

Field-of-Study and Job Mismatch among Lecturers in Tamale Technical University, Ghana

¹Aboko Akudugu, ²Mohammed Awal Kpahambang, ³Abudu Abdul-Ganiyu

Tamale Technical University, Department of Secretaryship and Management Studies, P.O. Box 3 E/R, Tamale, Ghana.

DOI: <https://doi.org/10.5281/zenodo.10040264>

Published Date: 25-October-2023

Abstract: This research utilised a descriptive survey to investigate field-of-study and job mismatch among lecturers at Tamale Technical University. Krejcie and Morgan (1970) table was used to select a sample of 123 lecturers from a total population of 181. Simple Random Sampling was employed to ensure a representative sample. University Graduation Manual for 2019 was used to ascertain lecturers' qualifications and designated departments. Both questionnaires and interviews were used as data collection instruments. Lecturers' demographic characteristics were analysed using frequency counts and percentages. Logistics regression computed at $p \leq 0.05$ was used to determine lecturers' motivation for studying mismatch fields. The results revealed that, approximately 53% of lecturers were still working in departments that did not align with their fields of study. The strongest predictor in the model was lecturers' ability to meet the financial demands of programmes with $p \leq 0.003$ and an odd ratio of 3.554. The study recommends for the setting up of a career development fund to support capable lecturers who are interested in pursuing programmes that are essential for their respective departments. Additionally, the study also recommends for policy flexibility to accommodate staff from departments offering practical, hands-on programmes.

Keywords: education, job mismatch, field of study, and level of study.

1. INTRODUCTION

Understanding the issue of field-of-study job mismatch concerning university lecturers is crucial as they play a vital role in shaping the skilled workforce required by industries (Palmer & Blake 2018 and Boudarbat & Chernoff, 2009). This topic has gained significant attention in recent policy discussions as policymakers seek ways to foster growth and innovation in both academia and industry. Consequently, comprehending the alignment between lecturers' fields of study and their job roles can optimise the returns on investments in human capital, skills, and education in general (Jones & Smith, 2022, & Healy & Morgan, 2009). Ensuring a positive match between the economic structure of society and its educational system is essential for sustainable economic development (Green, & Zhu 2010).

Education plays a pivotal role in developing competencies that directly contribute to enhanced productivity and higher earnings (Iammarino & Marinelli, 2012). Nevertheless, employers often face challenges in finding workers with skills that precisely meet the demands of specific job descriptions. Field-of-study job mismatch remains a prevalent global concern, with the OECD (2011) reporting that one in four workers is overqualified and one in three workers is underqualified for their jobs. Such mismatches pose real problems for the job market. Individually, a negative fit between acquired and required competencies can lead to unfavourable employment conditions (Dolton & Silles, 2008) and employee dissatisfaction (Green & Zhu, 2010). At the organisational level, education-job mismatches can result in reduced productivity and higher labour turnover, (Tulgan 2015, & Wyman, 2013), exacerbating field-of-study job mismatches and underutilisation of skills (Palmer & Blake 2018).

Field-of-study job mismatch is a prevalent issue in various economies worldwide. For instance, in France, approximately one in five workers reported their field of study did not align with their jobs in 1996 (Gbore, & Daramola, 2013). Montt (2015) revealed that field-of-study mismatches are most common in Australia, the United Kingdom, Italy, Japan, Korea, and the United States, where over 45% of workers fall into this category. Conversely, the lowest rates were found in Finland, Germany, and Austria at 23%, 26%, and 28%, respectively.

Montt (2015) also discovered that, on average across countries, about two-thirds of employees who were educated in "Science, mathematics, or computing" work in different fields, as do over 70% of those trained in "Humanities, languages, and arts" or "Agriculture and veterinary." These high mismatch rates may reflect lower market demand for graduates in these fields, leading them to seek employment opportunities in different domains or industries. It might also indicate greater transferability of skills from these fields, allowing graduates to work in diverse settings (Wolbers, 2003). For instance, around 85% of graduates from "Humanities, languages, and arts" fields in Australia, the United Kingdom, and Japan, as well as graduates from "Agriculture and veterinary" fields in Belgium, Korea, and Norway, are mismatched by their field of study. Conversely, approximately 30% of workers from "Health and Welfare" and 25% from "Social science, business, and law" backgrounds have mismatched fields of study. However, less than 20% of workers from the "Social science, business, and law" field in Canada, Denmark, Finland, Germany, Italy, the Netherlands, Norway, and Poland work in occupations unrelated to their field of study, as do around 15% of graduates from the "Health and welfare" fields in Austria and Finland (Tulgan, 2015 & Montt, 2015).

