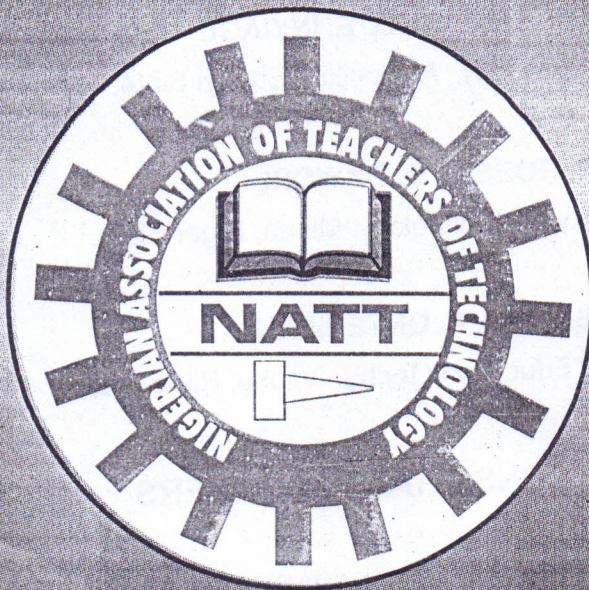


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The Implementation of Senior Secondary School Technical Vocational Education Curriculum as a mode of Exigent Economic Global Crisis in South West Nigeria

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Abstract

The curriculum for technical vocational education is developed to offer a complete secondary education subject in addition to occupational area. The major purpose of the study was to determine the implementation of senior secondary school technical vocational education curriculum as a mode of exigent economic global crisis in south west Nigeria. The study employed a survey research design. The population of the study consisted of 200 respondents. Two research questions were formulated, mean and standard deviation was employed to answer the research question, and t-test statistics was employed to test the hypotheses. Questionnaire containing 30 items was designed and used for data collection. A five point rating scale was used for the purpose of collecting data for the study. The instrument was subjected to face and content validity by two lecturers from science and technology education university of Lagos, and a director from technical education board Lagos state. The reliability coefficient for the study was 0.89 using cronbach alpha reliability tests. It was found out that effectiveness of any curriculum or the ease of its implementation largely depends on how curriculum controls (time available, space, facilities, personnel, (teaching and ancillary staff) and finance were accounted for during development and implementation. It was recommended that NBTE should ensure that proper accreditation is carried out regularly for effective implementation of TVE programme.

Key words: curriculum, implementation, technical vocational education, curriculum control.

Introduction

The ever increasing technological advancement and unemployment situation in the country have justified the inclusion of more skill-oriented subjects into the school curriculum. These subjects are design to train and equip youths in occupations that will enable them earn a living and contribute meaningfully to the society. This was in response to the global quest for a government commitment to sustainable development programme to reduce poverty level in developed and underdeveloped communities' calls for effective implementation of technical vocational education curriculum in both public and private senior secondary schools.

Technical vocational education (TVE) is the aspect of the general school curriculum concerned with the acquisition of knowledge, attitudes, and skills necessary for securing and advancing in a given occupation. Technical vocational education according to Verma and Parman (2000) is a way of preparing a workforce for industry, hospital, education, business and agricultural sector as a means to improve the formation of human capital and increases productivity and employment. Federal Republic of Nigeria (NPE, 2004) among other things defines technical vocational education as that aspect which leads to acquisition of practical and applied skills as well as basic scientific knowledge.

The curriculum for technical vocational education is developed to offer a complete secondary education in general education subject in addition to occupational area. According to Federal Republic of Nigeria (2000) technical vocational education at post junior secondary schools level, produce craftsman at the crafts level. Students that complete technical vocational education according to FGN (2004) shall have the opportunities to secure employment at the end of the course or set up their own business and further their education in advance craft/technical programme in post secondary (tertiary) institutions. Such as monotechnics, polytechnics, colleges of education (technical) and university. The goals of technical vocational education at senior secondary school according to FGN (2004) are to provide trained manpower in applied science, technology and business particularly at crafts levels; provide technical knowledge and vocational skills necessary for agricultural, commercial and economic development, and to give training and impart the necessary skills to individual who shall be self-reliant economically. What is apparent is that technical vocational education curriculum should be geared toward specific skills required for economic and social change and implement accordingly.

