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STRATEGIES FOR MITIGATING FACTORS MILITATING LIFELONG LEARNING AMONGST TECHNICAL EDUCATORS IN COLLEGES OF EDUCATION IN RIVERS STATE, NIGERIA

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***Abstract**: The study examined strategies for mitigating factors militating lifelong learning amongst technical educators in Colleges of education in Rivers State, Nigeria. The study was a mixed research using an exploratory research design. For the qualitative phase, researchers selected 10 technical educators, comprising 6 male and 4 female technical educators in federal college of education (technical), Omoku through purposive sampling method. The selected respondents were each engaged by the researchers on an online interview. For qualitative data analysis, the researchers adopted typological analysis. A pre-determined set of coding schemes were used to sort the statements into themes and sub-themes. For the quantitative phase, two specific objectives were formulated to examine professional development and institutional strategies for mitigating factors militating lifelong learning amongst technical educators in Colleges of education in Rivers State, Nigeria. The population of the study was 71 technical educators (comprising 55 male and 16 female technical educators) in colleges of education in Rivers State. The population was manageable, hence the study was a census study. Survey questionnaire was used for data collection and it was structured in the pattern of 5 point Likert rating scale of agreement. The instrument was face validated by technical education experts. The reliability of the instrument was established using Cronbach Alpha Reliability Coefficient. The reliability coefficient achieved was .86. Mean and Standard Deviation were used to answer the research questions and to ascertain the homogeneity of responses, while t-test was used to test the hypotheses at .05 level of significance. The study found that economic, teacher related, psychological, pedagogical, technology related, family related, managerial and government related factors are factors militating lifelong learning amongst technical educators in Colleges of education in Rivers State, Nigeria. Also, the study found that training educators in information technology communication, pairing of young lecturers with older lecturers, creating departmental/faculty study groups for educators to share ideas encouraging educators to set annual learning goals, organizing professional seminars for lifelong learning amongst educators, providing adequate information and communication technologies, regular review of technical education curriculum to integrate modern ideas and good working conditions such as salary increment, allowance and others are strategies for mitigating factors militating lifelong learning amongst technical educators in Colleges of education in Rivers State, Nigeria. Therefore, it was recommended mentorship programme in technical education should be strengthened so that junior technical educators can learn from more experienced educators.*

***Keywords**: Colleges, Education, Educators, Learning, Lifelong and Technical*

Introduction

Education is one platform through which societies transfer culture, values and identity from one generation to another. This is why efforts are made to ensure that educational programmes and objectives are effectively implemented. Meanwhile, implementing educational programmes and objectives requires human, material and financial resources. Inasmuch as all these resources are necessary, much focus is centered on human resources, which are facilitators, otherwise known as teachers. Teachers are very instrumental in achieving educational goals, hence adequate training is required to ensure that teachers are competent enough to implement the curriculum. Because of this, college of education was introduced in Nigeria. College of education is the unit of tertiary institution in Nigeria that is saddled with the responsibilities of training teachers to obtain qualitative professional certificate in education (Olafare, et al, 2017).

Over the years, colleges of education have trained so many teachers in different field of study which include technical education. Technical education is the training of technically oriented personnel who are to be the initiators, facilitators and implementers of technological development of a nation by adequately training its citizenry on the need to be technologically literate, leading to self-reliance and sustainability (Uwaifo, 2010). Ojimba (2013) defined technical education as the formal training of persons to become technicians in different occupations. It is an education that prepares people for specific trades, craft, technical or a professional position in engineering, accountancy, nursing, medicine, architecture, pharmacy, law and others (Odo, et al, 2017). Also, Technical education encompasses structured learning experiences designed to impart practical skills, technical knowledge, and work attitudes necessary for employment in specific occupational fields (Okoye & Arimonu, 2021).

Technical education more than any other profession, has more direct impact on national welfare. Technical education contributions are widespread and visible ranging from metalwork technology, mechanical/ automobile technology, electrical and electronic technology, building and woodwork technology among others. According to Haruna (2008), the benefits of technical education lie in its job creation role in the economy, and include preparing the individual to acquire skills for gainful employment, enabling the individual to be self-reliant through the setting up of small and medium scale enterprises (SMES); Consequently, Technical education can serve as change agents not only for technical systems but also for many other societal changes. The practical nature of Technical education makes it unique in content and approach, thereby requiring special care, attention and regular human development through lifelong learning.