2. FIELD-OF-STUDY JOB MISMATCH IN TAMALE TECHNICAL UNIVERSITY

Although the expectation is that all lecturers should be assigned to departments or units that can fully leverage their acquired expertise, some academic departments within Tamale Technical University continue to face instances of field-of-study job mismatch, colloquially known in Ghana as "skirt and blouse qualifications." Several lecturers possess qualifications that have limited relevance to the effective functioning of the units they serve. For instance, lecturers in faculties of Engineering, Business, Applied Sciences, and Languages and Liberal Studies might hold qualifications that do not meet the standards required to be placed in those specific domains. Historically, the university utilised the Potential Base Recruitment approach to recruit lecturers who did not have requisite qualifications but demonstrated commitment and quest for knowledge. Some of them are able to eventually develop themselves to the required standards.

While some staff members are currently pursuing relevant programmes that match the needs of their departments, the practice of possessing mismatched qualifications have serious repercussions for the overall functioning of these units (Levy, & Murnane, 2004). This is particularly concerning, as up to 50% of lecturers in certain departments still hold mismatched qualifications (UGM, 2019). Such qualifications cannot be used for programmes accreditation in these departments, and lecturers with incongruous fields of study might lack the capacity to effectively contribute to programmes design and development due to limited understanding of the core activities within those departments (Rubb, 2003). As highlighted by Adodo (2007), teachers play a pivotal role in students' academic achievements, and effective tertiary-level education hinges on adeptly facilitated interactive communication. Addressing the issue of field-of-study job mismatch among lecturers is imperative as that will ensure the production of high-quality graduates and overall academic excellence (Darling-Hammond, 2000).

3. PROBLEM STATEMENT

As asserted by Crawford (2013), teachers hold a position of paramount importance in any education system, second only to students. Consequently, the qualities of teachers have a direct bearing on the calibre of graduates produced. Robst, (2007) further argued that teachers' qualifications can yield a positive influence on students' academic accomplishments. Research findings have established a positive correlation between specific subject qualifications of teachers and improved academic outcomes among students ((Gbore & Daramola, 2013)). In contrast, Sloane (2003) discovered that, employing unqualified teachers in South Africa had adverse effects on both teaching quality and performance. It follows, as emphasised by Ibukun (2009) that, the quality of an educational system cannot surpass that of its educators. Avoke (2016) highlighted that a significant proportion, 61%, of teachers within Ghana's colleges of education lacked the requisite qualifications for their teaching roles, prompting the University of Education, Winneba (UEW), to focus on enhancing the capabilities of these faculty members. According to UGM (2019), despite the inherent demand on all staff to align their qualifications, over 50% of teaching staff in certain departments at the University possess qualifications that do not match their designated fields. As a result, this study sought to investigate the instances of and determine the underlying motivations behind lecturers' pursuit of mismatched fields at Tamale Technical University.

4. OBJECTIVES OF THE STUDY

The study sought to;

- Ascertain field-of-study job mismatch of lecturers
- Determine the motivation for studying mismatched fields

5. THE SKILLS GAP THEORY AS A LENS FOR EXAMINING FIELD OF STUDY AND JOB MISMATCH

While the main objective of this study does not revolve around testing theoretical constructs, it is worthwhile to explore the implications of the skills gap theory in understanding the relationship between field of study and job mismatch. As emphasised by various scholars, the skills gap theory provides a valuable perspective on how disparities between the skills individuals possess and those demanded by the job market can lead to field of study-job mismatches (Jones & Smith, 2022, Palmer & Blake 2018, Tulgan 2015, Wyman, 2013).

5.1 Skills Gap Framework:

The skills gap theory posits that the evolving demands of the job market can create a discrepancy between the skills individuals acquire through education and those sought by employers. This discrepancy can result from rapidly changing technologies, shifting industry needs, and evolving job requirements (Wyman, 2013). While a person's field of study provides a foundational skill set, it might not include the full array of skills needed to excel in specific job roles (Ingersoll, 2002). As a consequence, individuals may find themselves underqualified for certain positions or, conversely, overqualified for others due to excess of skills.

In the context of field of study-job mismatch, the skills gap theory suggests that individuals might be equipped with some of the skills necessary for a job but lack others that are crucial for optimal performance. This mismatch occurs when employers' expectations do not align with the skills individuals have developed during their education (Palmer & Blake 2018). For instance, a person with a technical background might possess strong analytical skills but lack the interpersonal and communication skills required for a client-facing role.