Curriculum in technical vocational education according to Olabiya (2005) is the totality of those experiences, knowledge, skills and activities systematically planned to educate youth for gainful employment in any chosen occupation or cluster of occupation. It consists of those programme of instruction, organisation and evaluation of all structured systematically to enable the student acquire the knowledge and skills necessary for securing and advancing in any chosen occupation. Educating the populace on technical vocational education and implication of their activities is one of the essential aspects of vocational education that requires urgent attention. Effective technical vocational education will only materialise through structured curriculum at all levels of the schools system pivotal to the success of the curriculum is the spirited implementation of the planned curriculum (Ogwo and Oranu, 2006). Authors added that even when technical vocational education curriculum has been excellently planned, poor implementation could ruin the entire exercise and cause serious doubts as to its potentials in solving our middle level manpower needs. Implementation according to National Planning Commission (NPC, 2005) is the process, institutional framework, and instruments for translating aspirations, goals, and programme into action and concrete results. Curriculum implementation is the process of converting the inputs; finances, information, materials, technical, human, demand and support into output production of goods and services. It is the stage which the content is made specific and meaningful to the general public concerned. Curriculum implementation is the task of transferring the curriculum document by the combined efforts of the students, teachers, and educators concerned. It is largely classroom efforts of the staff and students of a school in putting into operation the curriculum document. Proper implementation of the curriculum will enable the system to acquire enough facilities lead the recruitment of competent staff and external examiners. Shehu (1996) pointed out that in curriculum implementation the focus will be on teachers who are the implementers of the curriculum and resources needed (curriculum control). Resources according to him are facilities, money, man, and materials which can be harnessed and used to effectively facilitate implementation. Curriculum controls according to Ogwo and Oranu (2006) are signposts on the realities of the present; even when curriculum planners are aim at a better tomorrow.

The effectiveness of any curriculum or the ease of its implementation largely depends on how these controls (time available, space, facilities, personnel, (teaching and ancillary staff, finances, information) and materials were accounted for during development and implementation. it is therefore, through an intelligent and modest attempt to balance what available with what is hoped for that a people will progress. Olabiya (2009) observed that an efficient implementation strategy would be required to achieve the specific objective of TVE. The system approach to implementation of TVE should be used to structure, standardise and make more effective the process of imparting TVE programme.

UNESCO and ILO (2002) stressed that technical vocational education in their practical aspect should be designed taking into account special requirement about curriculum controls, especially the use of the new information and communication technology as a tool for enhancing the effectiveness of implementation of TVE programme in senior secondary school. Nigeria's experience has been one formulating good plans, policies, programmes and project and then failing to achieve objectives because of ineffective implementation or no implementation National population commission (NPC; 2005). Implementation has to be holistic, consistent, and persistent, as half measures yield not half result but often failure. A clear framework for monitoring and evaluation of TVE programme need to put in place.

In spite of the fact that the Nigeria government has put in place monetary, fiscal and industrial policy measures to implement technical vocational education in Nigeria, towards acquisition of necessary skills and habits for self-reliance, it has been observed that majority of students in senior secondary

schools who are expected to have acquired the required skills, attitude and knowledge through technical vocational education do not offer the subjects at the senior secondary school certificate examination. Therefore, the level of industrial development expected to be generated through technical vocational education compared to the need of the country has never been achieved. This according to Olaitan, Nwachukwu, Igbo, Onyemachi, and Ekong (1999) was blamed on poor organization, poor instructional delivery, and effects of curriculum controls which lead poor implementation of technical vocational education programme. Lack of skills abilities, information needed to enter and progress in employment for useful and better production has resulted to a situation whereby most of secondary school graduates now ply "okada" (commercial motorcycle).

Statement of the problem

This high rate of unemployment among senior secondary school graduates no doubts, defeats the very fundamental objectives of acquisitions of skills for self-reliance emphasised by Federal Republic of Nigeria (NPE, 2004). It is only through acquisition of right skills, attitude, and work habits that senior secondary school graduates can contribute their quota to the industrial development of the country to curb global economic crises.

Purpose of the study

The major purpose of the study was to determine impact of curriculum controls on implementation of senior secondary school technical vocational education curriculum as a mode of exigent economic global crisis in southwest Nigeria. Specifically, the study determines the:

1. Effects of curriculum controls on implementation of senior secondary schools technical vocational education programme.
2. Modalities to improve implementation of senior secondary schools technical vocational education curriculum in order to improve students' skill acquisition for self-reliance.

Research questions

The following research questions were formulated to guide the study:

1. What are the effects of curriculum controls on implementation of senior secondary school technical vocational education programme?
2. What are modalities for improving implementation of senior secondary school technical vocational education programme towards improving student skill acquisition for self-reliance?

Research Hypothesis

Ho1: There will be no significant difference in the mean responses of respondents on the effects of curriculum controls on implementation of senior secondary school TVE programme.

