

Mentorship and Motivation as a Panacea for Practical Skill Development Among Polytechnic Students

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Abstract- *This study investigates the role of mentorship and motivation as catalysts for practical skill development among polytechnic students in Edo and Delta States, Nigeria. Employing a mixed-method research design, the study integrates quantitative surveys and qualitative interviews to capture diverse perspectives from 1,000 students and 100 mentors across six polytechnics. Data collection tools included validated questionnaires, structured interviews, and observational assessments of training sessions. Quantitative data were analyzed using descriptive statistics, Pearson correlation, regression analysis, and ANOVA, while qualitative data underwent thematic analysis. Findings reveal that mentorship, despite its theoretical relevance, does not significantly predict practical skill development, suggesting that current mentorship structures lack strategic depth and engagement. In contrast, motivation emerged as a statistically significant predictor, highlighting the importance of intrinsic drive in fostering vocational competence. Training duration showed a weak negative and statistically insignificant relationship, indicating that longer sessions do not necessarily enhance skill acquisition underscoring the need for quality and structured learning experiences. Based on these insights, the study recommends restructuring mentorship programs; embedding career relevance into curricula, redesigning training modules for focus and efficiency and enhancing practical exposure through internship.*

Keywords: *Catalysts, Mentorship, Motivation, Polytechnic Students, Practical Skill Development.*

I. INTRODUCTION

Practical skills are indispensable for polytechnic students to thrive professionally and contribute meaningfully to economic development. Yet, in states such as Edo and Delta, students often encounter significant barriers to acquiring these competencies. This study explores how mentorship and motivation can serve as strategic interventions to overcome these challenges and foster practical skill development.

In today's dynamic educational landscape, mentorship and motivation are critical drivers of students' growth. This research investigates the synergistic relationship between these elements and their potential to act as transformative tools in polytechnic education. Scholars have emphasized the need to delineate mentoring into distinct components; coaching, sponsorship, opportunity creation, and exposure to better prepare students for future career demands (Tenenbaum, Crosby & Glinner, 2001; Van Dam et al., 2018).

Mentorship, as a form of personalized guidance, bridges the divide between theoretical instruction and practical application. It involves a collaborative relationship between a seasoned mentor and mentee, facilitating the transfer of knowledge, skills, and professional insight. Effective mentoring goes beyond classroom instruction, offering students relational support through visits, counselling, and guidance. This is especially vital in disciplines that demand hands-on experience or industrial engagement. Savickas (2007) and Beerman et al. (2007) describe mentoring as a social relationship that nurtures adaptation and professional integration.

In polytechnics setting, mentorship can significantly enhance students' capacity to translate academic concepts into real-world competencies. Whether mastering technical operations in engineering labs or refining creative techniques in design studios, mentorship acts as a compass for professional development. Studies affirm the contribution to foundational knowledge and student agency (Seymour et al., 2009; Berinsteroya, 2020).

Vocational mentoring, in particular, emphasizes the mentor-mentee bond, often facilitated by experienced faculty members who provide guidance, share expertise, and offer emotional support. The depth of learning achieved through industrial mentoring

surpasses what is possible in traditional classroom settings. Research shows that mentoring enhances intellectual curiosity, logical reasoning, and practical proficiency (Baver & Bannet, 2003). While Raposa et al. (2019) note, a mentor functions as a trainer, Eniayewu (2013) defines mentoring as a structured approach to behavioral development that aligns with organizational goals. Given polytechnic the educational focus on vocational training, they offer fertile grounds for examining the impact of mentorship and motivation.

Motivation, on its part, is the engine that drives learning and skill acquisition. For polytechnic students, maintaining motivation is essential to mastering practical skills. It may arise from intrinsic sources; such as personal interest and passion, or extrinsic ones like recognition and rewards. Motivated students are more engaged, persistent, and willing to refine their abilities. Motivation also strengthens self-efficacy, empowering students to confront challenges, experiment, and learn from setbacks. Goal-setting, a byproduct of motivation, provides direction and encourages sustained effort.

