

# The Impact of Teachers' Qualifications on Teaching and Students' English Achievement: A Case Study in the Department of English Language, Faculty of Languages, Souphanouvong University

**Chansy Yangxaypor\*, Somsack Phetsamai and Toulakone Souliya**

Souphanouvong University, Luangprabang, Lao PDR

E-mail: yangxayporchansy@hotmail.com\*, somsack79@gmail.com and souliya\_su@yahoo.com

\*Corresponding author

(Received: 8 September 2025, Revised: 6 January 2026, Accepted: 8 January 2026)

<https://doi.org/10.57260/csdj.2026.283474>

## Abstract

The purpose of this study was to investigate the impact of teacher's qualifications on teaching and students' learning English achievement in the Department of English language Faculty of Languages, Souphanouvong University. Teacher qualification is very important because it directly affects students' achievement. Student achievement was considered as dependent variable, and teacher educational qualification, subject major, teaching experience, and professional experience were considered as the independent variables. The researcher selected all the teachers who taught English classes and the English students from year 1 to year 4 for this research study 16 questionnaires were distributed among the English teachers in the English Department. The response rate of the teachers was 100% and 111 questionnaires were sent to the English students Department from years 1 to year 4. The response rate of the students was 82.80%. for both teachers' qualifications and students' learning English achievement in the Department of English Language on five-point Likert scales as the scaling method. The results reveal that most of the teachers have experience and hold their own expertise qualifications in teaching. And students have average to high academic achievement at each level. Therefore, professionally trained English language teachers are seen to have a better mastery of the subject in the classroom. They usually create the right environment for students to maintain a positive attitude towards the subject and perform better too. This study has buttressed the fact that teachers' qualification affects students' achievement in English language. The study has also shown that teacher's qualification has a significant relationship between with student's achievement and attitude towards English language.

**Keywords:** English learning achievement, Impact, Teacher qualifications, University students

## Introduction

More people use English today than have used any other language in the history of the world (Crystal, 1997). Language teaching is influenced by ideas on the nature of language (language theories) and the learning conditions that enable learners to acquire the language (learning theories). Differences in language theories may affect the selection of the teaching materials, and differences in learning theories may affect the teaching methods (Setiyadi, 2020). International virtual studies of educational achievement have become a crucial source of information for policymakers involved in education. To promote student performance in subject, it is important to determine which factors influence students' achievement. Such an understanding will aid in the development of new interventions for influencing the factors, thus, enhancing student achievement in the English language. Students' achievement in the English language depends on a complex relationship of factors both within and outside the classroom. These factors range from the teacher's background - level of education, subject majors, and years of experience, to the professional development the teachers have received to support their teaching, and to the learning practices the teachers use to accomplish their teaching, among other factors. Teacher education level and teacher experience, two main attributes of teacher quality, have gained attention and have been the focus of many investigations. However, the relationship between student achievement and both teacher education level and experience are in conflict, with some suggesting a positive relationship and others suggesting no relationship (Goldhaber et al., 2004). Researchers and policymakers have regarded improving teacher quality as a successful way to improve student achievement (Darling & Youngs, 2002).

By improving our understanding of these areas, administrators, researchers, and policymakers will better understand which teacher characteristics have the greatest impact on student science achievement. This will also enable researchers and policymakers to design more effective intervention programs to influence teacher behavior. (Opdenakker & Van Damm, 2006). As Wenglinsky (2002) has suggested, a teacher cannot be determined to be qualified by checking his or her education level, years of experience, or teaching certificate. Teachers influence students through their interactions with them, especially in the classroom. Thus, although important, teacher education level and experience only represent a portion of the ability to manage the classroom efficiently and to promote student achievement. According to Obeka (2021), a teacher's qualification is defined as the type of professional education for teaching that the teacher has received, which relates to the acquisition of relevant knowledge, skills, competence, and creativity needed for quality, productive engagement in the teaching profession. Agbor et al. (2023) suggested that the teachers' primary role of transmission of knowledge and skills cannot be overemphasized. In this case, a teacher's qualification plays an important role in teaching. As Koirala (2022) claimed that students' learning can be influenced by teacher characteristics such as teacher qualifications, level of degrees, years of experience, preparation in subject matter and pedagogy, use of technology, certification in their expertise area, and their ongoing professional development. He further indicated that "in many countries, teachers' qualifications that are considered to be related to students' learning have become a desirable target of teachers' education reform. Teaching activities produce changes in the learners by increasing the amount and quality of information, understanding of basic principles in the subject matter, inculcating abilities, and a positive or desirable attitude towards the subject matter.

