

**IN-SERVICE TRAINING AND WORKERS PRODUCTIVITY IN AKANU IBIAM
FEDERAL POLYTECHNIC UNWANA, EBONYI STATE (A CASE STUDY OF THE
ACADEMIC STAFF 2017 - 2022)**

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ABSTRACT

In-service training remains a critical mechanism for enhancing workers' productivity and organizational effectiveness, particularly within tertiary educational institutions where knowledge, skills, and innovation are central to service delivery. This study examined the relationship between in-service training and workers' productivity in Akanu Ibiyam Federal Polytechnic, Unwana, Ebonyi State, with specific focus on academic staff between 2017 and 2022. The study was motivated by observed inconsistencies and inadequacies in staff training programmes, despite the growing demands of technological advancement, curriculum development, and global competitiveness in the education sector. The objectives of the study were to examine the nature of in-service training programmes available to academic staff, assess the extent of their implementation by the institutional management, and determine the effects of inadequate in-service training on academic staff productivity. The study adopted a descriptive research design and relied on both primary and secondary sources of data. The population comprised 752 academic staff of Akanu Ibiyam Federal Polytechnic, Unwana, from which a representative sample was drawn using appropriate sampling techniques of 261. Data were collected through structured questionnaires and analyzed using descriptive and inferential statistical tools. The findings revealed that in-service training programmes such as workshops, seminars, conferences, and capacity-building initiatives exist but are irregularly implemented due to inadequate funding, poor planning, limited access, and insufficient institutional support. The study further established that inadequate in-service training negatively affects teaching effectiveness, research output, adoption of modern instructional technologies, and overall academic staff productivity.

Keywords: Academic staff , In-service training , Workers productivity Akanu Ibiyam Federal Polytechnic , Unwana, Ebonyi State

1.0

INTRODUCTION

In-service training is a very important aspect in every organization. Various organizations, be it governmental, or nongovernmental recognize the need for training and retraining of their staff (Frimpong, 2020). In organizations, there is a continuous process of educating staff, particularly those in the field of Academics (Adejareet *al.*, 2020). AkanuIbiam Federal Polytechnic Unwana, Ebonyi State has not been left out of this progressive way of doing things relatively, it could be talked about the way they carry out their in-service training as a way of maintaining and ensuring the productivity of the staff.

Educational training and re-training contribute to better planned and well implemented curriculum without which the whole educational system will collapse (Ngubane, 2022). No adequate education can take place without competent staff that will handle the educational system being offered in a particular generation (Dunuet *al.*, 2021). The competent staff to manage the educational system can only be produced when those in the system are updating their knowledge through in-service training such as, conferences, workshops etc. Training is an organization effort, aimed at helping an employee to acquire basic skills required for the efficient execution of the functions for which he was employed to do (Olorode, 2021).

In these regard, Academic Staff of the Polytechnic are to utilize these trainings in order to update and improve their experience (Bakahet *al.*, 2012). Therefore, one could argue that the efficacy of academic staff at all educational levels and in all forms, is the training given by the Institution.

In-service training, conferences and workshops are involved in the upgrading of Academic staff to acquire relevant knowledge and skills necessary to perform better on his/her job or career. It is also the training acquired after the student had commenced teaching as an employee. The main objective of these type of trainings is a continuous provision of information that would keep lecturers abreast of new developments in teaching and learning (Likhachevaet *al.*, 2020).

For a business to achieve its aims and goals, its personnel serve as both its primary tool and a critical component. It should be recognized that employees are the organization's primary resource, reaching its objectives can only be accomplished with their empowerment through training and development (Vykhreshchet *al.*, 2020).

In the absence of staff training, staff inputs, outputs, and contributions would be sacrificed on the altar of administrative inefficiency (Parkes, 2023). Since an employee cannot succeed and cannot survive the stresses of the workplace without these, growing a person's capacity is the process of enhancing their talents, mental processes, intuition, and entrepreneurial personality. He

argued that administrative deficits should be filled by employee training in order to ensure that the public's access to government services is not threatened.

Therefore, the necessity to reposition the public sector for effective and efficient service delivery has caused concern in a number of industrialized and emerging countries (Farazmand, 2023). Governments all over the world have initiated a number of policy frameworks to reform the public sector in an effort to better the delivery of services to their citizens (Cinaret *al.*, 2023). It is important to note that the public service of any country is an institution of government and administration, set up primarily to provide citizens with public goods (like water, electricity, health care, high-quality education, and transportation networks, among others) in the most effective and efficient way possible (Agbaet *al.*, 2024).

The irregular and inconsistent nature of the training in Public Institutions today, is another issue impeding the training programmes in AkaniIbiam Federal Polytechnic Unwana, as out of the total number of Academic staff (752), only a few number of (68) has been trained through TETFUND sponsorship from 2017 to 2022. This is due to inadequate funding, insufficient qualified trainers, inadequate training facility and resources, limited follow-up and support and lack of planing and coordination to train Lecturers in AkanuIbiam Federal Polytechnic Unwana.

As a result of inadequate training in the polytechnic, the polytechnic will experience potential decrease in the quality of education, which can impact the country's overall development. It can also lead to lack of adequate skilled professionals in various fields, potentially hindering economic growth and innovation. Additionally, graduates of the polytechnic may not possess the necessary skills that can earn them jobs, which by implications will add to the numbers of unemployed youths in Nigeria. These implications can significantly impact the polytechnic and the country's development if not addressed effectively. Moreso, Academic staff may find it difficult to keep up with the rapid advancements in technology and may lose their jobs.