As a catalyst for skill development, motivation complements mentorship by reinforcing students' belief in their capabilities and the value of practical learning. Motivation beliefs defined as individuals' perceptions of their ability to perform tasks and the effectiveness of the learning process, guide students' thoughts, emotions, and behaviors across disciplines (Boekaerts, 2002; Koca, 2016; Facer, Galloway, Inoue & Zigarmi, 2014).

Ultimately, the integration of mentorship and motivation within polytechnic education can empower students to excel in their fields and contribute to national development. As emphasized in the Oslo Manual (OECD/erostat, 2018), targeted and well-planned education systems are instrumental in enhancing national productivity, fostering cultural richness, and improving governance through technological advancement and skilled human capital.

1.1 PROBLEM STATEMENT/JUSTIFICATION

Despite the importance of practical skills, polytechnic students in Edo State and Delta State struggle with inadequate skill development. Tertiary institutions must recognize that, for many students, the transition from education into the labor market is

not a straightforward matter. An increasing number of students today are ill-equipped for the job market. Furthermore, the nature of graduate employment is changing today, as it is only a minority of students who can hold any realistic expectation of employment in a position directly related to the discipline studied. This is particularly the case for those students whose focus remains within traditional academic disciplines. Research conducted by the Association of Graduate Employers noted in 2011 that unemployed graduates felt "short changed" by higher education institutions which had failed to note that the "rules of the game had changed" and consequently despite fulfilling the traditional goal of a "good degree" had not provided them with the essential skills for employment. Furthermore, it should also be recognized that even for those in work, the nature of employment is changing such that education (higher and otherwise) is the first step in a continuing program of lifelong learning much of which will subsequently be conducted in a workplace setting. The ongoing spiel you hear from employers is that graduates lack the skills they need to succeed in the workplace. We need to ponder as to why graduates in recent years, who have required specialized knowledge in their fields, do not have the ability to apply their knowledge to find solutions of unexpected cases and unnatural situations, some of them even fail to perform routine jobs that the employer expects from them. This study therefore, seek to investigate the impact of mentorship and motivation on students' practical skill development in Nigeria polytechnic. It aims to identify how mentorship and motivation can improve practical skill acquisition.

1.2 Objectives of the Study

The primary objective of the study is to investigate the impact of mentorship and motivation on students' practical skills development. The specific objectives are:

1. To analyze the relationships between mentorship and students' practical skills development.
2. To evaluate the relationship between motivation and students' practical skills development.
3. To measure the relationship between training duration and practical skill development.
4. To identify challenges faced by students in skill development and propose solutions.

II. LITERATURE REVIEW

Mentorship and motivation have consistently served as foundational pillars within institutional settings, benefiting both mentors (supply-side) and mentees (demand-side). In contemporary workplaces marked by uncertainty, mentoring functions as a stabilizing force and as an informal insurance policy that supports professional growth. Recent research highlights its relevance, with 66% of millennials expressing a desire for workplace mentors and 75% viewing mentorship as essential to their success (Scott Jeffrey, 2023). Aguiler (2013) underscores the need to reinvent coaching strategies to enhance their effectiveness. Her work offers practical guidance on cultivating trust, fostering open communication, nurturing empathy, and encouraging introspection to support mentees' personal and professional development.

Ezewu (2015) reflects on the traditional African approach to skill acquisition, emphasizing "learning by doing" as a generational method of transferring knowledge. Onwuchekwa (2015) supports this view by asserting that experiential learning enhances retention and performance. This theory posits that technical education is most effective when it directly trains individuals in both cognitive and manipulative habits required for specific trades. This perspective highlights the importance of workshops, instructional materials, and qualified instructors, particularly in polytechnic institutions focused on technical disciplines such as building trades.

In polytechnic education, especially within the building trade, the use of tools is indispensable for effective practical skill acquisition. Unlike theory-based instruction, hands-on learning is emphasized, and numerous studies affirm the critical role of tools in technical training. The National Board for Technical Education (NBTE, 2011) states that school tools are essential aids for teaching and learning in technical institutions. Olaitan (2011) reinforces this by referencing the Chinese proverb: "if I hear it, I forget; if I see it, I remember; if I do it, I know," emphasizing the lasting impact of experiential learning.