Lifelong learning is a process of developing knowledge, skills, and interests that provides opportunities for teaching and learning (Edo et al, 2022). The philosophy underlying the definition of lifelong learning was summarized by Duyff (cited in Güven, 2020) under eight headings as follows: (1) Continuous-lifelong learning never stops, (2) Supportive - We do not do it alone, (3) Stimulating and empowering – It is self-directed and active-not passive, (4) Knowledge, values, skills, and understanding – It is more than what we know, (5) Lifetime – It is from our first breath to our last, (6) Applied - Lifelong learning is not just for knowledge's sake, (7) Confidence-creativity, and enjoyment – It is a positive, fulfilling experience, (8) All roles, circumstances and environment – It applies not only to our chosen profession, but to our entire life.

It is not restricted or constrained to specific time, periods, years, certain organizations or institutions .Since it is a natural tendency to improve personal capacities, it becomes a continuous process in which individuals retain and develop their life-based conduct, knowledge, and skills.
The main aim of lifelong learning is to reinforce and improve the quality of an individual's life or to develop their personal potential to the utmost level (McGarrah, 2015). Lifelong learning is regarded as a crucial necessity to build the future of societies with a mindset that strives for essential learning dimensions such as self-directed learning, collaborative learning, learning on-demand, and organizational learning (Fischer, 2000). Self-directed learning could be considered as a core dimension of lifelong learning because it is defined as a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes (Güven, 2020).

From the foregoing, it is paramount for technical educators to regularly embark on lifelong learning since it will help in terms of achieving the aim of technical education. Unfortunately, Kamaruddin et al (2025) found that educators are not taking advantage of lifelong learning because of several internal and external factors. Internal barriers include personal motivation, lifestyle constraints, and individual perceptions. External barriers encompass job-related motives, skills-related motives, relationship/family motives, educational progressive motives, learning styles options, learning issues, and progression issues.

Meanwhile, with the significance of lifelong learning, it is expedient to identify factors militating lifelong learning and possibly proffer solutions. On this premise, this study was designed to explore factors militating lifelong learning amongst technical educators in Rivers State, Nigeria and also to examine strategies for mitigate factors militating lifelong learning amongst technical educators in Rivers State, Nigeria.

Methodology

The study adopted a mixed research approach using exploratory research design. The choice of this research design is based on the fact that researchers first approached the study using qualitative research approach to explore factors militating lifelong amongst technical educators in colleges of education in Rivers State, Nigeria and thereafter investigated the study further by examining strategies for mitigating factors militating lifelong learning amongst technical educators in colleges of education in Rivers State, Nigeria through quantitative investigation. Therefore, the study was fragmented into qualitative and quantitative phases.

Qualitative Phase

For the qualitative phase, researchers selected 10 technical education educators, comprising 6 male and 4 female technical educators in federal college of education (technical), Omoku which was the only college of education in Rivers State as at the time of the study. The participants for this segment of the study was selected through purposive sampling method. The selected participants were each engaged by the researchers on an online interview. Through this interview, the researchers were able to elicit information from the participants (interviewees) on factors militating lifelong learning amongst technical educators in colleges of education in Rivers State, Nigeria. The online process adopted allowed for easy coding and data analysis. Data were analyzed using typological analysis method. Typological analysis is essentially a classificatory process wherein data are put into groups, subsets or categories on the basis of some clear criterion (such as acts, behaviour, meanings, nature of participation, relationships, settings, activities) (LeCompte & Preissle, 1993). A pre-determined set of coding schemes were used to sort the statements into themes and sub-themes.

Table 1: Summary of Participant and Identifier

S/NO	Real Participant Identification	Study Participant Identifier
1	Male lecturer	ML 1
2	Male lecturer	ML 2
3	Male lecturer	ML 3
4	Male lecturer	ML 4
5	Male lecturer	ML 5
6	Male lecturer	ML 6
7	Female lecturer	FL 1
8	Female lecturer	FL 2
9	Female lecturer	FL 3
10	Female lecturer	FL 4

Organization of Interview Responses

Table 2: Qualitative responses on Factors Militating Lifelong Learning amongst Technical Educators in Rivers State

Participants	Question/Responses	Theme	Sub-theme
Researcher	What are the factors militating lifelong learning?		
ML1		1. Economic factors	**Governmental factors**