According to Stronge (2002), a growing body of research concerning teacher quality has reinforced the notion that both teacher preparation and qualification and teaching practice matter in teaching, in terms of student achievement. In order for a clearer discussion, this study focuses exclusively on teacher preparation and qualification, more specifically, on teacher qualifications as a single aspect of teacher quality. According to this evidence, teacher qualification is one of the major factor to determine the student achievement. The Bush Administration's proposal, which specifies what defines a "highly qualified" teacher, is based on the premise that teacher excellence is vital to realizing improved student achievement. This legislation, along with typical hiring and compensation systems, assumes that years of teaching experience, teacher certification, engagement in certain types of coursework, and performance on standardized assessments are indicators of high-quality teachers (Rice, 2003).

### **Problem Statement**

Whether the teachers' qualifications and students' learning English achievement in the Department of English Language, Faculty of Languages, Souphanouvong University. This study investigated the following research questions bas on the problem:

1. How does the teachers' qualifications for teaching and students' learning English achievement?.
2. How does teachers' qualifications attitude towards the English language?.

### **Objective of the Study**

The main objective of the study is to analyze the effect of teachers' qualifications on students' achievement in the English language. In order to materialize this broad objective, the following objectives have considered:

1. To identify the teachers' qualifications level for teaching and students' learning English achievement.
2. To evaluate the teachers' qualifications for teaching and students' learning English achievement.

### **Literature Review**

#### **Student Achievement**

The student performance is affected by various factors. These factors have been to influence student achievement can be categorized into three types: school-related factors, student related factors, and teacher related factors (Dossett & Munoz, 2003). Among these three, teacher quality is the most important school-related factor influencing student achievement (Rice, 2003). Quality teachers are often seen simply as "good" teachers and are considered to be those who exhibit

Desirable traits and uphold the standards and norms of the profession. Quality teachers are also considered to be those who bring about "student learning. These teachers are called "effective" (Berliner, 2005) or "successful" (Fenstermacher& Richardson, 2005). Teacher quality usually refers to these two broad areas: teacher preparation and qualifications, and teaching practices (Lewis et al., 1999). Teacher qualification and preparation concerns the inputs that teachers bring to the school, including postsecondary education, certification, prior professional work experiences, subject Major, professional development, demographics, and aptitude. Teaching practices involve in the actual quality of teaching that teachers exhibit in their classroom. Some researchers classified teaching practice as teaching quality and teacher preparation and qualification as teacher quality (Kaplan & Owings, 2001). Teaching practices or teaching quality refer to what teachers do to promote student learning, including creating a positive learning climate, selecting appropriate instructional goals and assessments, using the curriculum effectively, and knowing how to use various instructional methods to teach to high

standards. “Conceptually, measuring teaching quality ought to be a high priority of any examination of teaching and learning, since, literally defined, it represents the direct effect on students by teachers as they create their classroom. While teacher preparedness and qualifications may not directly address the actual quality of teaching and student learning, they are necessary prerequisites of effective teaching (Stronge, 2002). Some well-established indicators of teacher preparation and qualifications, such as teachers’ education credentials, their subject knowledge and their certification type, do inform researchers and policymakers in terms of how well-prepared teachers are to take on the assignments they are handed (Lewis et al., 1999).