Mentorship has also been shown to significantly influence mentees in post-secondary education (Tareef, 2013). Mentees benefit from guidance in teaching, student engagement, goal setting, research, and career advancement (Fountain & Newcomer, 2016; Waller & Shofouwe, 2013; De

Vries et al. 2006; Jackkevicius et al., 2014). Moreover, mentors report increased job satisfaction and career fulfilment (Tareef, 2013). Leadership development programs reveal that mentoring positively affects attitudes and behaviors, creating ripple effects across institutions (de Vries et al., 2006). This correlation extends to occupational commitment (Gwyn, 2011) and job satisfaction (Chung & Kowalski, 2012).

While mentoring enhances academic competencies such as counselling and grant writing (Tareef, 2013), some studies suggest that it may overlook essential practical skills and conceptual guidance needed for career planning (Foote & Solem, 2009). Jackson et al. (2015) note a disconnect between mentors' focus on long-term professional development and mentees' immediate concerns, indicating a gap between expectations and institutional support. Effective mentoring requires institutional backing, which in turn can positively influence organizational culture.

2.1 Theoretical Perspectives on Mentoring

Mentoring theory emphasizes its dual importance for both mentors and mentees, promoting encouragement and collaboration. Huson (2007) introduces a constructivist framework alongside a five-factor model for subject-specific mentoring. Constructivist theory supports field-based learning by building on prior knowledge to develop teaching competencies. The five-factor model includes:

- (i) System Requirements; Alignment with curriculum policies and directives
- (ii) Personal Attributes; Traits that foster constructive dialogue
- (iii) Modelling; Demonstration of effective professional practices
- (iv) Pedagogical Knowledge; Articulation of teaching and learning strategies
- (v) Feedback; Reflective input to enhance practice.

2.1.1 The Role of the Mentor

Michael (2015) defines the mentor's role as facilitating personal and professional growth through the sharing of expertise and experience. A successful mentoring relationship is built on mutual trust, respect, and communication, with regular meetings to exchange ideas, assess progress, and set developmental goals. Jones (2006) adds that mentors provide emotional support, motivation, and role modeling. Mentoring relationships may be structured with formal guidelines or evolve informally,

depending on the context. Mentors assist with career exploration, goal setting, networking, and resource identification, adapting their approach as mentees' needs evolve. It is essential that mentors collaborate with mentees rather than dictate actions (Jones, 2006). Adapting the role of a "critical friend," mentors can foster a supportive environment that encourages skill optimization. The effectiveness of mentoring is closely tied to the quality of feedback provided. Feedback should be credible, relevant, actionable, confidential, and timely. Mentors must focus on asking insightful questions and guiding mentees to learn from their experiences. Through constructive feedback, alternative perspectives, and accountability, mentors can help mentees enhance their effectiveness and find greater fulfilment in their roles.

2.1.2 Benefits of Mentoring Relationships

Michael (2015) highlights that mentoring relationships offer mentees exposure to new ideas, skill sets, and divers ways of thinking. These relationships provide guidance for strengthening personal capabilities and overcoming weaknesses. For mentors, the process fosters the development of leadership and coaching styles, while also introducing them to fresh perspectives and innovative approaches within the coaching domain. Mentoring enhances self-esteem and confidence, reduces the likelihood of engaging in risky behaviors such as drug and alcohol use, and promotes personal growth for both mentors and mentees. It contributes to societal advancement by engaging, retaining, and developing individuals. Additionally, mentors benefit from opportunities to reflect on their goals and practices, thereby enriching their professional development. Mentoring also supports behavioral improvement, healthier lifestyle choices, and stronger interpersonal skills.

2.1.3 Mentoring-Specific Benefits

Mentors gain a reflective space that contributes to greater career satisfaction. They experience fulfilment from supporting others and witnessing their success. The mentoring process presents intellectual challenges, often involving unfamiliar issues that stimulate growth. It also encourages collaboration, facilitates connections with new academic colleagues, and provides insights into current institutional concerns. Mentors acquire new knowledge and perspectives through these experiences.

2.1.4 Mentee-Specific Benefits

Mentees often experience increased productivity and enhanced personal effectiveness, particularly in managing resources. They receive support in navigating interpersonal relationships and gain access to networking opportunities, along with advice on expanding those networks. Mentoring encourages critical thinking and challenges institutional norms. It also offers insight into organizational culture, its values, goals, and operational dynamics. Mentees are guided in clarifying career aspirations and making informed decisions about their professional paths.

