

PROFESSIONAL GROWTH OF VOCATIONAL AND TECHNICAL  
TEACHERS : CHALLENGES, BENEFITS AND CONCERNS

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Background and Problem

The need for professional growth is as a result of the challenges and concerns caused by knowledge explosion and professional obsolescence in almost all fields of human endeavours. There are new and emerging technologies and there are break-through in equipment, materials and methods. Those in technology related fields need to continue to learn throughout their careers to remain competent in their areas of practice. Vocational and technical teachers are faced with how to cope with the products of technologies that are used at home, school and the society. School laboratory/workshop equipment are being modernised by the use of improved materials, components and automated or remote controls. Latest techniques and research findings are integrated into current practices. The vocational and technical teachers need to engage in activities aimed at promoting their growth, development and increased job competence.

The curriculum regularly undergoes revision in order to prepare students for the occupational challenges of the future. Since vocational teachers are preparing the youths for the world of work, the learning experiences they provide must meet the changing occupational requirements. Otherwise, they will be teaching skills that are obsolete. It is necessary, therefore, that they have their own anti-obsolescence exposures or experiences in order to be current with new developments in their fields.

Vocational and technical education programme started getting the required attention with the introduction of the 6-3-3-4 system of education in Nigeria in 1982. One cannot underscore the fact that professional growth of the teachers is essential for the achievement of the national policy on technical education. Evans and Terry (1971) remarked:

It is imperative that vocational educators continue to improve their performance and keep up-to-date in:

- (a) The discipline(s) which provide the subject matter, the basic knowledge for an occupation;
- (b) the occupational field which is the source of the skills, procedures, and knowledge for occupational education; and
- (c) new educational processes and methods derived from current research and experimentation.

This requirement cuts across vocational and technical education

programme such as Technical, Business, Home Economics, Agriculture and Health Education. The need to train Nigerian youths to be self-reliant and highly productive is well recognised among educators (Agwubik, 1986; Odor, 1988; Ugonabo, 1989). Available literature on teacher in-service vocational and technical currency (Storm, 1976; Wonacott, 1983; Rockhill, 1983; Oranu, 1985; Leske and Persico, 1989) point to the fact that vocational teachers have to fit adequately into the new curriculum and be equal to their new and challenging responsibilities in order not to become cogs in the wheels of progress. Agencies that conduct teacher in-service education in Nigeria include: State and Federal Ministries of Education, Professional organisations, higher institutions, curriculum development agencies, educational technology centres and National Board for Technical Education (NBTE). At the moment, the greatest amount of in-service education is being provided for general and science education teachers. The in-service needs of the vocational and technical teachers is more in the updating and upgrading of knowledge and skills critical for the achievement of the goals of vocational education.

Cerrero, Miller and Dimmock (1986) found that the common useful approaches for remaining current with latest technology involves such activities as (1) Colleague discussions (2) In-house courses (3) University sponsored credit courses (4) Journal readings and (5) Workshops and seminars. In a similar dimension, Hamilton, Wonacott and Simandjuntak (1983) did some empirical work which revealed that participation in workshops, conferences and seminars is the most universally used approaches to teacher updating. Oranu (1985) found that technical teachers recognised the responsibility to up-date their subject matter knowledge and share information with their colleagues. However, the preferences for in-service time and format were not independent of job category.

This study, therefore, attempted to ascertain the extent to which vocational and technical teachers participate in professional development programmes with the hope of determining whether or not they are keeping abreast of new developments in their fields. It is by so doing that the public, the school administrators and the government will know if the teachers are getting involved in opportunities that make for growth on the job.

### Methodology

Population : The population for the study consisted of all vocational and technical teachers in the Government Technical Colleges in Bendel State.

Sample : 200 randomly selected vocational and technical teachers in the Government technical colleges were used for the study. For a subject to be selected, he or she must have at least 2 years post qualification teaching experience. To give every subject areas the chance of being represented, all subject areas in the Government Technical Colleges were listed and equal number of questionnaires were given to the subject teachers in all the vocational and technical subject areas.

Instrument : A questionnaire developed by the researcher was used for the study. It contained three sections. The first part asked for personal information such as sex, age of respondents, years of teaching experience and qualifications. The second part asked questions on the impact of technology on skill requirements and individual interest in professional growth and development. The third part asked questions on participation in professional growth program and activities involved in. The instrument was validated by four vocational educators. Reliability of the instrument was established through the test-retest technique, which involved 10 subjects.