The skills gap theory also underscores the importance of continuous learning and upskilling to bridge the divide between educational qualifications and evolving job requirements (Wyman, 2013). Given the rapid pace of technological advancements and changes in industries, individuals are encouraged to engage in lifelong learning to remain adaptable and relevant in the job market (Heijke, et al, 2003). Employers, on the other hand, play a vital role in offering training and development opportunities to address skills gaps and ensure their workforce remains competent and competitive (Wyman, 2013).

By incorporating the skills gap theory into discussions surrounding field of study-job mismatch, researchers and stakeholders can gain insights into the dynamic nature of the issue (Brynjolfsson & McAfee 2014). Recognising that skills demanded by the job market may extend beyond those acquired through formal education highlights the importance of flexible education systems, agile workforce development strategies, and a proactive approach to skills alignment (Tulgan, 2015).

6. MOTIVATIONS FOR PURSUING MISMATCH FIELD OF STUDY

Individuals may have various motivations for pursuing a field of study that appears to be a mismatch with their eventual career path. While this decision might seem counterintuitive, several factors can contribute to this phenomenon. Among others, some individuals may be driven by a strong passion for a particular subject or field, regardless of its direct relevance to their desired career (Chamlou 2005). Such individuals may have the propensity to prioritise personal interest and intellectual curiosity over practicality.

Cultural or familial expectations can influence an individual's choice of field of study (Law 2011). Pressure from parents, relatives, or societal norms might lead someone to select a certain field even if it doesn't align with their career aspirations. These are groups with the capacity to influence the decisions of persons who may rely on them for their opinions on certain programmes. Some families naturally would like their relatives to pursue certain courses because of their professional background. Besides, people can also decide to pursue programmes because of the influence of friends (Smart & Feldman,

2008). Equally, others can also resort to experts' opinions to select programmes. Thus, the study submits that, these groups could have influenced these lecturers to pursue such mismatched fields.

Financial constraints or the availability of scholarships might dictate an individual's choice of field (Crawford 2013). People in this bracket may have the inclination to opt for fields they can meet their financial obligations or offer programmes that have better financial prospects even if they don't match their career interests.

Equally, some individuals might not fully understand the requirements of their desired career when choosing a field of study from the initial stages of their careers (Smart & Feldman 2008). They might later realise the mismatch after gaining more insight into the industry.

Certain fields of study provide transferable skills that can be valuable in various careers (Wyman 2013). Individuals may believe that their skills can be applied broadly, allowing them to transition into their desired career despite the mismatch. Workers ability to transfer skills from one occupation to another could be a motivation for them to study mismatched fields. However, while some workers can perfectly transfer such skills across organisations, aspects of some skills cannot be transferred to different work settings. The ease of transferability largely depends on the former job and the successive ones (Arum, & Roksa, 2014). Following this, the study submits that, lecturers with skills that can be transferred are those that are motivated to study mismatched fields.

Additionally, some individuals may enter college or university without a clear career path in mind (Salazar-Xirinachs & Saavedra 2012). They might choose a field of study that they find interesting at the moment, with the expectation of figuring out their career direction later. Limited options or availability of specific programmes in certain educational institutions can lead individuals to also choose a field that may not be their ideal choice (Crawford 2013).

More so, some people choose a field of study for personal growth, believing that the skills and knowledge acquired will contribute to their overall development, even if it doesn't directly lead to their desired job. An individual might anticipate that their field of study will become more relevant in the future due to emerging trends or the intersection of disciplines (Law, 2011).

Another critical factor that students normally consider when opting for a particular programme is the possibility of them completing it on time (Chiswick, & Miller, 2009). This is important because, being able to complete the programme at the scheduled time would assist graduates put those qualifications into practice. Burns (2016) reported that, a private college in the UK was ordered to pay £5,000 to a former student who claimed that a certificate for a course she completed was issued a year late. In this particular study, it is assumed that, one of the motivations for lecturers pursuing mismatch fields is because they perceive them to be fields they can easily graduate. Certificates acquired could be used to search for jobs, gain promotions, wage increases and ultimately increase level of personal satisfaction (Salazar-Xirinachs & Saavedra 2012). Academic programmes that are respected for not graduating their students on time may receive less patronage from prospective applicants.