### **Teachers’ Level of Education**

The teachers’ level of education is a crucial factor in determining student achievement. It was categorized according to the highest qualification the teachers obtained, namely Certificate, Diploma, Bachelors, Masters or Doctoral degrees. A number of studies have examined the ways in which teachers’ highest qualifications are related to students’ achievement. Many of the studies found that teachers’ qualifications correspond positively with students’ achievement. Betts et al. (2003) found that teachers’ highest degree correlates positively with students’ achievement. Rice (2003) found that when teachers have an advanced degree in their teaching subjects it has a positive impact on the students’ achievements. In addition, specifies that highly qualified teachers must have minimum of a bachelor’s degree. The studies have focused on whether teachers with a master’s degrees or greater have a significantly greater impact on student achievement (Greenberg et al., 2004).

### **Teachers’ Teaching Experience**

Teacher experience is the number of years a teacher has taught. Several studies found teachers’ years of experience to positively correlate with students’ achievement. Betts et al. (2003) found that teachers’ experience significantly correlates with students’ achievement in mathematics. A report by the Centre for Public Education stated that research has been consistent in finding positive correlations between teaching experience and higher students’ achievement. Teachers with more than five years teaching experience are found to be the most effective while inexperience is shown to have strong negative effect on students’ performance. Greenwald et al. (1996) in their meta- analysis of data from 60 studies found that teachers’ years of teaching experience positively correlates with students’ achievement.

### **Teachers’ Professional Development**

Teachers’ professional development refers to the opportunities offered to practicing teachers to develop new knowledge, skills, approaches and dispositions to improve their effectiveness in their class rooms (Loucks-Horsley et al., 1998). Cavalli et al. (1997) show that teachers’ professional development has positive effects on students’ achievement, but the issue is that it has to be long-term.

## **Methodology**

Material and methods of the present study are outlined below

### **Research Methodology**

It describes research design, population and sampling strategy, data sources, measurement, reliability & validity, and mode of analysis. This research will be an explanatory study. The emphasis here is on studying a situation or a problem in order to explain the relationship between variables. The study involves the quantitative approach.

## Population and Sampling Techniques

The study population consisted of 19 English teachers and 111 English students in the Department of English Language, Faculty of Languages, Souphanouvong University, Done Mai Village Luangprabang. Even though this study selected in the English teachers and students in the Department of English language using stratified random sampling.

## Data Sources and Instrumentation

A structured self-administered questionnaire will be used to collect data from the participants. Primary data will be collected through the questionnaire. It was adapted and included 19 teacher qualification questionnaires, 111 English students' questionnaires, achievement measured on five- point Liker scale (Strongly agree to strongly Disagree). The values are recorded as follow: strongly agree scale 1, agree 2, agree a little 3, disagree 2, strongly disagree 1. Secondary data will be collected from research studies, books, journal articles, and ongoing academic working papers. The collected data will be processed and analyzed on order to make the study useful to the practitioner, researchers, policy makers, and academicians. The study will be proceed carefully throughout the whole process of data collection through questionnaires. Cronbatch alpha is an important concept in the evaluation of assessment of questioner. By cronbbatch alpha. In addition to the above, the secondary data for the study were mostly drawn from publication bodies. Therefore, these data may be considered reliable for this study.

The study involved a quantitative approach. The researcher ensured the quality of the tools by following the steps below, based on Likert, (1932):

1. Reviewed the related articles, principles, and theories based on how to create the tools.
2. Created the questionnaires that were consistent with the intended objectives.
3. Took the questionnaires to 3 experts to check the accuracy and appropriateness of each question and to check the consistency between the questionnaire and the behavioral objectives, and used the TAP Program to check for a consistency score of 0.67-1.00
4. Revised the students' questionnaire and then piloted it with 35 students in the Faculty of Economics and Tourism to determine the reliability of the questionnaire using the alpha coefficient; the reliability of the questionnaire was equal to 0.93.