Ho2: There will be no significant difference in the mean responses of respondents on the modalities for improving student skill acquisition for self reliance.

Methods

The study employed a surveyed researched design. Structured questionnaire were used as instrument to collect data from respondents. The population of interest for the study consisted of 200 respondents made up of two groups namely: 115 technical teachers (in senior secondary schools and technical colleges) and 85 non-teaching staff (craftsman and store keeper). In Oyo, and Lagos state, Mean and standard deviation were employed to answer the research questions. While t-test statistics was employed to test the hypothesis. Any items with mean value of 3.50 and above were considered accepted. The questionnaire was structured in line with research questions containing 30 items for the purpose of collecting data for the study. The instrument was evaluated for content and face validity by three experts. The experts included two lecturers from technical education department Adeniran Ogunsanya College of Education Ijanikin Lagos and a director from technical education board Lagos State.

Research Question 1

What are impacts of curriculum controls on implementation of senior secondary school technical vocational education programme?

Hypothesis 1

H01: There will be no significant difference in the mean responses of respondents on the effects of curriculum controls on implementation of senior secondary school TVE programme.

The data for answering research question 1 and testing hypothesis 1 are presented in table 1

Table 1

Mean and t-test Analysis of the responses of technical teachers and non-teaching staff of secondary and technical colleges on impacts of curriculum controls on implementation of senior secondary school TVE programme N=210

S/N	Impacts of curriculum controls on implementation of senior secondary school TVE	\bar{X}_1	\bar{X}_2	\bar{X}_0	Remark	t-cal	Sig(2-tailed)
1	Assist students in developing useful skills for world of work.	4.06	3.92	4.08	Agree	-2.01	0.05
2	Develop in student's functional capacity in technical vocational areas.	4.22	4.08	4.18	Agree	-1.10	0.28
3	Control wastage through prudent use of time and consumable for more objective functions	3.92	3.90	3.92	Agree	-0.06	0.96
4	Enhance reality of experience which stimulates self activity.	3.64	3.63	3.64	Agree	0.03	0.97
5	Enable student adapt well to employment situations.	3.78	3.63	3.72	Agree	0.43	0.66
6	Encourage active participation of student in learning process.	3.90	3.93	3.93	Agree	0.17	0.86
7	Promote student learning retention.	3.78	3.63	3.72	Agree	0.43	0.66
8	Encourage active participation of student in learning process.	3.84	3.95	3.83	Agree	1.27	0.24
9	Stimulate human reasoning and motivate student interest.	4.21	3.90	4.08	Agree	2.01	0.05
10	Enhance effectiveness of communication of ideas	3.84	3.95	3.83	Agree	1.27	0.24
11	Allow greater services to greater number of students.	3.85	3.81	3.84	Agree	0.17	0.86
12	It give room for independent study.	3.92	3.90	3.92	Agree	0.17	0.86
13	Facilitate the teacher's teaching job.	4.17	4.09	4.13	Agree	0.62	0.11
14	Facilitate the teacher's teaching job	4.02	3.72	4.12	Agree	0.17	0.86
15	It makes learning permanent	3.57	3.59	3.56	Agree	1.62	0.11

Technical teachers senior secondary schools N1 =115
Technical teachers in technical colleges N2=85

t-critical at .05 level of significance for df=198
*t-calculated significant at .05 level of significance

Result as can be seen in the data presented in Table 1 above, revealed that the mean responses of teaching and non teaching staff in senior secondary schools and technical colleges in Lagos state listed on impacts of curriculum controls on implementation of TVE in senior secondary schools were rated as accepted: Assist students in developing useful skills for world of work; Develop in students functional capacity in technical vocational areas; Control wastage through prudent use of time and consumable for more objective functions ; Enhance reality of experience which stimulate self activity; Encourage active participation of student in learning process; Enhance effectiveness of communication of ideas;

Findings also indicate that it Stimulate human reasoning and motivate student interest; Allow greater services to greater number of students; Facilitate the teacher's teaching job; it makes learning permanent; those items had their mean score ranges from 3.56 to 4.13. The impacts of curriculum controls received a mean score greater or equal to 3.50 and were therefore regarded as the impacts of curriculum controls on implementation of TVE programme in senior secondary schools. The result presented on hypothesis testing on Table 1 also reveals that all the items had their calculated significant mean difference between the responses of technical teachers in secondary and technical colleges on impacts of curriculum controls on implementation of senior secondary school TVE programme.

Research Question 2

What are modalities for improving implementation of senior secondary school technical vocational education programme towards improving student skill acquisition for self-reliance.