7. METHODOLOGY

This study employed descriptive survey to determine the motivation for lecturers studying mismatched fields. The survey design was used because it is flexible, efficient and the results are generalisable (Creswell, 2014). The population for the study was made up of all lecturers in Tamale Technical University for the 2021/2022 academic year. Krejcie and Morgan (1970) table was used to ascertain (123) respondents from a total of (181). Simple Random Sampling was used to select the required number from the population. The research instruments employed for the study were combination of questionnaire, interviews and extant document analyses. University Graduation Manual for 2019 was used to ascertain lecturers' qualifications and designated departments for analysis. A set of possible reasons for lecturers studying mismatched fields were developed by the researcher and subjected to extensive review by two experts in the field. Interview questions were developed with the support of extant literature and experts in the field. The questionnaire was validated with the help of experts and pre-tested to ensure reliability of cronbach's alpha of (0.83) before it was administered.

To measure the mismatch between field of study and current job, employees self-rating scale was employed. The dependent variable, field of study job mismatch was measured using a two point rating scale as; 1 - Similar, and 2 -Exactly. On the motivation for studying mismatched fields, lecturers were asked to indicate the extent to which they agreed to a set of factors being responsible for one pursuing an academic programme that is not related to his/her field of work as: 5 - strongly agree,

4 - agree, 3 - indifferent, 2 - disagree and 1 - strongly disagree. A total of 123 questionnaire were completed and returned by all participating lecturers. Data was analysed using the Statistical Package for Social Sciences (SPSS) version 20. Inferential statistics in the form of logistics regression computed at $P \leq 0.05$ was used to analyse the reasons for studying mismatched fields.

With respect to the interviews, limited interaction, intervening only when further clarification of issues was needed was employed to obtain data. This was used to ascertain the reasons for lecturers pursuing mismatched fields. The study relied largely on the use of field notes to capture running descriptions. This is in line with Neuman, (2011) recommendation that, jotting down notes will serve as a memory aid when full field notes are constructed. This was done as soon after interviews as possible, preferably the same day. Thorough reading was done on all transcripts and notes, so as to gain familiarity and extensive understanding of the materials pieced together as recommended by (Creswell, 2014). Following this, comparisons were made against data collected using questionnaire to establish similarities and differences.

8. RESULTS AND DISCUSSION

Lecturers' field of study and their designated departments were extracted from the 2019 University's Graduation Manual (UGM) that contained names, qualifications and departments of all the 181 teaching staff. Their field of study were categorised into two main parts namely; Education Job Match (EJM) and Education Job Mismatch (EJMM). The Education Job Match was made of lecturers whose highest field of studies had nominative relevance to the departments they were assigned to. As shown in table 1, 47% of lecturers in the University fall within this category. Computer Science department has the highest education job match 81.5%, followed by the Accountancy department 81.3%, while the departments with the least education job match are Industrial art 18.2% Electrical Engineering 20%, Mechanical Engineering 30.8% and HCIM 30.8% respectively. These lecturers pursued programmes that were considered to be department specific and were generally deemed to have qualifications that one must have before he or she could effectively function in those units. Besides using them for teaching and development of new courses, these qualifications are also required by regulatory bodies for purposes of accreditation and reaccreditation of academic programmes. Thus, the study maintained that, all lecturers with such qualifications were placed at their appropriate departments.

Education job mismatch arises where ones qualification does not match with what is exactly required at the department in terms of level or field which are classified in this study as 'Level of Education Job Mismatch (LEJMM)' and 'Field of Education Job Mismatch (FEJMM)'. As indicated in Table 1, about 52.4% of lecturers still function in mismatch departments. For this study, level of education job mismatch occurs when the qualification an individual uses for a job is relevant in terms of field, but lower than what is required. For instance, an instructor who holds an HND certificate qualification teaching in the same department requires a master's degree as an entry requirement to teach in the department in the same field. From the study, Computer Science, Accountancy, Marketing and Agricultural Engineering departments do not have lecturers in this category. However, some departments such as Fashion and Design 100%, Electrical Engineering 80% and Auto-mobile Engineering 60% have their lecturers falling under this category. This implies that, so many of them studied fields that are relevant to their assigned departments, but are lower in terms of levels since most of them have either diploma or first degree relative to a minimum of second degree required. The study observed that, the 'Potential Based Recruitment' principle was used to recruit these lecturers who still have the opportunity to close the gap by way of acquiring certificates that would match with the requirements of their respective units.