## Tools

Structured self-administered questionnaires were used to collect data from the participants. All the questionnaires were in English. The teachers' questionnaire used a 5-point, 4-point, or 3-point Likert scale, depending on the section, and the students' questionnaire used a 4-point Likert scale. The sections of these 2 sets of questionnaires are indicated below:

1. The questionnaire for teachers with 5 aspects:
  - University's and teachers' emphasis on academic success (5-point Likert scale)
  - About being an English teacher (5-point Likert scale)
  - Teacher academic qualifications (4-point Likert scale)
  - University environment (4-point Likert scale)
  - Teachers' opinion about students' issues (3-point Likert scale)
2. A questionnaire for students with 4 aspects (all aspects are 4-point Likert scale)
  - How I learn English
  - Learning English at the faculty
  - Motivation for studying English
  - Self-confidence in learning English

### Data collection

The researcher obtained formal authorization to commence data gathering work. The official request was initially presented by the researcher to the science and research office, which falls under Souphanouvong University. The request letter upon approval, forwarded permission to the faculty of languages that were involved in data collection. Upon obtaining institutional authorization, the researcher visited the department of English language, and distributed the questionnaires to the faculty members and students in person. The researcher distributed questionnaires to the participants for two main reasons: 1) to ensure the teachers' qualifications, and 2) student's English achievement. Both target participants were in the Department of English language. The response rate of 19 teachers was 84.21%. However, the response rate from the students in year 1 to year 4 was 83.63%. The missing questionnaires were from year 4 because some of them were preparing for an internship.

### Data Analysis

Data analysis and coding were done by using a software package. The process of analysis was multistage. The dataset underwent an initial evaluation to ensure its data quality. This was through checking for inconsistent entries, unusual values, and data missing points. The researcher carried out a descriptive statistical analysis by calculating mean values and standard deviations.

## Results

### 1. Results of a study on teachers' teaching qualifications and students' English language learning achievement.

**Table 1** Analysis of Teacher Questionnaires

Item	Mean	Standard Deviation
University's and teachers' emphasis on academic success (on 5-point Likert scale)	3.01	0.98
About being a teacher (on 5-point Likert scale)	3.99	0.98
Teacher academic qualifications (on 4-point Likert scale)	3.52	0.74
University environment (on 4-point Likert scale)	3.58	0.73
Teacher opinion(on 3-point Likert scale)	2.95	1.05
<b>Total</b>	<b>3.41</b>	<b>0.89</b>

The study found that teachers' qualifications impact on students' learning English achievement at the Department of English, Souphanouvong University, in 5 aspects, with a total value of (Mean = 3.41, Standard Deviation = 0.89). When considered in terms of aspect. The first aspect was about being a teacher (Mean = 3.99, Standard Deviation = 0.98), the second aspect was University and teachers emphasizes on academic success (Mean = 3.01, Standard Deviation = 0.98). The next aspect was the university environment (Mean = 3.58, Standard Deviation = 0.73). The fourth aspect was the teachers' academic qualifications (Mean = 3.52, Standard Deviation = 0.74), and the last aspect was teacher opinion (Mean = 2.95, Standard Deviation = 1.05).



## 2. Results of an evaluation of teachers' teaching qualifications and students' English language learning achievement.

**Table 2** Analysis of Students Learning English Achievement Year 1

Item	Mean	Standard Deviation	Meaning	Rank
How I learn English	3.08	0.71	Moderate level student achievement	1
Learning English in the faculty	2.88	0.77	Moderate level student achievement	4
Study English motivation	2.97	0.73	Moderate level student achievement	3
Self-confident in learning English	2.98	0.75	Moderate level student achievement	2

Year 1: The first prominent aspect was how do I learn English, (Mean = 3.08, Standard Deviation = 0.71). The second aspect was self-confidence in learning English (Mean = 2.98, Standard Deviation = 0.75) next aspect was to study English motivation (Mean = 2.97, Standard Deviation = 0.73). And the last aspect was Learning English at the faculty (Mean = 2.88, Standard Deviation = 0.77).