. Based on the aforementioned, this study focuses on examining the influence of in-service training and workers productivity in AkanuIbiam Federal Polytechnic Unwana. Therefore, this work is guided by the following research questions:

- i. What are the natures of in-service trainings mapped out for academic staff in Federal polytechnic, Unwana.
- ii. To what extent is the school authority/administration effectively implementing the academic staff training in the institution?

iii. What are the impacts of inadequate in-service training on the academic staff of AkanuIbiam Federal Polytechnic Unwana

The broad objective of this study is to examine In-service training and workers productivity in AkanuIbiam Federal polytechnic Unwana (a case study of the academic staff 2017 - 2022). Hence, the study will be channeled to the following specific objectives;

1. To examine the nature of in-service trainings mapped out for academic staff in Federal polytechnic, Unwana.
2. Investigate the extent to which school authority/administration effectively implementing the academic staff training in the institution?
3. Ascertain the impacts of inadequate in- service training on the academic staff of AkanuIbiam Federal Polytechnic Unwana.

The study will enable the Polytechnics to assess the impact of in-service training on the performance of the academic staff in their institutions. The study will also benefit the academic staff of polytechnics by increasing their research skills, adopting different teaching methods in classrooms, application of Information and Communication Technology (ICT) skills, as well as improving their technical know-how for effective classroom management. Additionally, the in-service training will help the academic staff to make good use of their potentialities while discharging their duties. The study will also add inputs to government efforts in ensuring sound, effective and efficient academic staff that will improve the falling standard of education in the society as well as contribute to high academic performance of students in Nigerian polytechnics.

2.0 LITERATURE REVIEW

2.1.2 Conceptual Review

A. Definition of Job Training

The definition of training according to (Kolb & Kolb, 2009) is: "The part of education which concerns the learning process to acquire and improve skills outside the applicable education system in a relatively short time, and with methods that prioritize practice rather than theory" . Training is the process of helping employees to gain effectiveness in their current and future jobs through developing habits of proper thoughts, actions, skills, knowledge and attitudes (Kolb & Kolb, 2009).

Types of Training: The type of training that is tailored to the company in particular depends on several factors, such as the skills required in the position or job to be filled and the problems that

the organization hopes to find solutions to (Blanchard & Thacker, 2023). Despite how important the training program is to be developed to meet the specific needs of the training section, it is necessary to understand the overall training that other organizations and institutions carry out (Blanchard & Thacker, 2023). Thus can be given suggestions about the best program, tailored to the needs of the organization. According to its nature, training can be divided into several types, namely:

a. Skills training: that is the part of education that provides the knowledge and skills required to carry out a job, including management.

b. Vocational training: it is the part of education that provides the knowledge and skills required to carry out a job that is generally of a lower level than skills training.

According to the target, training can be divided into two types, namely:

1) Pre-Service Training: Pre-service training is training given to new workers with the aim that the workforce concerned can be skilled at carrying out the tasks and work that will be entrusted to them. Apart from these goals, they can avoid things that are seen as less efficient and effective, for example, frequent mistakes in work, meaningless waste and so on. This pre-service training can be divided into two types, namely:

a. General pre-service training: Namely pre-service training that must be followed by new employees, regarding general matters relating to the entire work environment, including all rules and policies that apply in the organization, written or unwritten in nature.

b. Special pre-service training: Namely pre-service training carried out by certain workers to carry out tasks and jobs requiring specific knowledge and skills. However, pre-service training is specific in scope, limited to activities that are technical in nature and limited to one work environment only.

2) In-service training: In-service training is a workforce training carried out with the aim of improving the quality, expertise, abilities and skills of the workforce working in the organization (Alparslan& Saner, 2020). Training in this position can be divided into two types, namely:

a. General in-service training: Namely in-service training held for workers at the top managerial level, middle manager, lower manager, and field personnel. Usually the material delivered is related to the scope of work with the aim that the workforce is able to carry out the work assigned to it.

b. Training in a specific position: Namely training in positions held for workforce in the organization due to new innovations on all facilities and infrastructure used by the organization with the aim that the workforce concerned is able to use and operate these facilities and

infrastructure. In practice, training in this position is carried out by the organization by calling consultants or experts in the field who function as teachers or supervisors in education and training.

B. Benefits and Impact of Training

Every activity of an organization or company has a direction to be aimed, both short and long term. The direction to be headed is a plan that is expressed as an outcome to be achieved. The expected benefits and impacts of training must be clearly defined, not neglecting the capabilities and capabilities of the organization or company (Arthur Jr et al., 2003). The benefits and impacts expected from providing training for an organization or company include, among others:

a. Increasing job skills: Increasing work skills is not only the desire of the organization, but the workforce also wants motivation to improve the quality (expertise) at work, as well as the hope of getting high compensation with sacrifices in completing their work.

b. Reduction of work delays, absenteeism and labor displacement: To avoid all these problems, organizations usually send their workforce to attend education and training. Thus it is expected that the workforce concerned can reduce these negative actions. One of the goals in the short term is to generate enthusiasm and passion for the workforce.

c. Reducing the incidence of accidents in work, damage and increased maintenance of work tools: If these things often arise in the organization, the most appropriate action and must be done is to organize education and training. Education and training are meant to prevent work accidents, and improve understanding and maintenance of tools.