Lecturers are expected to have degrees that are in tandem with the human capital needs of their designated departments. Their highest field of study should be in line with the jobs they are required to perform. However, a mismatch in terms of field of study could occur if ones highest academic qualification does not have significant bearing on the core activities of the department he is placed. For instance, if a lecturer's highest field of study is Management, but is assigned to Auto-mobile Engineering Department, he or she is considered to be in mismatch unit. From table 1, about 26% of lecturers are placed in departments where their highest fields of study are not needed. Marketing tops the league with 54.5% followed by agricultural engineering with 50%, while the least is Building Technology with 12.2%. Most of these lecturers have their highest qualifications in different fields, a practice generally referred to as 'skirt and blouse' certificates in some Ghanaian circles. This development could have dire consequences on such departments as development of new courses could suffer. Besides, these qualifications cannot be used by the regulatory bodies for purposes of accreditation and reaccreditation of academic programmes since they are technically not needed in those units.

Interestingly, departments such as HCIM and Electrical Engineering recorded 100% and 80% respectively in terms of Level of Education Job Mismatch, but recorded nothing in the case of Field of Education Job Mismatch. On the contrary, Marketing and Agricultural Engineering recorded nothing in the case of Level of Education Job Mismatch, but registered 54.5% and 50% respectively in the Field of Education Job Mismatch. Thus, the point of contestation that naturally arises from these two scenarios is whether it would be in the interest of the institution to have more of the former than the later or the vice versa? Indeed, based on the theory of 'Potential Based Recruitment', those who fall under the category of LEJMM should be preferred since they can still learn to fill the gap.

Table 1: Lecturers Fields of Study and Designated Departments

<i>Departments</i>	<i>NL</i>	<i>EJM</i>	<i>EJMM</i>	<i>LEJMM</i>	<i>FEJMM</i>	<i>%EJM</i>	<i>%LEJMM</i>	<i>%FEJMM</i>
Computer Science	8	7	1	-	1	81.5	-	12.5
Fashion & Design	9	0	9	9	-	-	100	-
HCIM	13	4	9	9	-	30.8	34.6	34.6
Liberal Studies	30	19	11	2	9	63.3	6.7	30.0
Statistics/Maths	17	11	6	3	3	64.8	17.6	17.6
Accounting	16	13	3	-	3	81.3	-	17.7
Marketing	11	5	6	-	6	45.5	-	54.5
Sec/Mgt.	10	6	4	1	3	60.0	10	30.0
Agric. Eng.	16	8	8	-	8	50.0	-	50.0
Automobile	5	0	5	3	2	-	60.0	40.0
Building Tech.	16	7	9	7	2	43.8	43.8	12.2
Electrical Eng.	5	1	4	4	-	20.0	80.0	-
Industrial Arts.	11	2	9	6	3	18.2	54.4	27.4
Mechanical Eng.	13	4	9	7	2	30.8	53.8	15.4
Total	181	86	95	50	45			

Source: UGM (2019), Legend: NL = Number of Lecturers, EJM= Education Job-Match, EJMM – Education Job-Mismatch, LEJMM = Level of Education Job-Mismatch, FEJMM = Field of Education Job-Mismatch

9. MOTIVATION FOR STUDYING MISMATCH FIELDS

Logistic regression analysis was utilised to investigate the potential motives driving lecturers' decisions to pursue fields that don't align with their backgrounds. The model contained twenty independent variables. The overall model, including all predictors, demonstrated statistical significance, with X^2 (df – 19, N – 123) equating to 48.17 and $p < 0.001$. This indicates the model's capacity to differentiate between factors influencing lecturers who opt for mismatched fields and those that don't sway their choices. The comprehensive model accounted for between 32.4% (Cox and Snell R square) and 43.3% (Nagelkerke R square) of the variability in the rationales behind lecturers' pursuit of mismatched fields, accurately classifying 75.6% of instances. As depicted in Table 2, at a 95% confidence level, eight variables emerge as significant predictors within the model. These variables substantially contribute to the model's predictive capability, implying that these factors motivate lecturers to engage in mismatched field studies. The contributions of other variables to the model are relatively less significant.

The strongest predictor in the model is the ability of lecturers to meet the financial demands of programmes which recorded a $p < 0.003$ an odd ratio of 3.554. This indicates that, lecturers who perceive the financial cost of mismatch fields to be affordable are over three times more likely to pursue those programmes than those who are not motivated by this reason. In an attempt to solve this problem, University of Education Winneba (UEW) in Ghana has established a research scheme called 'Innovation and Staff Development Fund' to support needy staff build their capacities (Palmer & Blake, 2018, and Avoke, 2016). Equally, Smart & Feldman (2008) submitted that, government policy on subsidising education in a country could lead to high patronage for such programmes since most people may not have the financial muscles to pursue programmes of their choice.