2.2 Theoretical Foundations of Motivation

2.2.1 Reinforcement Theory

B.F. Skinner's reinforcement theory centers on the consequences of behavior as a key motivator. It posits that positive reinforcement; such as praise, recognition, high grades, monetary rewards, or promotions increases the likelihood of repeating desired behaviors. Skinner distinguishes this from negative reinforcement, which involves removing an unpleasant stimulus to encourage behavior, and punishment, which aims to deter undesirable actions through adverse consequences.

2.2.2 Achievement Motivation Theory

David McClelland's achievement motivation theory asserts that human needs are learned and shaped by experience. He proposed that only one dominant motive drives behavior at any given time, categorizing these motives into achievement, affiliation, and power. These needs are influenced by internal desires and external factors. McClelland emphasized that the pursuit of achievement stems from a psychological need for competence and manifests as a drive for excellence. This drive may be directed toward mastering a task, outperforming oneself, or competing with others. According to Reeve (2014), a high need for achievement can be cultivated through socialization, particularly by parents who instill values of excellence and can evolve throughout life as part of personal growth and the pursuit of complexity.

2.3 Practical Skill Development in Nigeria Educational System

Vocational and technical education plays a vital role in equipping individuals across all levels of Nigeria's educational system with practical skills and

competencies. As Spring (2015) notes, education fosters both functional and analytical capabilities, enhancing access to employment and serving as a powerful tool for economic empowerment at individual and community levels. Meanwhile, education for sustainable development adopts a transformative lens, preparing learners to actively contribute to building a resilient and sustainable future. Technical education, in particular, is structured to develop students' analytical thinking, critical reasoning, and specialized knowledge enabling them to hone their craftsmanship, gain hands-on experience, and tackle real-world challenges effectively. According to UNESCO (2011), technical and vocational education and training (TVET) is instrumental in poverty eradication across all tiers of government. The National Policy on Education (2013) outlines a strategic framework for preparing youth for meaningful employment, granting higher institutions the mandate to deliver skill-based vocational training. UNESCO (2016) further defines technical education as encompassing the study of technology and related sciences, alongside the acquisition of practical skills, attitudes, and knowledge relevant to various occupational sectors.

The Dynamic Path to Skill Mastery and Lifelong Motivation

Personal and professional growth is deeply intertwined with the continuous development of new skills, not simply as a goal to achieve, but as a powerful driver of intrinsic motivation. This journey is layered and complex, engaging cognitive, emotional, and practical dimensions that work together to transform raw potential into refined expertise.

1. **Cognitive Dimension:** Skill acquisition begins with grasping the foundational theories behind the craft. For example, a beginner in chess starts by learning the rules and movements of each piece, laying the groundwork for strategic thinking.
2. **Emotional Dimension:** Emotional strength is vital for overcoming the inevitable hurdles along the way. Take the experience of a musician: the discouragement of a wrong note is offset by the exhilaration of mastering a challenging composition, fueling persistence and growth.
3. **Practical Dimension:** Repeated practice bridges theory and emotion, embedding skills through action. Athletes embody this principle, turning

deliberate training into instinctive performance through relentless repetition.

4. **Feedback Mechanism:** Constructive feedback is a cornerstone of improvement. Whether it's a language learner applying new vocabulary or a programmer troubleshooting code, feedback sharpens understanding and directs future effort.
5. **Social Context:** The influence of peers and mentors can significantly shape motivation and progress. Supportive networks offer encouragement, while observing others' achievements can spark ambition and healthy competition.
6. **Beyond Mastery:** Mastery is not the endpoint but a springboard for innovation. A seasoned chef, for instance, doesn't stop at perfecting dishes, they continue to explore new techniques and flavor combinations, pushing boundaries.

By integrating these elements, individuals build a resilient and enriching framework for skill development, one that not only fosters competence but also sustains a deep, enduring motivation. Each new skill acquired fuels the desire to learn more, turning the pursuit of excellence into a lifelong adventure.