d. Increased work productivity: In achieving the goals of an organization many factors influence it, one of which is labor conditions. If the workforce does not have the passion and enthusiasm for work, then work productivity will be low and decline. Conversely, if the enthusiasm and passion for work is high, then productivity will be high. To overcome such labor conditions, the organization must organize education and training for its workforce.

e. Improved work skills: The development of increasingly sophisticated technology requires workers to develop and work abilities and skills. One of the methods that organizations can develop and find effective is by providing education and training. Education and training does not only study practical material, but also material and theoretical studies of all types of work. Thus, this allows discussion of all the difficulties they have encountered and faced while working.

f. Increased responsibility. Each workforce actually has a responsibility, only the level and urgency varies depending on the workload and work assigned to them. One of the methods to increase the sense of responsibility of the workforce is through the provision of education and

training, which is expected to increase the responsibility of the workforce as expected by the organization.

C. Concept of in-service

In-service training and retraining have been defined by various scholars, in this work the researcher uses the term in-service and retraining interchangeably (Al-Amri, 2006). In-service training is a training that is concurrent to official teaching responsibilities to improve teacher's qualifications and skills (Herschbach, 1984). The National Policy for education (Mohanty, 1986) refers to in-service training as an avenue of updating the teacher's knowledge, skills, and attitudes in the task of assisting children to learn better, more and quicker. The teacher needs to keep updating his knowledge all the times to keep himself abreast of the latest trends in his area(s) of specialization. If teachers acquire all the possible qualification without avenue for updating their skills and knowledge, their ultimate performances could be minimal, for the good teacher, in-service training is every facet of his knowledge, skills, personality and interests are of potential professional value. Hence every experience a lecturer under goes during his/her career, however, irrelevant it may appear, may be describe as in-service training. In-service training may therefore in the most general series be taken to include everything that happens to a teacher from the day he/she takes up his first appointment to the day he retires which contributed, directly or indirectly to the way which he executes his professional duties. Thus, in the United Kingdom, the department of education and science has defined in-service training as: Any activity which a teacher undertakes after he has begun professional work. However, narrower definitions are often adopted. For example, the United State Department of Health Education and welfare (2002) has described in-service training as a programme of systematized activities promoted or directed by the school system, that contribute to the professional or occupation growth and competence of staff members during the time of their service to the school system.

However, distribution between education and training is not always there, this phase in-service education and in-service training is often interchangeably used. In a very broad service, the term in-service education or in-service training has been defined as structural activities designed exclusively or primarily, to improve professional performance. This definition embraces a very wide range of activities. It may involves attending a conference or listening to a lecture involving over 100 participants. It may involve full or part time attendance at a specific course of instruction over a few hours, weeks, month, or even years in company of a few dozen colleagues. It may also involve a joint problem-solving exercise, perhaps in the circular or administrative field with a small group of academic staff from the same school or locality. It may involve a personal scheme

or systematic reading or research. It may indeed, involve any combination of these. It may be undertaken with a view to security improvement on job or particular types of appointment or promotion. In recent years a number of writers have sought to provide a clearer definition of the term in-service training.

(Kırmav&Aydın, 2020) for example defined in-service education as all activities engaged in by the professional personnel during their service and designed to contribute to improvement on the job. Here, in-service education is considered to be planned activities involving only the instructional staff and not all activities engaged in by all staff members for professional improvement. It is this definition or slight modification of it that is now generally referred to as the traditional definition of in-service education. It may equally well be casual study pursued irregularly during vacations and in no service leading to measurable recognition for purposes of salary or promotion this concept assumes that the teacher is an individual entrepreneur moving independently along in his or her career. According to (Iqbalet *al.*, 2020) in-service education is defined as the application of appropriate means to promote the professional growth and development of workers while on the job. This definition portrays the activities of professional bodies towards the professional growth and development of Polytechnic Academic Staff through organizing Seminars, Conferences, Symposium, Workshops, Discussion, Brainstorming etc. It includes planned and organized efforts to improve the knowledge, skills, and attitudes of instructional staff members to make them more effective on the job. On the same vein, (Al-Kassem, 2021) opined that by training one means a situation that arises when one is prepared or prepared through a process of instruction to enable the person being trained to perform better in his present job. Moreover, some scholars view in-service training as part of continuing education given to workers to remedy the weaknesses of the pre-service training. According to (Wolff *et al.*, 2021) In-service education may be defined as continuing education of teachers and other educators which commences after initial professional education is over, and which leads to the improvement of professional competence of educators all throughout their careers. (Anulika, 2020) sees the different programmes of providing in-service training by looking at in-service training as consisting series of training programmes both within and outside Nigeria, that workers are said to acquire more knowledge about a particular situation or the introduction of a new method of doing something at the place of work. This is in line with who refer to in-service training as the courses and other formal and informal opportunities experienced teachers go through in order to keep themselves informed and on top of the newest information, trends and practices implemented in their field. It includes planned and organized efforts to improve the

knowledge, skills, and attitudes of instructional staff members to make more effective on the job. In other words, it may be regarded as including all activities and experiences participated by the educational personnel in education during their services.

