other countries of the world such as Belgium, regular participation in PD training is taken into account in considering the promotion of teachers. These results may also suggest that one of the strategies that can be used to enhance teachers' positive attitude towards their PD in promoting quality teaching and learning in schools is by linking teachers' professional development with teachers' promotion.

CONCLUSIONS

The study concludes that professional development of teachers should be planned, conceived and implemented by teachers themselves. The study also concludes that teachers should plan their own professional development initiatives to promote their own learning. Guidance to professional development of teachers should be provided by the school administrators. Teachers should be financially supported to undertake professional development initiatives, and such support should be from their own schools as well as the Department of Basic Education. Teachers should be involved in the conception and implementation of their professional development initiatives. Professional development initiatives should be linked to better promotional and financial rewards.

RECOMMENDATIONS

The study recommends that any professional development initiatives should be planned and conceived by teachers. School administrators should only provide guidance to professional development initiatives to advance the curriculum needs of the school. Teachers should be subjected to classroom observation as part of professional development, and constructive critique should be offered to support to teachers and how they should handle teaching and learning of their learning areas, in their own classrooms. Teachers should be forced to further their studies as part of professional development in promoting quality teaching and learning

in schools. Adequate financial support and rewards should be provided to encourage teachers to undertake professional development initiatives to promote effective teaching and learning in schools. This study, therefore, recommends the following model which is the **Teachers' Professional Development (TPD) model for effective teaching and learning in schools:**

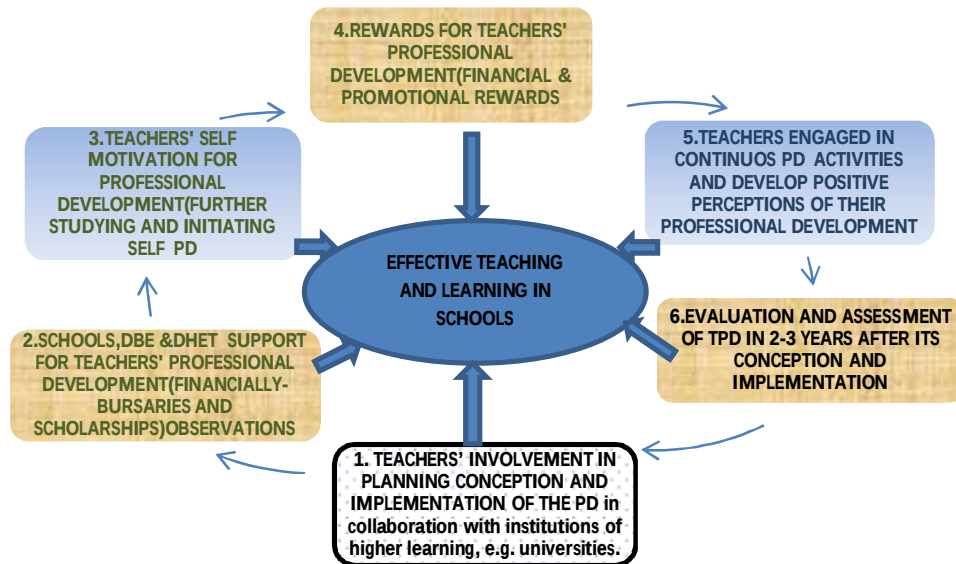


Figure 5: *Teachers' Professional Development Model (TPDM) for effective teaching and learning in schools*

TPD needs to be evaluated after 2-3 years of its conception and implementation to check for its effectiveness in equipping teachers with pedagogical and subject content skills and knowledge in promoting quality teaching and learning. The evaluation should be done in three different phases. The first phase is what the researchers call **Micro-level of the TPD- Individual-teacher based level**. The evaluation of the TPD focuses on whether teachers individually are/were and efficiently developed and the competencies teachers still need to do their jobs effectively and efficiently. **Meso-level of TPD- is an Institute (school) based level** level which will look at whether the TPD programmes are helping teachers to be effective and productive in teaching within their local institutions/schools where they are employed. **Macro-level-National and internationally based level** where the evaluation is on checking as to whether PD is helping teachers to apply gained knowledge, skills and strategies nationally and internationally and whether teachers are now experts of their subjects.

When teachers are adequately supported by their schools, DBE and DHET, and are equipped with pedagogical and subject knowledge and strategies which enable the enhancement of teaching skills through teachers' professional development (TPD) they feel accepted and needed. The study concludes that by indicating that unless teachers are professionally developed, they will remain teachers who are just trainers and preceptors and not educators who are mentors and who are continuously studying further in their quest to gain knowledge to help their learners. This will impede the provision of effective teaching in rural dysfunctional schools.

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