**Table 3** Analysis of Students Learning English Achievement Year 2

Item	Mean	Standard Deviation	Meaning	Rank
How do I learn English	2.89	0.65	Good student achievement	1
Learning English in the faculty	2.83	0.70	Moderate level student achievement	3
Study English motivation	2.76	0.71	Moderate level student achievement	4
Self-confident in learning English	2.83	0.75	Moderate level student achievement	2

Year 2: the first prominent aspect was study motivation (Mean = 2.89, Standard Deviation = 0.65). The second aspect was self-confidence in learning English (Mean = 2.83, Standard Deviation = 0.75). The next aspect was Learning English at the faculty (Mean = 2.83, Standard Deviation = 0.70). And the last aspect was studying English motivation (Mean = 2.76, Standard Deviation = 0.71).

**Table 4** Analysis of Students Learning English Achievement Year 3

Item	Mean	Standard Deviation	Meaning	Rank
How do I learn English	3.14	0.77	Good student achievement	1
Learning English in the faculty	2.94	0.81	Moderate level student achievement	3
Study English motivation	3.05	0.79	Good student achievement	4
Self-confident in learning English	3.14	0.77	Good student achievement	2

Year 3: The first prominent aspect was how I learn English (Mean = 3.14, Standard Deviation = 0.77). The second aspect was self-confidence in learning English (Mean = 3.14, Standard Deviation = 0.81). Learning English in the faculty (Mean = 2.94, Standard Deviation = 0.702). And the last study English motivation (Mean = 3.05, Standard Deviation = 0.79).

**Table 5** Analysis of Students Learning English Achievement Year 4

Item	Mean	Standard Deviation	Meaning	Rank
How do I learn English	2.97	0.86	Good student achievement	4
Learning English in the faculty	3.01	0.78	Moderate level student achievement	2
Study English motivation	3.13	0.79	Good student achievement	1
Self-confident in learning English	2.98	0.76	Good student achievement	3

Year 4: The first prominent aspect was studying English motivation (Mean = 3.13, Standard Deviation = 0.79). The second aspect was to learn English in the faculty (Mean = 3.01, Standard Deviation = 0.78) was how do I learn English (Mean = 2.98, Standard Deviation = 0.76). And the last aspect was self-confidence in learning English (Mean = 2.97, Standard Deviation = 0.86).

## Discussions

The study indicates that teachers' qualification affects students' achievement in the English language. The Mean value of teachers is 3.87, and the statistical deviation is 0.97. Findings have shown in that there is a positive correlation between teachers' qualification and students' learning English achievement in English language. Thus the hypothesis is rejected depicting that there is a significant relationship between teachers qualification and students achievement in English. This study has shown that most teachers' who teach English language in the Faculty of Languages, Souphanouvong University are professionally qualified to do so. The findings of this study also agree with that of Obeka (2021). The findings of this study corroborate with Akinsolu (2010), and Fakeye (2012) observe a significant joint contribution between teachers' qualification and subject teachers mastery on students' English achievement. Students taught by teachers with higher qualification performed better than those taught by teachers with lower qualification. Similarly, studies carried out by Owolabi & Adedayo (2012) also revealed that students taught by teachers with higher qualifications performed better than those taught by teachers with lower qualifications. However, the findings of this study agree



with Tazilabong (2019) whose study showed a positive relationship between teachers' qualification and students' attitude. The findings of this study also agree with Uche & Osiah (2011) whose study revealed that professionally qualified teachers tend to interact with their students more effectively giving room for positive attitude towards the subject than academically qualified teachers. The study found that teachers' qualifications impact on students' learning English achievement at the Department of English, Souphanouvong University, in 5 aspects. When considered in terms of aspect. The first aspect was about being a teacher, the second aspect was University and teachers emphasizes on academic success. The next aspect was the university environment. The fourth aspect was the teachers' academic qualifications, and the last aspect was teacher opinion. The result of this study is consistent with Darling-Hammond (2000), teacher quality and student achievement education analysis, Richardson (2008), Buddin & Zamarro (2009), teacher qualifications and student achievement in Mathemeatics and Antony & Elangkumaran (2020), the impact of teacher qualifications on students' achievement in Science. On the other hand, the results of this study is not consistent with Maphoso & Mahlo (2015) teacher qualification and pupil academic achievement, impact of teacher qualification on student achievement at the elementary and middle school levels.