Another significant predictor influencing lecturers' choices toward mismatched fields is the duration of the programme, with a noteworthy significance level of $p < .004$ and an odds ratio of 2.374. This aligns with assertions by Burns (2016) and Montmarquette et al. (2002) highlighting programme duration as a pivotal factor in students' decision-making. Timely

acquisition of certificates can facilitate job searches, promotions, wage increases, and overall personal satisfaction. Reference groups, including friends and experts, significantly contribute to lecturers' programme choices, with odds ratios of 1.316 and 2.130, respectively, as indicated in the model. Furthermore, marital status is a noteworthy determinant in lecturers' preferences for programmes, marked by a significance level of .030 and an odds ratio of 1.454. Other predictors in the model, such as ease of study, elevated social status, and transferable skill acquisition, also yielded significance, with odds ratios of 1.673, 2.192, and 1.535, respectively. However, predictors like experience and educational level held odds ratios below 1, signifying that lecturers are 0.601 and 0.622 times less likely to pursue mismatched fields.0266534685

Nevertheless, some scholars have contended that the current insistence on lecturers obtaining a minimum of a master's degree could lead to Credential Inflation (Arum & Roksa, 2014). They argue that not all programmes necessitate higher-level credentials, as some require repetitive practices for proficiency. Credential Inflation can arise due to changes in educational policies, teaching methods, or societal expectations (Stevens & Armstrong, 2009), potentially leading to devaluation of once-prestigious academic achievements. Advanced degrees might be granted without a commensurate increase in expertise or research (Altbach, 2004). Credential inflation raises concern since it can obscure the actual skills and knowledge possessed by individuals. Stevens & Armstrong (2009) assert that if a multitude of individuals hold similar high-level credentials without a corresponding increase in skills and knowledge, evaluating potential employees' abilities becomes challenging for employers and institutions.

Table 2: Motivation for studying mismatch fields

<i>Reasons</i>	<i>B</i>	<i>S.E</i>	<i>Sig.</i>	<i>Odd/Ratios</i>
Field offers exciting career opportunities.	-.039	.202	.504	.961
Field is easy to study	.515	.238	.030	1.673
Right qualification to study field	-.285	.224	.203	.752
Field is accessible	-.154	.201	.443	.857
Field is affordable financially	.990	.329	.003	3.554
It has good prospects for scholarships	-.088	.209	.663	.916
Field has high social status	.785	.411	.050	2.192
Field is suitable to one's age	-.351	.231	.128	.704
Fields is suitable to one's sex	-.096	.196	.625	.909
Family recommended field	.293	.205	.152	1.341
Marital status as a factor	.789	.363	.030	1.454
Experience as a factor to study field	-.509	.359	.156	.601
Duration of study in field as a factor	.984	.337	.004	2.374
Friends recommended field	.684	.271	.047	1.316
Experts recommended field	.756	.351	.031	2.130
Institution accepts field of study	.221	.189	.243	1.248
Physical condition accepted by field	-.146	.197	.458	.864
Lack of interest to use previous skills	.132	.216	.540	1.141
Ability to transfer skills	.728	.239	.043	1.535
Level of education	-.475	.367	.195	.622
Constant	1.633	.708	.000	1.502

Source: Field Survey 2016; $P \leq .05$

In an interview with a personnel at the human resource unit, he reported that,

The current development is pushing staff to procure qualifications from sources that are not accredited. Some courses do not necessarily require higher level qualifications to be able to function effectively. Repetitive hands-on effective practice can equip staff in practicals oriented departments with the needed competencies to deliver on their mandates (IDI, 2022)

A head of department submitted that,

Some lecturers are unable to contribute effectively in new programmes developments because their highest fields of studies did not have nominative relevance to the departments they were assigned to (IDI, 2022)

Another head of department asserted that,

Some have even gone back to schools to pursue programmes that are department specific. The University has a policy not to sponsor lecturers who pursue programmes that are not seminal to the requirements of departments they are placed. (IDI, 2022)

Equally, an officer from the personnel department contended that,

Some lecturers have been denied promotions because their fields of study did not have significant bearing on the departments they were serving. Such qualifications cannot be used for accreditation and reaccreditation purposes since they are not foundational enough to be accepted by the regulatory bodies (IDI, 2022)

Dolton, & Silles (2008) asserted that, a proper match between education and employment reduces the need for further training within the firm. Gbore, & Daramola, (2013) found that, for society in general, an appropriate field-of-study job-match leads to productivity increase derived from efficient use of human capital.