Hypothesis 2

H02: There will be no significant difference in the mean responses of respondents on the modalities for improving implementation of senior secondary school TVE programme towards improving student skill acquisition for self-reliance.

The data for answering research question 2 and testing hypothesis 2 are presented in Table 2

Table 2

Mean and t-test Analysis of the responses of technical teachers and non-teaching staff of senior secondary and technical colleges on modalities for improving implementation of senior secondary school technical TVE programme towards improving student skill acquisition for self-reliance N=210

S/N	Modalities for improving implementation of SSS TVE programme towards improving student skill acquisition for self-reliance	1	2	G	Remark	t-cal	Si g (2-tailed)
1	Experts in TVE should be involved in curriculum development.	3.79	3.84	3.82	Agree	-0.10	0.91
2	Employment of qualified personnel must be made to implement TVE curriculum in senior secondary school.	3.85	3.77	3.86	Agree	-0.80	0.42
3	Teacher needs to be made familiar with what workers does in industry	3.92	3.90	3.92	Agree	-0.06	0.96
4	Provision of adequate tools, materials and equipment for implementation of TVE curriculum should be made available.	3.64	3.63	3.64	Agree	0.03	0.97
5	Time allocated to teaching of TVE curriculum in senior secondary should be appropriate to topic teaching.	3.78	3.63	3.72	Agree	0.43	0.66
6	Public private organisation should be encourage to participate in TVE programme.	3.90	3.93	3.93	Agree	0.17	0.86
7	Text books, journals and other resources essential for implementation of TVE curriculum should be made available.	3.89	3.83	3.72	Agree	0.63	0.69
8	Enabling environment should be provided by government agencies.	3.84	3.95	3.83	Agree	1.27	0.24
9	Clear job descriptions and expectations from staff should be provided to enhance effectiveness.	4.21	3.90	4.08	Agree	2.010	0.056
10	Regular feedback should be made available to students to serve as motivation for hard work	3.84	3.95	3.83	Agree	1.27	0.2
11	Functional library should be build in secondary schools for effective implementation of curriculum.	3.85	3.81	3.84	Agree	0.17	0.866
12	Refresher course, seminar and in-service training should be organised.	3.92	3.90	3.92	Agree	0.17	0.86
13	Evaluation of all activities should be done in the process of goal attainment.	3.99	4.09	3.89	Agree	1.62	0.11
14	Active cooperation should be encourage from all concerned parties in implementation of TVE curriculum	4.42	3.72	4.12	Agree	0.17	0.86
15	Curriculum should be made to respond to industries	4.07	4.09	4.16	Agree	1.62	0.11

Technical teachers senior secondary school N1 =115 t-critical at .05 level of significance for df = 352

Technical teachers in technical colleges N2 =85 *t-calculated significant at .05 level of significance

Table 2 reveals that the mean responses for all 15 modalities for improving TVE programme towards student skill acquisition for self-reliance listed are agreed upon by all respondents which include: Experts in TVE should be involved in curriculum development; Employment of qualified personnel must be made to implement TVE curriculum in senior secondary school; Teacher needs to be made familiar with what workers does in industry ; Provision of adequate tools, materials and equipment for implementation of TVE curriculum should be made available; Time allocated to teaching of TVE curriculum in senior secondary should be appropriate to topic teaching; Seminars, workshop should be organised for the non teaching staff; Text books, journals and other resources essential for implementation of TVE curriculum should be made available;

Table 2 further reveals, Enabling environment should be provided by government agencies; Clear job descriptions and expectations from staff should be provided to enhance effectiveness in curriculum implementation; Regular feed back should be made available to students to serve as motivation for hard work; Functional library should be build in secondary schools for effective implementation of curriculum; Refresher course, seminar and in-service training should be organised for teaching and non-teaching staff; Evaluation of all activities should be done in the process of goal attainment and Active cooperation should be encouraged from all concerned parties in implementation of TVE curriculum. The result in Table 2 shows that all the items had their calculated significant (2-tailed) values greater than 0.05. This implied that there was no significant mean difference between the responses of technical teachers in senior secondary and technical colleges on the modalities for improving student skill acquisition for self-reliance.