### Conclusion and suggestions

The main objective of this researcher is to identify the impact of teachers' qualifications and students' English achievement in the Department of English language, Faculty of Languages, Souphanouvong University. The researcher identified 5 factors of teachers' qualifications and 4 factors for students' learning English achievement under the literature review. They were University and teachers' emphasis on academic success, about being a teacher, teacher academic qualifications, university environment and teachers' teaching opinion. The research was designed, and hypotheses were formulated accordingly. One questionnaire was used to collect the data from the teachers who work in the English Department, Faculty of Languages. The teachers' academic qualifications and the factors that highly affected their students' English achievement were examined. According to the findings, students were satisfied with their learning achievement. They have a moderate level on each level. In addition to this finding, a strong positive relationship was found between teaching experience and student learning performance, teachers' emphasis on academic success, and student motivation to study English. There was one of the factors that was not appropriate between teachers' qualifications and students' English achievement. In addition to these to five factors (University and teachers' emphasis on academic success, about being a teacher, teacher academic qualifications, university environment). Was the highest influenced and positively, significantly on students' English achievement. Based on this it can be argued that one factor that was not appropriate and negatively significant was that teachers thought that some of the students from year one and other levels they lack of prerequisites knowledge, the four basic English skills, and support in using information technology. As mentioned earlier, there were 4 factors for students' learning English achievement. Based on this finding, students were satisfied with four factors that also have positively and significantly influenced on students' English achievement.

## Recommendations

1. The government should ensure that only professionally qualified teachers should be employed to teach the English language in universities.
2. The government should provide funds for continuous professional development programmes for English language teachers should upgrade their skills to make them more competent in the delivery of their jobs.
3. Teachers should evolve effective and more innovative strategies for teaching the subject so as to develop a positive attitude towards the subject amongst the students.

## New knowledge and the effects on society and communities

Teachers are important key players in teaching English language at education sector level, it is important that they have a good knowledge of the subject matter. According to teacher quality is understood to be the greatest predictor of academic success. It then follows that a teacher's professional development can improve classroom instruction and students achievement. The National Policy on Education states that the quality of education system depends very much on the competence, commitment and motivation of the teachers. On the other hand teachers' qualification has an effect on students' attitude as seen from study findings showing that there is a significant relationship between teachers qualification and students attitude to English language.

## References

- Akinsolu, A. O. (2010). Teachers and Students' Academic Performance in Nigerian Secondary Schools: Implications for Planning. *Florida Journal of Administration and Policy*, 3(2), 86-103. <https://eric.ed.gov/?id=EJ903008>
- Agbor, C. N., Onnoghen, U. N., & Etan, M. O. (2023). Teachers' qualification and academic performance of environmental education students in the University of Calabar. *LWATI: A Journal of Contemporary Research*, 20(2), 2-12. <https://research.ebsco.com/c/lr7qmf/viewer/pdf/zbqlhwiblz>
- Antony, S., & Elangkumaran, P. (2020). An impact on teacher qualifications on student achievement in science: A study on the GCE (O/L) in Trincomalee District. *International Journal of Engineering Science and Computing*, 10(2), 24690-24695. <http://surl.li/enyrmw>
- Berliner, D. C. (2005). The Near Impossibility of Testing for Teacher Quality. *Journal of Teacher Education*, 56(3), 205-213. <http://dx.doi.org/10.1177/0022487105275904>
- Betts, J. R., Zau, A., & Rice, L. (2003). *Determinants of student achievement: New evidence from San Diego* (pp. 1-5821). San Francisco: Public Policy Institute of California.
- Buddin, R., & Zamarro, G. (2009). Teacher Qualifications and Student Achievement in Urban Elementary Schools. *Journal of Urban Economics*, 66(2), 103-115. <https://doi.org/10.1016/j.jue.2009.05.001>
- Cavalli, L. R., Varella-Garcia, M., & Liang, B. C. (1997). Diminished tumorigenic phenotype after depletion of mitochondrial DNA. *Cell growth and differentiation*, 8(11), 1189-1198. <https://pubmed.ncbi.nlm.nih.gov/9372242/>
- Crystal, D. (1997). *English as a Global Language*. Cambridge: Cambridge University Press.
- Darling-Hammond, L. (2000). Teacher Quality and Students' Achievement: A Review of State Policy Evidence. *Education Policy Analysis Archives (EPAA)*, 8, 1. <https://doi.org/10.14507/epaa.v8n1.2000>