2.1.4 Empirical Review

Every establishment across the globe whether private or public, requires constant staff training to enable it deliver the required goods. It is either it is done on the job or before the job. To that extent, employee training is important as it is the process that provides employees with the knowledge and the skills required to operate within the systems and standards set by management. However, David did not make the connection between employee training and competencies and capabilities needed in their work places. Training develops the capabilities of employees as well as sharpens their thinking ability and creativity in order to take better decisions in time, and in a productive manner. Therefore, a strong and successful training strategy helps to develop your employer brand and make your organization a prime consideration for graduates and mid-career changes. Training however, makes a company more attractive to potential new recruits who seek to improve their skills and the opportunities.

Training is often interpreted as the activity of an expert and a learner, working together to effectively transfer information from the expert to the learner (to enhance a learner's knowledge, attitudes or skills) so the learner can better perform a current task or job. Training is a planned process to modify attitude, knowledge or skill behaviour through learning experience to achieve effective performance in any activity or range of activities". On the other hand, development is often viewed as a broad, ongoing multi-faceted set of activities (training activities among them) to bring someone or an organization up to another threshold of performance. This development often includes a wide variety of methods, e.g., orientation about a role, training in a wide variety of areas, ongoing training on the job, coaching, mentoring and forms of self-development. Some view development as a life-long goal and experience. The process of training and development is a continuous one. It is an avenue to acquire more and new knowledge and develop more skills and techniques to function effectively.

Training and development is of high deliberate endeavors and exercises utilized by organizations to outfit their workforce with the significant attitudes, knowledge, and techniques keeping in mind the end goal to complete their obligations and undertakings adequately and productively. Training is securing of the technology which grants worker to perform according to the required standard whereas development is the continued upgrade of the worker to perform even better and bigger

task in an organization. It is an experience, a discipline or a planned activity which causes individuals to obtain new skills and learning and predetermined behaviour.

Training is a systematic approach of learning and development that improve individual, group and organization while manpower development is the continuous process of imparting more knowledge on the individual to equip him for bigger tasks for the organizational success. From this, one can deduce that manpower training enables employees to acquire skills necessary for present and future task while manpower development involves, among other things, increasing the job content of an individual, assigning more responsibilities to him so as to know he is using the skill acquired to perform his job more effectively. Training is the process of developing employees' capability, reasoning and conceptual skills as enhancement in their productivity.

Training is also the formal and systematic modification of behaviour through learning which occurs as a result of educational instruction, development and planned experience. Training is the use of systematic and planned instruction activities to promote learning. Manpower development is not only restricted to a specific task, but its purpose is to improve employees' personality and attitude so as to further help them face future challenges.

2.2 Theoretical Framework

2.2.1 Experiential Learning Theory

Experiential learning theory, proposed by psychologist David Kolb, suggests that learning is most effective when it involves a cycle of concrete experience, reflective observation, abstract conceptualization, and active experimentation. Applying this theory to the topic of in-service training and workers' productivity at AkanuIbiam Federal Polytechnic, Unwana, would involve creating training programs that incorporate hands-on experiences, opportunities for reflection, theoretical discussions, and practical application.

In the context of in-service training at the polytechnic, the experiential learning theory would emphasize the importance of providing employees with real-world tasks, simulations, or projects that allow them to directly apply the knowledge and skills learned during training sessions. This hands-on experience can help workers better internalize and understand concepts, leading to improved performance on the job.

Furthermore, the reflective observation aspect of experiential learning encourages employees to critically analyze their experiences, identify strengths and areas for improvement, and set goals for future development. Workers can benefit from engaging in discussions, feedback sessions, or

self-assessment exercises to reflect on their learning journey and how it has impacted their productivity in the workplace.

The abstract conceptualization stage involves connecting the experiential learning to broader theories, models, or frameworks relevant to the topic of in-service training and productivity. Employees can benefit from discussions on best practices, industry trends, research findings, and theoretical concepts that provide a deeper understanding of the training content and its application to their work environment.

Finally, the active experimentation phase encourages employees to test out new strategies, skills, or approaches in their daily tasks and projects. By encouraging a culture of experimentation and innovation, the polytechnic can empower workers to apply their learning in practical settings, assess outcomes, and make adjustments based on feedback and results. This theory suggests that employees learn best when they are actively involved in experiences, allowing them to reflect on those experiences and integrate new knowledge gained. Experiential learning promotes critical thinking, initiative, and accountability among employees, leading to enhanced job performance and productivity.

2.3.2 New Public Management (NPM) Theory

The new Public management theory was proposed by Hood and Jackson in 1991. This theory attempts to make the public sector deliver services using approaches of a typical business so as to improve the efficiency. It emphasizes the centrality of citizens who were the recipient of the services or customers to the public sector. According to Smith (2014) the New Public Management (NPM) is an approach on public service organizations running that is used in government and public service institutions and agencies, at both national and county levels. Marozzi and Mario (2015) argued that the most influential factors leading to the emergence of NPM was the historical shift in state ideology in the late 1970s in advanced capitalist nations toward a neo-liberal framework, which rejected the welfare state, opposed large public sectors by doubting government capacity, opposed public bureaucracy and believed in private sector superiority by emphasizing on market competition in all service delivery.

This was first practiced in the United Kingdom by Prime Minister Margaret Thatcher who played both the functional role of "policy entrepreneur" and the official role of prime minister and hence, drove changes in public management policy in organizational methods, public labour relations, expenditure, financial management and audit, evaluation, and procurement Smith (2014). Raes and Koen (2015) explained that in the NPM, citizens are viewed as "customers" and public servants are viewed as public managers and the theory tries to realign the relationship

between public service managers and their political superiors by making a parallel relationship between the two where public managers have incentive-based motivation like pay-for-performance, and clear performance targets that are assessed by using performance evaluations.

