Empowering Information Technology teachers through professional developments An evaluation

Elsa Mentz, Roxanne Bailey, Betty Breed, Marietjie Havenga

Three approaches to IT teachers' professional development in South Africa

Traditional professional development (PD1)

Teachers can engage with each other

s not consider individual needs

Individual needs-driven faceto-face professional development (PD2)





Experts travel to teacher

Multimedia-based professional development (PD3)



Professional development:

On-going process where an individual acquires the necessary knowledge, skills and attitudes to not only better him/herself but also his/her teaching practice

RESEARCH QUESTION

To what extent do traditional professional development (PD1), individual needs-driven faceto-face professional development (PD2) and multimedia-based professional development (PD3) comply with the characteristics of effective professional development?

GUSKEY'S 21 CHARACTERISTICS FOR EFFECTIVE PROFESSIONAL DEVELOPMENT:

After intensive research on the characteristics of effective professional development, Thomas Guskey compiled a list of 21 characteristics for effective professional development [6]. These characteristics focus on various aspects of professional development and can be used as guidelines when developing a professional development programme or as evaluation criteria after implementation of a professional development programme.

RESEARCH DESIGN AND METHODOLOGY

- Evaluation research methodology
- Likert-scale where professional development programme complied with characteristics to no extent (0 points), to some extent (1 point) or to a greater extent (2 points)
- Two researchers rated professional development programmes and by means of discussion reached consensus where discrepancies in rating occurred.

Designed by graphikos Potchefstroom Campus. Contact: (Tel: +27(0) 18 299 4101)

RESULTS

Table 1. Scores of each professional development approach

Nr	Characteristic	PD1	PD2	PD3
1	Enhances teachers' content and pedagogical knowledge	1	1	2
2	Provides sufficient time and other resources	1	2	2
3	Promotes collegiality and collaboration	2	1	0
4	Includes procedures for evaluation	1	2	2
5	Aligns with other reform initiatives	2	2	1
6	Models high-quality instruction	0	1	2
7	Is school- or site-based	0	2	2
8	Builds leadership capacity	0	2	1
9	Based on teachers' identified needs	0	2	2
10	Driven by analyses of student-learning data	2	2	1
11	Focuses on individual and organisational improvement	1	2	2
12	Includes follow up and support	0	2	2
13	Is on-going and job-embedded	0	2	2
14	Based on best-available research evidence	1	2	2
15	Takes a variety of forms	1	1	2
16	Provides opportunities for theoretical understanding	2	2	2
17	Helps accommodate diversity and promote equity	1	2	0
18	Driven by an image of effective teaching and learning	0	2	2
19	Provides for different phases of change	0	1	2
20	Promotes continuous inquiry and reflection	0	2	2
21	Involves families and other stakeholders	0	0	0
	Total	16	34	33

- PD 1 does not include follow-up opportunities nor is focused on individual needs-PD 2 scored the highest but should pay attention to include content knowledge in future endeavours
- PD 3 is only driven to some extent by the analysis of student data which can provide good feedback regarding efficacy of programme

CONCLUSIONS

- PD 1 does not include follow-up opportunities nor is focused on individual needs- PD 2 scored the highest but should pay attention to include content knowledge in future endeavours
- PD 3 is only driven to some extent by the analysis of student data which can provide good feedback regarding efficacy of programme

REFERENCES

- [1] Bowker, A., Hennessy, S., Dawes, M. & Deaney, R. 2009. Supporting professional development for ICET use in Mathematics using the T-Media multimedia resource. *British society for research into learning mathematics*, 29, 19-24.
- [2] Chikoko, V. 2008. Developing teachers for rural education? Reflecting on the 2nd KwaZulu-Natal teacher development conference. *Perspectives in*
- [3] Conco, Z.M. 2004. How effective is in-service training for teachers in rural contexts? PhD, University of Pretoria.
 [4] South African Department of Education. 2006. Teachers training manual: Information Technology. Pretoria, State printers.
 [5] Guskey, T.R. 2003. The characteristics of effective professional development: A synthesis of lists. Paper presented at the 84th Annual meeting of the
- American educational research association. Chicago, IL, USA.
- [6] Howey, K.R., Mathes, W.A. & Zimpher, N.L. 1985. *Issues and problems in professional development*. Washington, DC: National institution of Education. [7] Pillay, J. 2011. Challenges counsellors face while practicing in South African schools: implications for culturally relevant in-service training. *South*
- African journal of psychology, 41, 351-362.
 [8] Rage, O.H. 2006. Do school-based teacher professional development programmes work?: teachers' perceptions on values of school-based professional development programmes. MEd, University of KwaZulu-Natal