	Limited access to computer and modern learning resources and poor internet services.	2. Teacher related factors 3. Psychological factors 4. Pedagogical factors 5. Technology related factors 6. Family related problems 7. Managerial factors 8. Government related factors	They include; limited access to computer, lack of employer support and poor internet services, inadequate salary increment, lack of accreditation, lack of modern workshop and equipment, poor government policy, poor funding, inadequate electric power supply, poor government and institutional support **Teacher related** These are; fear of failure, poor time management, geographical gap, reluctant to adopt new teaching methods, technologies and skills **Economic factors** Economic factors are; high cost of technological gadgets, economic pressure, cost of professional certificate, training programs and research activities, economic pressure and poor access to capital **Psychological Factors** These are low self-esteem **Pedagogical Factors** Pedagogical factors are inflexible curricula, limited access to modern learning resources **Technology Related Factors** They are lack of access to ICT, lack of modern workshop and equipment and high cost of technology, Rapid changes in technology
ML2			
ML3	Absence of promotion, salary increment, recognition and career growth		
ML4	Limited access to workshop, seminars, conferences and training programmes, cost of professional certificate, training programs and research activities		
ML**5**	Poor time management, geographical and infrastructural gap, direct and indirect cost and lack of employer support		
ML6	Fear of failure, low self-esteem, lack of motivation, inflexible curricula and lack of accreditation		
FL1	Lack of in-service training, lack of access to ICT, lack of modern workshop and equipment and high cost of technology		
FL2			
FL3	Non-functional workshop equipment, inadequate electric power supply, poor government policy and poor funding		
FL4	Reluctant to adopt new teaching methods, technologies or skills, family commitment and personal obligations		
	Poor government and institutional support, lack of motivation, epileptic power		

supply, economic pressure and poor access to capital	**Family Related Factors** They are; family commitment and personal obligations
Rapid changes in technology, inadequate access to modern technologies and poor institutional support in providing study leave, sponsorship, promotion incentives and supportive policies	**Managerial Factors** Managerial factors are limited access to workshop, seminars, conferences and training programmes, absence of promotion, lack of employer support, lack of motivation, Lack of in-service training

Source: Field Survey, 2026

Table 2 on factors militating lifelong learning amongst technical educators in Rivers State, Nigeria shows that respondents highlighted several factors militating lifelong learning amongst technical educators in Rivers State, Nigeria, such as economic, teacher related, psychological, pedagogical, technology related, family related, managerial and governmental factors. Having identified factors militating lifelong learning amongst technical educators in Rivers State, Nigeria, there is need for further research to investigate the strategies of mitigating the identified factors, which creates knowledge gap. Therefore, more quantitative data are needed to provide solutions to this knowledge gap. It is against this backdrop that the researchers sought to examine strategies for mitigating factors militating lifelong learning amongst technical educators in colleges of education in Rivers State, Nigeria.

Quantitative Phase

The quantitative phase examined strategies for mitigating factors militating lifelong learning amongst technical educators in colleges of education in Rivers State, Nigeria. Specifically, the study sought to;

1. Examine professional development strategies for mitigating factors militating lifelong learning amongst technical educators in colleges of education in Rivers State, Nigeria.
2. Ascertain institutional strategies for mitigating factors militating lifelong learning amongst technical educators in colleges of education in Rivers State, Nigeria

Research Questions

1. What are the professional development strategies for mitigating factors militating lifelong learning amongst technical educators in colleges of education in Rivers State, Nigeria?
2. What are the institutional strategies for mitigating factors militating lifelong learning amongst technical educators in colleges of education in Rivers State, Nigeria?

Hypotheses

The following null hypotheses were tested at .05 level of significance;

HO_1: There is no significant difference between the mean responses of technical educators on professional development strategies for mitigating factors militating lifelong learning amongst technical educators in colleges of education in Rivers State, Nigeria.

HO_2: There is no significant difference between the mean responses of technical educators on institutional strategies for mitigating factors militating lifelong learning amongst technical educators in colleges of education in Rivers State, Nigeria.