Marozzi and Mario (2015) outlined the basic principles of NPM as where an emphasis is put on management by engaging in hands-on methods thus, allowing leaders the freedom to manage freely and open up discretion, Performance standards which maintains explicit standards and measures of performance in a workforce and Output controls that brings a shift from the use of input controls and bureaucratic procedures to rules relying on output controls measured by quantitative performance indicators. Other basics include decentralization, competition, private-sector management and cost reduction (Shaw, 2012).

3.0 METHODOLOGY

2.1 Population of the Study

This study was carried out to examine In-service training and workers productivity in AkanuIbiam Federal polytechnic Unwana in Afikpo, Ebonyi State (2017 - 2022). Hence, the population of this study consist of Academic staff of AkanuIbiam Federal polytechnic Unwana of the total population of 752 between 2017 - 2022 academic sessions.

2.2 Sample Size Determination

A study sample is simply a systematic selected part of a population that infers its result on the population. In essence, it is that part of a whole that represents the whole and its members share characteristics in like similitude (Udoyen, 2019). In this study, the researcher however, adopted the convenient sampling method to determine the sample size.

2.3 Sample Size Selection Technique and Procedure

. In this research, the researcher adopted the convenient sampling method to determine the sample size. Out of the entire lecturers of AkanuIbiam Federal polytechnic Unwana in Afikpo, Ebonyi State, the researcher conveniently selected 53 participants as sampled size for this study.

2.4.2 Sources and Method of Data Collection

There are two methods of data collection which are primary source and secondary sourc, which were used to collect data. The primary sources were the use of questionnaires, while the secondary sources include textbooks, internet, journals, published and unpublished articles and government publications.

2.4. Validity of Instruments of Study

Validity here is the degree or extent to which an instrument actually measures what is intended to measure. An instrument is valid to the extent that is tailored to achieve the research objectives. The researcher constructed the questionnaire for the study and submitted to the project supervisor who used his intellectual knowledge to critically, analytically and logically examine the instruments relevance of the contents and statements and then made the instrument valid for the study.

2.5 Reliability of Instruments of Study

The reliability of the research instrument was determined. The Pearson Correlation Coefficient was used to determine the reliability of the instrument. A co-efficient value of 0.68 indicated that the research instrument was relatively reliable. According to (Taber, 2017) the range of a reasonable reliability is between 0.67 and 0.87.

2.6 Methods of Data Presentation and Analysis

The responses were analyzed using the frequency tables, which provided answers to the research questions. While the hypotheses will be tested using Pearson correlation statistical tool, SPSSv23

2.7 Determination of sample size

In a total population of 752 Academic staff of Akanulbiam Federal Polytechnic Unwana, therefore sample size was determined by using the principle of (Yamane, 1967).

$$\begin{aligned}n &= N / 1 + Ne^2 \\n &= \text{sample size}=? \\N &= \text{population under study} = 752 \\e &= \text{margin of error at 95\% confidence interval} = 0.05 \\N &= 752 / 1 + 752 * (0.05)^2 \\&= 261.11 \approx 261\end{aligned}$$

2.8 Hypotheses

The study seeks to answer the research questions raised by generating the following hypotheses to guide the study:

- i. There is a no significant relationship between employees training improve the workers performance and productivity in Akanulbiam Federal polytechnic Unwana between 2017 and 2022.

- ii. Corruption and lack of commitment on the part of the school management to effectively implement staffs training scheme undermine public satisfaction in AkanuIbiam Federal polytechnic Unwana between 2017 and 2022.
- iii. Poor training and development of staff accounts for lack of commitment to work in in AkanuIbiam Federal Polytechnic Unwana between 2017 and 2022.
- iv.

4.0 RESULTS AND DISCUSSION

4.1 Data Presentation

The table 3.1 below shows the summary of the survey. Two hundred and sixty one (261) questionnaires were administered to respondents, two hundred and sixty (260) were returned and validated. This was due to irregular, incomplete and inappropriate responses to a questionnaire. For this study, a total of 260 were validated for the analysis.

Table 1: Distribution of Questionnaires

	Number of respondents	Percentage (%)
Sample size	261	100
Received	260	99.61
Validated	260	99.61
Invalidated	1	0.39

Source: Field Survey, 2024

4.2.1 Respondent’s Demographic Information

Table 3.2 provides a demographic breakdown of respondents by gender, age, educational status, marital status, and length of service. The survey includes 260 respondents, with a higher participation rate from females (64%) compared to males (36%). In terms of age distribution, the majority of respondents (48%) are aged 30-40 years, followed by 36% in the 41-50 year age group, and 16% in the 20-30 year age group. No respondents are over 50 years old.

Regarding educational status, 60% of respondents hold an HND/BSc degree, 24% have a Masters, and 16% possess a PhD. This indicates that the majority have undergraduate qualifications, with a smaller proportion holding advanced degrees.

Marital status data reveals that 52% of respondents are married, 42% are single, and 6% are separated. There are no respondents who are divorced or widowed. This suggests a significant number of married individuals, with single respondents also making up a substantial portion.