10. CONCLUSION AND RECOMMENDATION

The outcomes of this investigation reveal that out of the examined factors, eight hold notable influence over lecturers' inclination toward fields that don't match their backgrounds. Among these elements, the financial expenditure associated with programmes stands out as the most potent predictor within the model. Conversely, lecturers' experience exhibited the lowest odds ratio in relation to their pursuit of incongruous fields at Tamale Technical University. Additionally, the study highlights a potential concern: if not managed effectively, the policy could inadvertently spark a competitive rush for credentials, which in turn could contribute to the escalation of credential inflation.

Based on these findings, the study recommends for the implementation of a financial subsidy policy to provide support for lecturers aspiring to pursue further studies but facing financial constraints. This subsidy would alleviate the monetary burden associated with such educational pursuits. Furthermore, the proposed policy should be flexible for lecturers in departments where hands-on skills are of paramount importance to reduce the tendency of credentialing arms-race.

11. STUDY LIMITATIONS AND AVENUES FOR FUTURE RESEARCH

The scope of this study was confined to only lecturers at Tamale Technical University during the 2021/2022 academic year. The distinct characteristics of this university could potentially limit the applicability of the findings beyond its boundaries. The study exclusively utilised data specific to the participating lecturers, thereby constraining its generalisability to similar institutions. Future research should expand its scope to cover other training institutions both within the country and internationally. Furthermore, the conclusions drawn from the small sample size utilised in this study might not be readily extended beyond the population from which the sample was drawn. To enhance external validity, it's recommended to augment the sample size, rendering the research more representative. Although the findings and conclusions might not possess widespread representativeness, they can establish a foundational reference for future studies of a similar nature within Ghanaian universities.

REFERENCES

- [1] Adodo, S. O. (2007). Effect of diagnostic remediation instructional strategies and students learning outcomes in junior secondary school Integrated Science. Unpublished Ph.D Thesis, University of Ado-Ekiti, Ekiti State.
- [2] Altbach, P. G. (2004). Globalisation and the university: Myths and realities in an unequal world. *Tertiary Education and Management*, 10(1), 3-25.
- [3] Arum, R., & Roksa, J. (2014). *Aspiring Adults Adrift: Tentative Transitions of College Graduates*. University of Chicago Press.
- [4] Avoke, M. (2016) '61% of Teachers in Tertiary Institutions Unqualified': University of Education Winneba (UEW) Survey. (<http://www.myjoyonline.com/news/2016/april-26th/>)
- [5] Boudarbat and Chernoff, (2009): The Determinants of Education-Job Match among Canadian University Graduates: Discussion Paper No. 4513