To achieve the quantitative phase of the study a population of 71 technical educators (comprising 55 male and 16 female technical educators) in colleges of education in Rivers State, Nigeria. The population was manageable, hence the study was a census study whereby the entire population was used for the study. Self-made survey questionnaire was used to elicit quantitative information and it was structured in the pattern of 5 point Likert rating scale of agreement. The instrument was validated by two experts in the department of technical education in Federal College of Education (Technical), Omoku, Rivers State. The reliability of the instrument was established using Cronbach Alpha Reliability Coefficient, which yielded a reliability coefficient of .86. The instruments were administered and retrieved by the researchers at the spot of administration. Percentage, mean and standard deviation were used to answer research questions and to test homogeneity of responses, while t-test statistical tool was used to test hypotheses of the study. Percentage of acceptance values greater than 50% were accepted while percentage of agreement values less than 50% were rejected. Also, Mean values < 3.00 were rejected, while mean values ≥ 3.00 were accepted. More so, calculated hypotheses values < table values were accepted while calculated hypotheses ≥ table values were rejected.

Results and Analysis

Research Question 1: What are the professional development strategies for mitigating factors militating lifelong learning amongst technical educators in colleges of education in Rivers State, Nigeria?

Fig 1: Graphical presentation of Percentage of Agreement on Professional Development Strategies for Mitigating Factors Militating Lifelong Learning

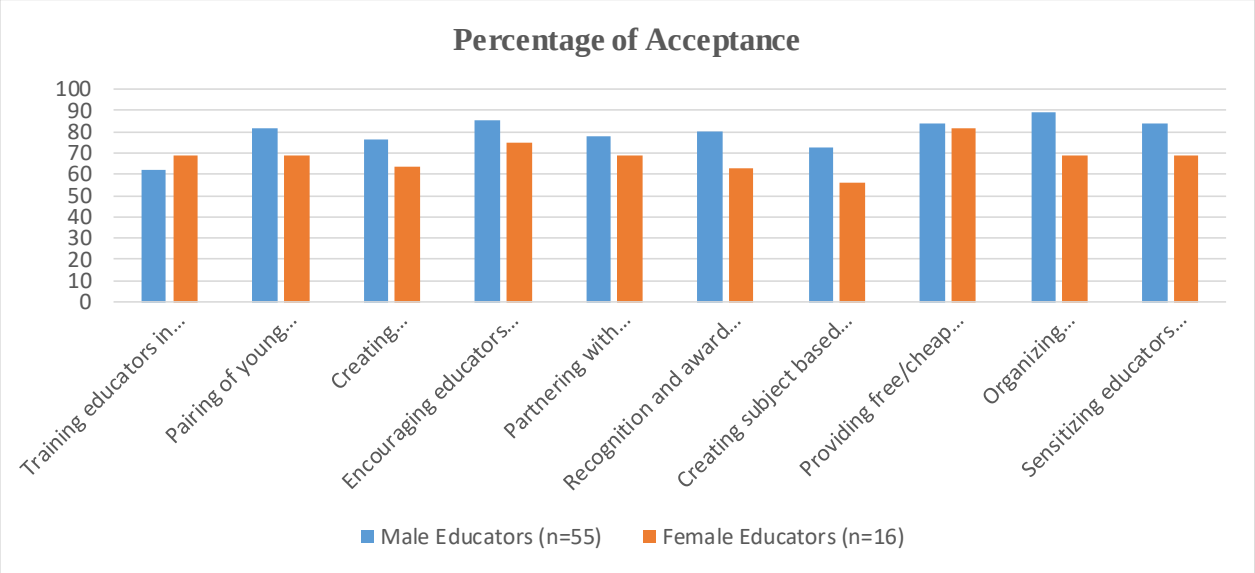


Figure 1 on professional development strategies for mitigating factors militating lifelong learning amongst technical educators in colleges of education in Rivers State, Nigeria shows that the percentage of agreement for both groups in all the items were above 50% which is the acceptable percentage. Therefore, in answer to research question 1, professional development strategies for mitigating factors militating lifelong learning amongst technical educators in colleges of education in Rivers State, Nigeria as presented in items 1-10 respectively include training educators in information communication technology, pairing of young lecturers with older lecturers for guidance, creating departmental/faculty study groups for educators to share ideas, encouraging educators to set annual learning goals, partnering with industries for educators training, recognition and award for lifelong learners, creating subject based platform for educators to share ideas, providing free/cheap online courses for lifelong learning, organizing seminars/workshop to train educators every semester and sensitizing educators on the importance of lifelong learning. This is in consonance with Zhongy et al (2025) that found that building institutional measures, improving the management system, enhancing learning motivation and evaluating education quality are strategies for promoting lifelong learning.