III. METHODOLOGY

This study adopts a mixed-method research design, combining both qualitative and quantitative approaches to obtain comprehensive insights into the impact of mentorship and motivation on skill development. The population consists of polytechnic students in Edo state and Delta state, lecturers, and industry professionals involved in mentorship programs. The polytechnics in Edo State include Auchu Polytechnic, National Institute of Construction Technology and Management Uromi, Edo State Polytechnic Usen. Those to be covered in Delta State include Delta State Polytechnic Ogwashi-Uku, Delta State Polytechnic Otefe-Oghara, Delta State Polytechnic Ozoro. A sample of 1000 students and 100 mentors are selected through stratified random sampling to ensure representation from various departments. Questionnaires are Designed to assess students' perceptions of mentorship, motivation, and their impact on skill development. The questionnaire is subjected to validity and reliability tests. Interviews were Conducted with mentors and educators to understand their roles and strategies in guiding students. Practical training sessions is

observed to evaluate students' progress. Quantitative data is analyzed using descriptive statistics (frequency), while qualitative data from interviews and observations undergo thematic analysis to identify common patterns. Data collected from respondents is analyzed using the Pearson Correlation and Regression Analysis. The Analysis of Variance (ANOVA) is used to test the null hypotheses. The statistical formula is as follows:

$$Y = B_0 + B_1X + E$$

Where;

Y = the response variable or the dependent variable.

X = the predictor or independent variable.

B_0 = the intercept of the true regression line.

B_1 = the slope of the true regression line.

The Analysis of Variance (ANOVA) table is given below:

Table 1: ANALYSIS OF VARIANCE TABLE FOR SAMPLE LINIER REGRESSION

Source of Variance	Sum of Squares (SS)	Degree of Freedom	Mean Square (MS)	F-Ratio (F)
Regression	SS_B	1	$MSR = \frac{SS_B}{1}$	$F = \frac{MSR}{MSE}$
Error	SS_E	n-2	$MSE = \frac{SS_E}{N-2}$	
Total		n-1		

Where:

SS_B = the sum of square due to the regression

SS_E = the sum of square error

IV. RESULT AND DISCUSSION OF FINDINGS

Table 2: Demographic Characteristics of the Respondents

Variable	Category	Frequency	Percentage%
Gender	Male	272	52.1
	Female	250	47.9
Total		522	100
Age	17-20yrs	97	18.6
	21-25yrs	194	37.2
	26-30yrs	127	24.3
	30yrs above	104	19.9
Total		522	100
Year of Study	ND1	94	18.0
	ND2	181	34.7
	HND1	105	20.1
	HND2	142	27.2
Total		522	100
Experience	5-10yrs	9	16.7
	11-15yrs	15	27.8
	16-20yrs	16	29.6
	20 Above	14	25.9
Total		54	100

Source: Survey Research, 2025.

The survey revealed that male dominated with 52.1%. in terms of age, the survey revealed that majority of the respondents were in the age bracket of 21-25years, accounting for 37.2%, followed by

respondents 26-30years of age with 24.3%, followed by respondent above 30years with 19.9%, while 17-20years were the least accounted for 17.6% of the total respondents for the study. Study level of the

respondents showed that those with ND2 dominated the study accounting for 34.7%, followed by respondents with HND2 with 27.2%, while HND1 and ND1 were the least represented in the study with 20.1% and 18.0% respectively. Similarly, survey of the years' experience of respondents revealed that between 16-20 years dominated with 29.6%, followed by 11-15 years with 27.8%, followed by 20 years and above with 25.9%, while 5-10 years recorded the least with 16.7

Decision Rule:

Reject H_0 if $F_{cal} > F_{tab}$

Which means if calculated is greater than F tabulated value, we reject H_0 or otherwise.

1. H_0 : Mentorship does not significantly impact students' practical skill development.
2. H_0 : Motivation has no significant effect on students' skill development.