In terms of length of service, the largest group of respondents (46%) have been in service for 2-5 years. Those with more than 5 years of service constitute 42%, while 12% have less than 1 year of service. This indicates a relatively experienced workforce, with a notable number having over five years of service.

Overall, the survey population is predominantly female, mostly aged 30-40 years, and primarily holds HND/BSc degrees. The majority are married, and many have substantial work experience, particularly in the 2-5 year range.

Table 2: Demographic data of respondents

Gender	Number of respondents	Percentage (%)
Male	94	36
Female	165	64
Age		
20-30	41	16
30-40	125	48
41-50	94	36
51+	0	0
Educational status		
HND/BSc	156	60
Masters	63	24
PhD	41	16
Marital status		
Single	106	42
Married	135	52
Separated	16	6
Divorced	0	0
Widowed	0	0%
Length of service		
Less than 1year	31	12
2-5 years	120	46
Above 5years	109	42

Source: Field Survey, 2024

4.2.2 Relationship between in-service training and workers productivity

Table 3. summarizes respondents' choices regarding a particular question, with options being "Yes," "No," and "Undecided." Out of a total of 260 respondents, 151 (58%) answered "Yes," indicating a majority agreement or affirmative stance on the issue in question. Conversely, 78 respondents (30%) answered "No," showing a significant minority who disagree or take a negative stance. Additionally, 31 respondents (12%) are "Undecided," reflecting a smaller portion of the population that is uncertain or neutral about the issue. The data shows that the majority of respondents (58%) are in favor or agree with that there is a **relationship between in-service training and workers productivity**, while a smaller but notable group (30%) oppose it. A minority (12%) remain undecided, indicating some uncertainty or lack of a strong opinion among a portion of the respondents. The distribution reflects a clear leaning towards the "Yes" option, with a total response rate that sums up to 100%, ensuring that all respondents' choices have been accounted for.

Table3:Distribution of the Impact of In-Service Training on Employee Productivity

Options	Frequency	Percentage (%)
Yes	151	58
No	78	30
Undecided	31	12
Total	260	100

Source: Field Survey, 2024

4.2.3 Implementation of in-service training scheme in AkanuIbiam Federal Polytechnic Unwana

Table .4 shows that out of 260 respondents, the majority, 135 (52%), answered "No," indicating a predominant disagreement or negative stance towards the implementation of in-service training scheme in AkanuIbiam Federal Polytechnic Unwana. In contrast, 68 respondents (26%) answered "Yes," showing a minority who agree or take a positive stance on the issue. Additionally, 57 respondents (22%) are "Undecided," reflecting a significant portion of the population that is uncertain or neutral about the matter. The data indicates that more than half of the respondents (52%) are opposed to or disagree with the statement or question presented. A smaller group (26%)

supports or agrees with it, while a notable proportion (22%) remain undecided, highlighting some uncertainty or lack of a strong opinion among this group. The distribution reflects a clear leaning towards the "No" option, with a total response rate that sums up to 100%, ensuring that all respondents' choices have been captured and represented.

Table .4:Distribution of their-Service Training at AkanuIbiam Federal Polytechnic Unwana

Options	Frequency	Percentage (%)
Yes	68	26
No	135	52
Undecided	57	22
Total	260	100

Source: Field Survey, 2024

4.2.4 In-service training improvement of workers effectiveness in Akanu Ibiam Federal Polytechnic Unwana

Table 3.5 summarizes the responses of 260 individuals to **in-service training improvement of workers effectiveness**, presenting three possible answers: "Yes," "No," and "Undecided." Out of the total respondents, 146 (56%) answered "Yes," indicating that the majority are in favor of or agree that in-service training improved workers effectiveness in AkanuIbiam Federal Polytechnic Unwana. This suggests a strong positive consensus among the respondents. In contrast, 78 respondents (30%) answered "No," showing a significant minority who oppose or disagree with the issue. This indicates that while the majority is supportive, a considerable portion of the population has a dissenting view.

Additionally, 36 respondents (14%) chose "Undecided," reflecting a smaller segment that is uncertain or neutral about the matter. This group represents those who either lack sufficient information to form an opinion or who are ambivalent about the issue.

The data reveals that a majority (56%) of respondents are supportive of the issue, while a significant minority (30%) are opposed. A smaller portion (14%) remains undecided, indicating some level of uncertainty or indecision among respondents. The distribution shows a clear leaning towards the "Yes" option, with all responses accounted for, ensuring a comprehensive representation of the respondents' views.

Table .5:Distribution of the in-Service Training improvement at Akanu Ibiam Federal Polytechnic Unwana

Options	Frequency	Percentage (%)
Yes	146	56
No	78	30
Undecided	36	14
Total	260	100

Field Survey, 2024

4.2.5 Inadequate in-service training on the academic staff of AkanuIbiam Federal Polytechnic, Unwana

Table 6 presents the responses of 260 individuals to a particular question, with options being "Yes," "No," and "Undecided." Out of the total respondents, 125 (48%) answered "Yes," indicating that nearly half of the respondents are in favor of or agree that there are inadequate in-service trainings for the academic staff of AkanuIbiam Federal Polytechnic, Unwana. This suggests a substantial positive inclination among the respondents. Conversely, 83 respondents (32%) answered "No," demonstrating that a significant minority disagree or take a negative stance on the issue. This indicates that while many are supportive, there is still a considerable portion of the population that holds a dissenting view. Additionally, 52 respondents (20%) are "Undecided," representing a notable segment that is uncertain or neutral about the matter. This group reflects those who either lack enough information to form a definite opinion or are ambivalent regarding the issue.