Table 3: Grand Mean and Standard Deviation Scores on Professional Development Strategies for Mitigating Factors Militating Lifelong Learning

Category	n	Grand Mean	Standard Deviation	Decision
Male Educators	55	3.71	.81	Agree
Female Educators	16	3.68	1.10	Agree

Table 3 presents grand mean and standard deviation scores of educators on professional development strategies for mitigating factors militating lifelong learning amongst technical educators in colleges of education in Rivers State, Nigeria. The result shows that the grand mean score of male educators for research question 1 was 3.71 which is greater than acceptable mean score of 3.00, while the grand mean score of female educators for research question 1 was 3.68 which is also greater than acceptable mean value of 3.00. Also, the closeness in the standard deviation scores such as .81 for male educators and 1.10 for female educators shows homogeneity in the response of both groups on research question 1.

Hypothesis 1

There is no significant difference between the mean responses of technical educators on professional development strategies for mitigating factors militating lifelong learning amongst technical educators in colleges of education in Rivers State, Nigeria.

Table 2: t-Test for Responses on Professional Development Strategies for Mitigating Factors Militating Lifelong Learning

		t-test for Equality of Means						
							95% Confidence Interval of the Difference	
		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
VAR00001	Equal variances assumed	.319	69	.750	.35909	1.12394	-1.88312	2.60130
	Equal variances not assumed	.360	29.800	.721	.35909	.99785	-1.67936	2.39754

The results of the independent samples t-test in Table 2 indicated mean difference and standard error difference scores of .36 and 1.12, respectively with t(69) =.32, p=.75 at .05 level of significance. This shows that p=.75 is greater than .05, meaning that $H0_1$ was accepted. Therefore, there was no significant difference between the mean responses of technical educators on professional development strategies for mitigating factors militating lifelong learning amongst technical educators in colleges of education in Rivers State, Nigeria.

Research Question 2: What are the institutional strategies for mitigating factors militating lifelong learning amongst technical educators in colleges of education in Rivers State, Nigeria?

Fig 2: Graphical presentation of Percentage of Agreement on Institutional Strategies for Mitigating Factors Militating Lifelong Learning