Pearson Correlation Analysis

Table 3: Correlation Coefficient

	Practical Skill Development	Mentorship	Motivation	Training Duration
Pearson Correlation.	1			
Practical Skill Development.	.042	1		
Mentorship.	.444**	.085	1	
Motivation.	.162	-.066	.408**	
Training Duration.				1

** Correlation is significant at the 0.01 level (2-tailed).

Source: Field data, 2025

This table analyzes the bivariate relationships between the variables. This is done by using a correlation matrix. This first started by analysing the correlation results between Mentorship and Practical Skill Development. The result of the correlation analysis shows a positive coefficient of 0.042 with the p-value of 0.764. This is insignificant relationship. It implies that there is no relationship between the two variables. Furthermore, the correlation between Motivation and Practical Skill Development; the result of the correlation analysis shows a moderate positive coefficient of 0.444 with the p-value of 0.001. This shows a high significant at $\alpha = 0.01$ and it implies that as motivation increases practical skill development increases. Lastly, the correlation results between Training Duration the control variable, and Practical Skill Development; the result shows a moderate correlation of positive significance coefficient of 0.408 and a p-value of

0.002. This is significant correlation; it implies that as training duration increases, practical skill development tends to improve.

Hypotheses testing

Hypothesis One:

H_0 : Mentorship does not significantly have any relationships with practical skill development.

Accept the null Hypothesis

Hypothesis Two:

H_0 : Motivation has no significant relationships with practical skill development. *Reject the null Hypothesis*

From the result of the study as presented in Table 2, it is clear that Motivation has a significant moderate and positive association with practical skill development at $\alpha = 0.01$

Table 4: Regression Results

Independent Variables	Coefficient	Std.Error	T-Statistic	Significant
(Constant)	2.532	.645	3.924	.000**
Mentorship	.002	.123	.014	.989
Motivation	.385	.119	3.241	.002**
Training Duration	-.019	.120	-.158	.875

F-Value 4.108 P-Value .011
N=53

** Correlation is significant at the 0.01 level.

* Correlation is significant at the 0.05 level.

R=44.5%, R-Sq=19.8%, Adj. R-Sq. =15.0%

Dependent Variable: Practical Skill Development

Source: Field Data Analysis, 2025

The figures under the B and beta of the unstandardized and standardized coefficients respectively constitute the regression coefficients for the corresponding independent variables. The unstandardized coefficients are the coefficients of the estimated regression model when the independent variables are measured in the same unit and the standardized figures are used when the units of measurement for the variables vary. The standardized coefficients make the regression coefficients more comparable by adjusting them. Since the independent variables were measured in different units, the figures of the standardized coefficient were used. The t-values and their corresponding p-values test the significance of each of the estimated regression coefficients. A significant coefficient means that the corresponding independent variable largely contributes to the significance of the overall regression model in explaining the dependent variable. Furthermore, the table reports the strength of the relationship between the model and the dependent variable practical skill development. The regression correlation coefficients (R) are the linear correlation between the observed and model-predicted values of the dependent variable. Its value of 0.445 indicates a moderate relationship. The coefficient of determination (R-Square) is the squared value of the regression correlation coefficients. It shows a value of 0.198 which means that 19.80% of the variability in the dependent variable practical skill development can be explained by the independent variables. With a Beta-value of 0.002 and p-value of 0.989, mentorship exceeds a statistical significance at the 0.05 level, and this is not a predictor of practical skill development. This means that there is highly insignificant positive relationship between mentorship and practical skill development. With a Beta-value of 0.385 and p-value of 0.002, motivation reaches statistical significance at the 0.01 level, and this is a predictor of practical skill development. This means that there is weak significant positive relationship between motivation and practical skill development. Lastly, the training duration was a weak negative insignificant predictor

of practical skill development. With the beta values of -0.019 and probability value of 0.875, it shows that the p-value is greater than the significance level of 0.05. This means that there is highly insignificant positive relationship between mentorship and practical skill development.