Discussion of Finding

The findings of the study are discussed along the research questions that guided the study. The data provided in table 1 provided answers to research question one. Based on the findings of the study, the majority of respondents are generally in agreement over the impacts of curriculum controls on implementation of senior secondary school TVE programme. The impacts of curriculum controls on implementation TVE programme in senior secondary school agreed are: Assist students in developing useful skills for world of work; Develop in students functional capacity in technical vocational areas; Control wastage through prudent use of time and consumable for more objective functions ; Enhance reality of experience which stimulate self activity ; Enhance reality of experience which stimulate self activity ; Encourage active participation of student in learning process; Enhance effectiveness of communication of ideas; Stimulate human reasoning and motivate student interest; Allow greater services to greater number of students; Facilitate the teacher's teaching job; it makes learning permanent; the respondents identified these as the impacts of curriculum controls on TVE programme. Thus, the finding were in agreement with Ogwo and Oranu (2006) who emphasised that the effectiveness of any curriculum or the ease of its implementation largely depends on how these controls (time available, space, facilities, personnel, (teaching and ancillary staff) and finance were accounted for during development and implementation. it is therefore, through an intelligent and modest attempt to balance what available with what is hoped for that a people will progress. UNESCO and ILO (2002) stressed that technical vocational education in their practical aspect should be designed taking into account special requirement about curriculum controls, especially the use of the new information and communication technology as a tool for enhancing the effectiveness of implementation of TVE programme in senior secondary school. Olaitan, Nwachukwu, Igbo, Onyemachi, and Ekong (1999) blamed poor organisation, poor instructional delivery, and effects of curriculum controls which lead poor implementation of TVE programme.

Determining the modalities to improve implementation of senior secondary schools technical vocational education curriculum in order to improve students' skill acquisition for self-reliance, respondents identified that Experts in TVE should be involved in curriculum development; Employment of qualified personnel must be made to implement TVE curriculum in senior secondary school; Teacher needs to be made familiar with what workers does in industry ; Provision of adequate tools, materials and equipment for implementation of TVE curriculum should be made available; Time allocated to teaching of TVE curriculum in senior secondary should be appropriate to topic teaching; Seminars, workshop should be organised for the non teaching staff; Text books, journals and other resources essential for implementation of TVE curriculum should be made available; Enabling environment should be provided by government agencies; Clear job descriptions and expectations from staff should be provided to enhance effectiveness in curriculum implementation; Regular feed back should be made available to students to serve as motivation for hard work; Functional library should be build in secondary schools for effective implementation of curriculum; Refresher course, seminar and in-service training should be organised for teaching and non-teaching staff; Evaluation of all activities should be done in the process of goal attainment and Active

cooperation should be encouraged from all concerned parties in implementation of TVE curriculum. Thus, these findings are in line with what Shehu (1996) NPC (2005) and Olabiya (2009) observed, they stressed that an efficient implementation strategy would be required to achieve the specific objective of TVE. The system approach to implementation of TVE should be used to structure, standardise and make more effective the process of imparting TVE programme and effective institutional frame work.

Findings

On the basis of the data collected and analysed, the following are the findings of the study.

1. The effectiveness of any curriculum or the ease of its implementation largely depends on how curriculum controls (time available, space, facilities, personnel, (teaching and ancillary staff) and finance were accounted for during development and implementation, since it assist students in developing useful skills for world of work; develop in students functional capacity in technical vocational areas; enhance reality of experience which stimulate self activity and encourage active participation of student in learning process.
2. Efficient implementation strategy would be required to achieve the specific objective of TVE. The system approach to implementation of TVE should be used to structure, standardise and make more effective the process of imparting TVE programme through Seminars, workshop organised for teaching and non teaching staff; Text books, journals and other resources essential for implementation of TVE curriculum should be made available.

Conclusion

The study was to determine impart of curriculum controls on implementation of senior secondary school TVE curriculum as a mode of exigent economic global crisis in southwest Nigeria. The study has identified the impacts of curriculum controls on implementation of TVE programme and modalities to improve implementation of senior secondary schools technical vocational education curriculum in order to improve students' skill acquisition for self-reliance presents the opinions of teaching and non-teaching staff in technical colleges and senior secondary school. It is hoped therefore, that if all these controls and modalities are taken into consideration in implementation of TVE programme. Consequently, students will have the opportunities to establish their own workshop, contribute their quota to industrial development of this nation and become employers of labour instead of hoping solely on paid employment or resulted to a situation whereby most of secondary school graduates now ply "okada" (commercial motorcycle).

Recommendations

1. National Board for Technical Education should ensure that proper accreditation exercises are carried out regularly for effective implementation of TVE programme.
2. Ministry of education should always conduct instructional supervision aimed at improving the implementation and constant seminars, workshops and conferences should be organised for teaching and non-teaching staff on need for effective implementation of TVE curriculum.
3. Adequate finance must be made for procurement of teaching resources (hand tools, machines, and consumable materials) and building of workshop.
4. Public private organization should be encouraged to participate in the implementation of technical education programme.

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