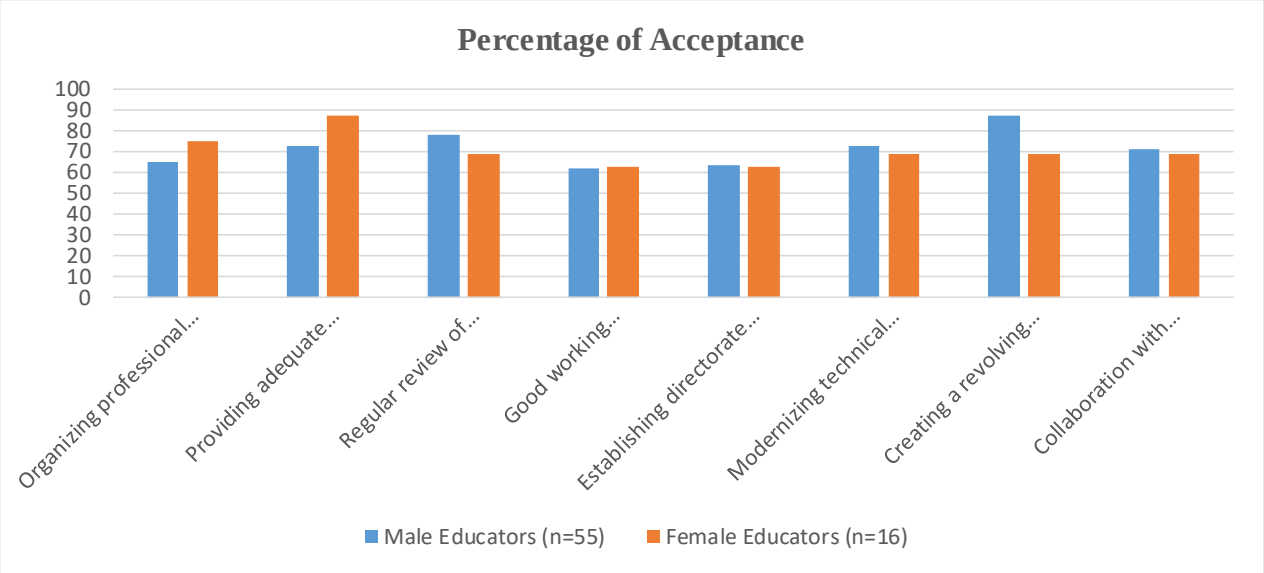


Figure 2 on institutional strategies for mitigating factors militating lifelong learning amongst technical educators in colleges of education in Rivers State, Nigeria shows that the percentage of agreement for both groups in all the items were above 50% which is the acceptable percentage. Therefore, in answer to research question 2, institutional strategies for mitigating factors militating lifelong learning amongst technical educators in colleges of education in Rivers State, Nigeria as presented in items 11-18 respectively include organizing professional seminars for lifelong learning amongst educators, providing adequate information and communication technologies, regular review of technical education curriculum to integrate modern ideas, good working conditions such as salary increment, allowance, establishing directorate of staff development and training, modernizing technical education workshop, creating a revolving fund to support educators conferences, seminars and certification and collaboration with other tertiary institutions for joint workshops/seminars. This is in conformity with Zhongy et al (2025) that found that building institutional measures, improving the management system, enhancing learning motivation and evaluating education quality are strategies for promoting lifelong learning.

Table 4: Grand Mean and Standard Deviation Scores on Institutional Strategies for Mitigating Factors Militating Lifelong Learning

Category	n	Grand Mean	Standard Deviation	Decision
Male Educators	55	3.75	.83	Agree
Female Educators	16	3.58	1.08	Agree

Table 4 presents grand mean and standard deviation scores of educators on institutional strategies for mitigating factors militating lifelong learning amongst technical educators in colleges of education in Rivers State, Nigeria. The result shows that the grand mean score of male educators for research question 1 was 3.75 which is greater than acceptable mean score of 3.00, while the grand mean score of female educators for research question 2 was 3.58 which is also greater than acceptable mean value of 3.00. Also, the closeness in the standard deviation scores such as .83 for male educators and 1.08 for female educators shows homogeneity in the response of both groups on research question 2.

Hypothesis 2: There is no significant difference between the mean responses of technical educators on professional development strategies for mitigating factors militating lifelong learning amongst technical educators in colleges of education in Rivers State, Nigeria.

Table 5: t-Test for Responses on Institutional Strategies for Mitigating Factors Militating Lifelong Learning

	t-test for Equality of Means

		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
VAR00002	Equal variances assumed	1.284	69	.203	1.53182	1.19261	-.84737	3.91101
	Equal variances not assumed	1.529	33.356	.136	1.53182	1.00160	-.50512	3.56876

The result of the independent samples t-test in Table 5 indicated mean difference and standard error difference scores of 1.53 and 1.19, respectively with t(69) = 1.28, p=.20 at .05 level of significance. This shows that p=.20 is greater than .05, meaning that $H0_2$ was accepted. Therefore, there was no significant difference between the mean responses of technical educators on institutional strategies for mitigating factors militating lifelong learning amongst technical educators in colleges of education in Rivers State, Nigeria.

Conclusions

The study deduced that several factors such as economic, teacher related, psychological, pedagogical, technology related, family related, managerial and governmental factors militates lifelong learning experience amongst technical educators in colleges of education in Rivers State, Nigeria. Meanwhile, the study also found that the factors above can be mitigated through training educators in information communication technology, pairing of young lecturers with older lecturers for guidance, creating departmental/faculty study groups for educators to share ideas, encouraging educators to set annual learning goals, partnering with industries for educators training, recognition and award for lifelong learners, creating subject based platform for educators to share ideas, providing free/cheap online courses for lifelong learning, organizing professional seminars for lifelong learning amongst educators, providing adequate information and communication technologies, regular review of technical education curriculum to integrate modern ideas, good working conditions such as salary increment, allowance, establishing directorate of staff development and training, modernizing technical education workshop, creating a revolving fund to support educators conferences, seminars and certification and collaboration with other tertiary institutions for joint workshops/seminars, among others.

Recommendations

The following recommendations are made:

1. Mentorship programme in technical education should be strengthened so that junior technical educators can learn from more experienced educators.
2. There should be a legislation compelling every technical education institution that is close to an industry to partner with the industry by signing an MOU with the industry so that technical educators can have on-the-job trained by experts in the industry.

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