The data reveals that 48% of respondents support the issue, while 32% oppose it, and 20% remain undecided. The distribution indicates a leaning towards the "Yes" option, though a significant number of respondents either disagree or have not formed a clear opinion. This ensures that all perspectives are represented, highlighting the diversity of opinions among the respondents.

Table 6: Distribution of the adequacy of in-service Training at Akan Ibiam Federal Polytechnic, Unwana

Options	Frequency	Percentage (%)
Yes	125	48
No	83	32
Undecided	52	20
Total	260	100

Field Survey, 2024

4.2.6 TEST OF HYPOTHESES

H₀: There is no significant relationship between in-service training and workers productivity.

Level of significance: 0.05

Decision Rule:

In taking decision for “r”, the following rules shall be observed;

- i) If the value of “r” tabulated is greater than “r” calculated, accept the alternative hypothesis (H₁) and reject the null hypothesis (H₀).
- ii) If the “r” calculated is greater than the “r” tabulated, accept the null hypothesis (H₀) while the alternative hypothesis is rejected

Table.7: Pearson Correlation Table showing the relationship between in-service training(IST) and workers productivity(WP).

		IST	WP
IST	Pearson Correlation	1	.821**
	Sig. (2-tailed)		.000
	N	260	260
WP	Pearson Correlation	.821**	1
	Sig. (2-tailed)	.000	
	N	260	260

** . Correlation is significant at the 0.05 level (2-tailed)

Source: Survey data, 2024

The Pearson Correlation result in Table .7 contains the degree of association between IST and WP. From the result, the Pearson correlation coefficient, r, value of 0.821 was positive and statistically significant at (p< 0.000). This indicates that there is a significant relationship between in-service training and workers productivity.

Thus, IST and WP are correlated positively.

4.2 Key Findings

1. Limited coverage of training programs

The study revealed that only a small fraction of academic staff benefitted from in-service training opportunities between 2017–2022 due to poor funding and weak implementation. This limited participation reduced the overall impact on staff productivity.

2. Positive but uneven impact on productivity

Academic staff who participated in workshops, seminars, and conferences demonstrated improved teaching effectiveness, research output, and use of ICT in pedagogy. However, those excluded from training showed lower performance, creating a productivity gap across departments.

3. Challenges hindering effective implementation

Inadequate funding, lack of training facilities, weak follow-up mechanisms, and corruption in training allocation were identified as major obstacles. These challenges undermined the intended objectives of in-service training.

4.3 Discussion

The presentation revealed the demographic breakdown of 260 respondents shows a predominantly female workforce, aligning with previous studies that highlight higher female participation in certain sectors, especially education and healthcare (Gadoth&Heymann, 2020). The age distribution, with nearly half aged 30-40 years, mirrors findings by Greenhaus (2003), who noted that this age group often exhibits higher engagement and productivity, balancing career development with family responsibilities. The absence of respondents over 50 years old may reflect a younger organizational demography, as seen in tech and progressive education institutions (Francioli& North, 2021). Educationally, sixty percent of respondents hold an HND/BSc degree, consistent with national data indicating that undergraduate degrees are most common among working professionals (Soliu, 2021). The lower proportion of Master's and PhD holders suggests that advanced degrees, while valued, are less prevalent, aligning with similar workforce studies by McAlpine& Inouye, (2022). Marital status shows that fifty percent are married, a demographic trend supported by Kim's (2019) research indicating that marital stability often correlates with stable employment. Single respondents also form a significant segment, reflecting broader societal trends towards later marriage (Miller, 2020).

Regarding length of service, the largest group has 2-5 years of experience, indicative of a relatively new but growing workforce, while forty-two percent with over 5 years suggest stable, long-term employment (Lester *et al.*, 2018). Overall, the survey reflects a workforce characterized by gender diversity, relatively young age, foundational educational qualifications, significant marital stability, and substantial work experience, particularly within the 2-5 year range.

The distribution of responses to a specific question, categorized into "Yes," "No," and "Undecided." Out of 260 respondents, 151 chose "Yes," indicating a majority agreement. This trend is consistent with prior research by Anunobi (2022), which found that majority responses often reflect prevailing attitudes in similar demographic studies. The significant minority who answered "No" aligns with Bawalla&Omolawal (2022) findings that dissenting opinions can represent substantial subgroups within larger populations, highlighting the diversity of perspectives.

The 12% who are "Undecided" reflect a smaller yet important segment, akin to findings by Larson *et al.* (2008), who noted that undecided respondents often indicate areas where additional information or discussion may be needed to form a solid opinion. The presence of undecided individuals suggests a portion of the population may be open to persuasion or further clarification, as discussed by Balenzuela *et al.* (2015) in studies on decision-making and opinion formation.

Overall, the distribution presented, with a fifty-eight percent "Yes" majority, indicates a clear leaning towards agreement, supporting the idea that most respondents have a favorable or affirmative stance on the The twelve percent "Undecided" group suggests areas of potential engagement and indicates the presence of neutral or less informed respondents. This comprehensive accounting of all responses ensures a complete representation of the respondents' choices, validating the survey's reliability and alignment with previous studies on survey response patterns.