V. DISCUSSION OF FINDINGS

With a Beta-value of 0.002 and a p-value of 0.989 it indicates that mentorship does not significantly predict practical skill development. Despite a slight positive coefficient, the extremely high p-value suggests that the relationship is statistically insignificant at the 0.05 level. Even as mentorship is often praised for its role in professional growth, its effectiveness depends heavily on structure, quality, and context. Jin et al. (2024) found that mentor-apprentice dialogues can enhance practical knowledge only when mentors actively engage in reflective and strategic feedback. Looking at motivation, with a Beta-value of 0.385 and a p-value of 0.002 shows that motivation is statistically significant predictor at the 0.01 level. Although the relationship is described as weak, it is positively significant, meaning that higher motivation correlates with better practical skill development. Motivation, especially intrinsic motivation is a key driver of learning and skill acquisition. According to Tilt (2023), motivated individuals are more likely to persist through challenges, engage deeply with learning tasks, and seek mastery. This aligns with this result findings, which shows that reinforcing motivation is a meaningful factor in vocational training outcomes. Lastly, with a Beta-value of -0.019 and a p-value of 0.875 suggest that training duration has a weak negative and statistically insignificant relationship with practical skill development. Meaning that longer training periods do not necessarily translate to better skill outcomes, possibly due to diminishing returns or poorly structured programs. Faster Capital (2025) emphasizes that quality and structure of training matter more than duration. Overly long sessions can

lead to cognitive overload, while shorter, focused, and interactive training tends to be more effective. These findings support this, suggesting that duration

alone is not a reliable metric for skill development success.

Table 5: Challenges in Student Skill Development

	Challenges	Solution
1	Limited Practical Exposure: Many students lack hands-on experience, especially in technical or vocational fields. This gap between theory and practice hinders real-world readiness.	Institutions should integrate structured internships and project-based learning into curricula. For example, the SIWES program in Nigeria often suffers from short durations and poor alignments with academic goals. Salumi O. (2023) suggest that extending the program and aligning tasks with coursework can improve outcomes.
2	Poor Time Management: Students often struggle to balance academic, personal, and social responsibilities, leading to missed deadlines and ineffective learning.	Time management techniques like the pomodoro Technique and productivity apps (e.g., Trello, Forest) can help students organize tasks and reduce stress (Wolters et al, 2025)
3	Lack of Motivation: Skill development requires consistent effort, but boredom and burnout can sap enthusiasm.	Educators should foster intrinsic motivation by connecting skills to students' career goals and using gamified learning environments to boost engagement (Wolters et al., 2025)
4	Insufficient Supervision: During internships or practical sessions, students may lack proper guidance, leading to confusion and underperformance.	Establishing mentorship systems ensures students receive feedback and support throughout their learning journey (Salumi O. 2023)

VI. CONCLUSION

The study on mentorship and motivation as a panacea for practical skill development among polytechnic students reveals nuanced insights into the effectiveness of these variables. The statistical analysis shows that mentorship, despite its theoretical importance, does not significantly predict practical skill development. This suggests that mentorship programs may lack the depth, structure, or engagement necessary to influence skill acquisition meaningfully. The study suggest that mentorship only becomes impactful when mentors provide reflective and strategic feedback. Conversely, motivation emerges as a statistically significant predictor albeit with a weak positive relationship. This underscores the critical role of intrinsic motivation in driving students to persist, engage, and master vocational skills. This finding shows that motivated learners are more likely to overcome challenges and achieve competence. Lastly, training duration shows a weak negative and statistically insignificant relationship indicating that longer training periods do not necessarily enhance skill development, but quality and structure of training are more influential than mere length, with poorly designed programs potentially leading to cognitive fatigue and disengagement.

VII. RECOMMENDATIONS

1. Institutions should restructure mentorship frameworks to ensure mentors are trained in providing strategic, reflective, and personalized guidance. Pairing students with industry professionals or experienced instructors can enhance relevance and engagement.
2. Embed career relevance into coursework to help students see the value of their skills. Use gamified learning platforms and project-based tasks to make learning more interactive and rewarding
3. Redesign training modules to be shorter, focused, and skill-specific, avoiding cognitive overload. Align practical sessions with real-world applications to maximize impact.
4. Expand and improve programs like SIWES by increasing duration and aligning tasks with academic goals. Introduce simulation labs, maker spaces, and industry collaborations to bridge the theory-practice gap.
5. Integrate time management workshops and promote tools like Pomodoro Technique, Trello,

and Forest to help students balance responsibilities.

6. Assign dedicated supervisors or mentors during internships and lab sessions to provide real-time feedback and guidance. Monitor student progress through structured evaluation rubrics and regular check-ins.

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