- [6] Brynjolfsson, E., & McAfee, A. (2014). "The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies." W. W. Norton & Company.
- [7] Chamblou, N. (2005). "Learning to Compete: The Performance Advantage of Human Capital." World Bank Publications.
- [8] Chiswick, B., & Miller, P. W. (2009). The international transferability of immigrants' human capital skills. *Economics of Education Review*, 28(2), 152–169
- [9] Crawford, K. (2013). "Can I Do What I Love and Still Pay the Bills?": Predicting Major Choice and Objective Success." *Sociological Perspectives*, 56(2), 201-220.
- [10] Creswell, J. W. (2014) *Research Design: Qualitative, Quantitative, and Mixed Method Approaches*. Sage Publications
- [11] Darling-Hammond, L. (2000). Teacher quality and students' achievement. *Education Policy Analysis Archives*. 10 (36) 16-38.
- [12] Dolton, P.J. and Silles, M.A. (2008) The effects of overeducation on earnings in the graduate labour market, *Economics of Education Review*, 27: 125–139.
- [13] Gbore, L. O., & Daramola, C. A. (2013). Relative contributions of selected teachers' variables and students' attitudes toward academic achievement in biology among senior secondary school students in Ondo State, Nigeria. *Current Issues in Education*, 16(1). Retrieved from <http://cie.asu.edu/ojs/index.php/cieatasu/article/view/809>
- [14] Green, F. and Zhu Y. (2010) Overqualification, job dissatisfaction, and increasing dispersion in the returns to graduate education, *Oxford Economic Papers*, 62: 740–763.
- [15] Healy, A. and Morgan, K. (2009), Spaces of Innovation: learning, proximity and the ecological turn, Utrecht University, Papers in Evolutionary Economic Geography (PEEG), No. 0918.
- [16] Heijke, H., Meng, C. and Ris, C. (2003) Fitting to the job: the role of generic and vocational competencies in adjustment and performance, *Labour Economics*, 10, 215-229.
- [17] Iammarino, S. and Marinelli, E. (2012): Education-job (mis)matching and interregional migration: Italian university graduates' transition to work; CIMR research working paper series; Working paper no.8; Houghton Street London WC2A 2AE United Kingdom.
- [18] Ibrahim, B.A. (2000). Relationship of teachers' personal variables with their job performance and students' academic achievement in Kogi State secondary schools. Unpublished Ph.D thesis, University of Ilorin, Ilorin.
- [19] Ibukun, W. O. (2009). Building the future: Invest in teachers now. A paper presented at the Ondo State world teachers day Monday, 5th October.
- [20] Jones, J. and Smith, H.A. (2022), "A comparative study of formal coaching and mentoring programmes in higher education", *International Journal of Mentoring and Coaching in Education*, Vol. 11 No. 2, pp. 213-231. <https://doi.org/10.1108/IJMCE-03-2021-0054>
- [21] Judith Burns J. (2016) Private College ordered to pay £5,000 to former student. BBC 4 July 2016
- [22] Ingersoll, R.M. (2002). Out-of-Field Teaching, Educational Inequality, and the Organization of Schools: An Exploratory Analysis. Retrieved from <http://www.cpre.org/RI-01-2014.pdf>.
- [23] Montmarquette, C., Cannings, K., & Mahseredjian, S. (2002). How do young people choose majors? *Economics of Education Review*, 21(6), 543–556.
- [24] Law, S. (2011). "Why Do Students Choose Engineering? A Preliminary Study of Motivation and Career Aspirations." *Journal of Engineering Education*, 100(1), 123-143.
- [25] Levy, F., & Murnane, R. J. (2004). "The New Division of Labor: How Computers Are Creating the Next Job Market." Princeton University Press.

- [26] Montt, G. (2015), "The causes and consequences of field-of-study mismatch: An analysis using PIAAC", OECD Social, Employment and Migration Working Papers, No. 167, OECD Publishing, Paris.
- [27] Neuman, W. L. (2011) *Social Research Methods: Qualitative and Quantitative Approaches*. Seventh Edition: Allyn and Bacon
- [28] OECD. (2011). OECD statistics portal. Available at: <http://stats.oecd.org/WBOS/index.aspx>. Accessed: March 2011.
- [29] Palmer, K., & Blake, D. (2018). "The Expertise Economy: How the Smartest Companies Use Learning to Engage, Compete, and Succeed." Nicholas Brealey Publishing.
- [30] Robst, J. (2007b), "Education, College Major, and Job Match: Gender Differences in Reasons for Mismatch", *Education Economics*, 15(2), pp. 159-175.
- [31] Rubb, S. (2003). "Overeducation: A Short or Long run Phenomenon for Individuals?" *Economics of Education Review* 22: 389 – 94.
- [32] Salazar-Xirinachs, J. M., & Saavedra Chanduví, J. (Eds.). (2012). "Bridging the Skills Gap: Innovations in Africa and Asia." Palgrave Macmillan.
- [33] Smart, J. C., & Feldman, K. A. (2008). "Higher education, capitalism, and the student as consumer." In *Higher education: Handbook of theory and research* (Vol. 23, pp. 357-386). Springer.
- [34] Sloane, P.J. (2003), "Much Ado about Nothing? What Does the Overeducation Literature Really Tell Us in F. Büchel, A. de Grip, Antje Mertens, Over education in Europe: Current Issues in Theory and Policy, pp. 11-45.
- [35] Stevens, M. L., & Armstrong, E. A. (2009). Introduction: The Contemporary Academic Labor Market. *Review of Higher Education*, 32(4), 455-460.
- [36] Tulgan, B. (2015). "Bridging the Soft Skills Gap: How to Teach the Missing Basics to Today's Young Talent." Wiley.
- [37] Wolbers, M.H.J. (2003), "Job Mismatches and their Labour-Market Effects among School-Leavers in Europe", *European Sociological Review*, 19(3), pp. 249-266.
- [38] Wyman, N. (2013). "The Skills Gap: How Companies Can Keep the Workers They Have and Find the Ones They Need." Penguin.