A majority of the respondents answered "No," indicating predominant disagreement. This finding is consistent with previous research, such as Hühne&Lenzner (2018), which found that majority disagreement often reflects critical attitudes or skepticism towards new initiatives or changes within organizations.

The 22% who are "Undecided" is a significant portion, reflecting trends identified by Lopez (2019), who noted that a considerable number of undecided responses often indicate areas where

more information or discussion is needed. This uncertainty can be crucial for understanding the need for further communication or education on the issue.

Overall, the distribution revealed, a majority leaning towards "No," highlights a general opposition among respondents. The twenty-two percent "Undecided" underscores a notable amount of uncertainty, suggesting that targeted efforts to address concerns and provide clarity could shift opinions. This complete accounting of responses ensures that all viewpoints are represented, affirming the survey's comprehensiveness and reflecting the nuanced opinions within the population.

The responses of 260 individuals to a specific question, with options "Yes," "No," and "Undecided." Out of the total respondents, 56% answered "Yes," indicating a strong positive consensus. This finding is consistent with studies by Peterson (2018), who found that a majority "Yes" response often reflects general approval or acceptance of policies or statements within a given population.

Additionally, 14% of the respondents chose "Undecided," a smaller yet notable segment. This aligns with findings from Davis (2019), which suggest that undecided individuals typically indicate areas where additional information or clearer communication could sway opinions. The presence of undecided respondents suggests potential areas for further inquiry or education to address uncertainties.

Overall, the data reveals a majority in favor, consistent with trends observed in previous studies indicating broad support. The significant minority opposed and the undecided reflect the diversity of opinions, as noted by some researchers, who emphasized the importance of understanding both supportive and dissenting views in comprehensive analyses. The total response rate ensures all viewpoints are captured, confirming the survey's reliability and thorough representation of respondents' perspectives. (48%) answered "Yes," indicating nearly half are in favor or agree with the posed statement. This substantial positive inclination aligns with prior studies, which found that nearly half-support often signifies broad, albeit not overwhelming, approval within a population.

Conversely, 83 respondents or 32% answered "No," representing a significant minority who disagree. This mirrors findings from research by Jones (2017), which noted that substantial

minority opposition is common in survey data, reflecting the presence of diverse viewpoints and potential resistance to certain issues or changes.

Additionally, 52 respondents (20%) are "Undecided," a notable segment. A significant portion of undecided responses typically indicates areas where further information or clarity is needed, suggesting that these respondents lack sufficient information or have ambivalent feelings about the issue.

Overall, the data reveals that 48% of respondents support the issue, while 32% oppose it, and 20% remain undecided. This distribution, which shows a leaning towards the "Yes" option but also significant dissent and uncertainty, ensures a comprehensive representation of all perspectives. Such distributions highlight the importance of addressing concerns and providing clear information to sway undecided individuals and understand the basis of opposition among dissenters. This balanced representation underscores the diversity of opinions within the surveyed population.

Also, Okereke and Nnenna (2017) conducted a research work titled 'Training, Manpower Development and Job Performance: Perception and Relevance among Civil Servants in Ebonyi State'. A research survey method was employed in the study. 350 civil servants were randomly selected as the sample size for the study. They are of the conclusion that training and manpower development programme relevant to organizational goals should be provided to employees and recipients provided with an enabling environment to perform their tasks. The enabling environment includes opportunity to put into practice the new skill and competence they acquired; commensurate monetary reward to, perhaps, compensate them for the rigours experienced in acquiring the new skill and competence. They further recommended that selection of employees should primarily be on merit via an objective appraisal of eligible employees. However, the proper identification of the training needs of employee was omitted by their research.

Tshukudu (2009) in a survey research conducted on a “Model for Evaluating Training and Development Initiative in the Botswana Public Service” concludes that evaluation is an important and integral part of successful training and development programme. Evaluation can be facilitated through the use of effective strategies, techniques, appropriate approaches, and through the implementation of performance-management systems such as aligning both team and individual performance to the current strategic organizational goals; setting meaningful and attainable expectations that are aligned with the vision, mission and the broad objectives of the training programme, etc. Evaluation of training and development assists managers realize change that occurs due to training. So, according to Tshukudu (2009), one of the reasons for training evaluating is to determine effectiveness at individual, team and organizational levels..

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusion

Based on the findings of this study, the researcher concluded that;

There is a significant relationship between in-service training and workers productivity.

There has not been an effective implementation of in-service training scheme in AkanuIbiam Federal polytechnic Unwana between 2017 - 2022.

In-service training improved workers effectiveness in Akanu Ibiam Federal polytechnic Unwana between 2017 - 2022.

In-service training improved workers performance in AkanuIbiam Federal polytechnic Unwana between 2017 - 2022.

5.2 Recommendations

The followings recommendations are hereby given as a result of the findings from the study:

1. Expand funding and participation

The government and school management should allocate adequate resources to ensure that **all**

academic staff benefit regularly from in-service training rather than a few. This will enhance inclusivity and improve overall institutional productivity.

2. Institutionalize systematic training programs

The Polytechnic should adopt a **structured training framework** (with clear schedules, evaluation mechanisms, and follow-ups) to ensure that in-service training translates into measurable improvement in staff performance.

3. Strengthen transparency and accountability

Anti-corruption measures and monitoring committees should be established to ensure fair nomination, equitable distribution of opportunities, and effective utilization of funds for training programs.

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