Data Collection and Analysis

Two hundred copies of the questionnaire were distributed to the respondents by hand. 186 (ie. 93 percent) were duly completed and returned for analysis. The data obtained were analysed with emphasis on the frequency of participation in professional development program. Being an exploratory study, the analysis involved frequencies and percentages. A respondent will be considered 'regular' in professional development if he/she indicated any of the following: (1) once in 3 months (2) once in 6 months (3) once in 9 months and (4) once in a year. Any of the above is considered adequate because of the constraints of organising such development program for technical and vocational teachers. Any response above one year will be considered 'occasional' or 'once in a while'.

Results

This study was conducted mainly to determine the extent to which vocational and technical teachers participate in professional development programs. The data collected in respect of this purpose are presented below.

Table 1 : Extent of participation in professional growth by Vocational and Technical Teachers

<u>Frequency of participation</u>	<u>N</u>	<u>%</u>
Once in 3 months	0	0
Once in 6 months	1	0.54
Once in 9 months	3	1.61
Once in a year	2	1.08
Once in 2 years	13	6.99
Once in 3 years	8	4.3
Once in 4 years and above	3	1.61
Never had the opportunity	156	83.87
<b>Total</b>	<b>186</b>	<b>100</b>

Table 1 shows that about 84 percent of the teachers never had the opportunity of participating in professional development program. This percentage represents a significant majority of the teachers. About 3 percent participated on a regular basis while about 13 percent participated occasionally. (See Figure 2).

Figure 2 : Degrees of participation in development program

	N	%
Participation on regular bases	6	3.22
Occasional participation	24	12.9
Never had the opportunity	156	83.87
	186	

Those on regular basis are made up of all those that indicated participation 'once in 9 months' and 'once in a year'. Occasional participation are those who participated once in two years, 3 years, 4 years and above. Table 3 shows the formal educational activities of those who participated in professional development program.

Table 3 : Formal Educational Activities

Type of Activity	Number(N)	Percentage
Curriculum development	14	46.7
Experimental/hands-on-activities	9	30.0
Test construction	4	13.3
Methodology of teaching	3	10
	30	100

The analysis of activities of those who participated showed that 30 percent engaged in the doing/psychomotor oriented activities while 70 percent were pre occupied with curriculum and pedagogical activities.

### Discussion

The evidence gathered from Table I seems to indicate that a small proportion of the vocational and Technical teachers participate in professional growth activities. In addition, the content of such program weigh more on instructional activities (see Table 3). These findings are very interesting since they tend to support the findings of Odor and Ologunde (1988) which revealed that the focus of in-service courses organised in Nigeria are in the area of teaching methods, improvisation, induction into emergent educational practices and school management methods.

What has become apparent from the result of this study is the fact that the majority of vocational and technical teachers are not involved in programmes that are likely to make them grow on the Job. Besides, what some of the teachers are exposed to are not tailored to their special needs on-the-job. Those who participated in professional development could have benefited from pre-vocational teachers courses at the Federal level or scholarship awards by the State or Federal Government for further studies. Majority did not participate because there were no opportunities for such at the State level.

In order to improve the effectiveness of the teachers, a well established vocational education staff development program is:

needed on a regular bases. The benefits of professional growth program cannot be over-emphasized. It helps professionals maintain their expertise in a climate of rapid technological change. It provides opportunities for teachers to interact with colleagues in their specialties to share ideas, experiences and learn from one another. They will be in step with instructional and curriculum innovations for vocational courses. Teachers can be in tune with emerging technological trends and happenings in the field that will have impact on how and what they teach. They can also explore the possibilities of producing low cost equipment from local and textual materials through joint authorship. Problems and frustrations associated with the fabrication of equipment spare parts and tools can be known and solutions offered in such a forum. Finally, it is an avenue to become aware of the facilities and potentials available in different colleges.

While it is expedient for the Government to start a professional growth program for vocational and technical teachers, efforts should be made to stimulate and motivate the teachers so that the program can achieve its desired objective. There could be rewards for participation such as payment of travelling and feeding expenses for attending conference/workshops, and promotional benefits to attendances.

### Conclusion

This study revealed that most vocational and technical teachers are not involved in relevant professional growth activities. They need current skills and knowledge that will have immediate application in the classroom. This can be achieved to a large extent through effective implementation of vocational education staff development program. Based on the findings of this study, it is recommended that the Government should provide opportunities for professional growth of vocational and technical teachers based on needs assessment of the teachers. For further research, there is the need to determine the extent to which vocational and technical teachers participate in informal continuing education.

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