- Darling-Hammond, L., & Youngs, P. (2002). Defining “highly qualified teachers”: What does “scientifically-based research” actually tell us?. *Educational researcher*, 31(9), 13-25. <https://doi.org/10.3102/0013189X031009013>
- Dossett, D., & Munoz, M. A. (2003). *Classroom Accountability: A Value-Added Methodology*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Fakeye, D. O. (2012). Teachers Qualification and Subject Mastering as Predictors of Achievement in English Language in Ibarapapa Division of Oyo State. *Global Journal of Human Social Sciences*, 12(3), 1-8. <https://socialscienceresearch.org/index.php/GJHSS/article/view/100141>
- Fenstermacher, G. D., & Richardson, V. (2005). On making determinations of quality in teaching. *Teachers college record*, 107(1), 186-213. <https://doi.org/10.1111/j.1467-9620.2005.00462.x>
- Kaplan, L. S., & Owings, W. A. (2001). Standards, retention, and social promotion. *NASSP Bulletin*, 85(629), 57-66. <https://eric.ed.gov/?id=EJ637116>
- Goldhaber, D., Perry, D., & Anthony, E. (2004). The National Board for Professional Teaching Standards (NBPTS) process: Who applies and what factors are associated with NBPTS certification?. *Educational Evaluation and Policy Analysis*, 26(4), 259-280. <https://doi.org/10.3102/016237370260042>
- Greenwald, R., Hedges, L. V., & Laine, R. D. (1996). The effect of school resources on student achievement. *Review of Educational Research*, 66(3), 361-396. <https://doi.org/10.2307/1170528>
- Greenberg, E., Rhodes, D., Ye, X., & Stancavage, F. (2004). Prepared to teach: Teacher preparation and student achievement in eighth-grade mathematics. In *American Institute for Research, 2004 Annual meeting, San Diego, CA*.
- Koirala, K. P. (2022). Practices of Pre-service Science Teacher Education Program: Review and Reflection. *The Educator Journal*, 10(1), 126-134. <https://doi.org/10.3126/tej.v10i1.46735>
- Lewis, L., Parsad, B., Carey, N., Bartfai, N., Farris, E., & Smerdon, B. (1999). *Teacher quality: A report on the preparation and qualifications of public school teachers (NCES 1999-080)*. Washington, DC: National Center on Education Statistics .
- Likert, R. (1932). A technique for the measurement of attitudes. *Archives of psychology*, 140, 1–55. <https://search.gesis.org/publication/zis-Likert1932A>
- Loucks-Horsley, S., Stiles, K. E., Mundry, S., & Hewson, P. W. (Eds.). (2010). *Designing professional development for teachers of science and mathematics*. Corwin press.
- Mahlo, D., & Maphoso, L. S. T. (2015). Teacher Qualifications and Pupil Academic Achievement. *Journal Social Science*, 45, 51-58. <https://doi.org/10.1080/09718923.2015.11893393>
- Obeka, O. N. (2021). Teachers Qualification as a Determinant of Students Achievement and Attitude towards the English Language. *Journal of Research in Humanities and Social Science*, 9(12), 73-81. <https://www.questjournals.org/jrhss/papers/vol9-issue12/Ser-3/L09127381.pdf>
- Opdenakker, M. & Van Damm, J. (2006). Teacher characteristics and teaching styles as effectiveness enhancing factor of classroom practice. *Teaching and Teacher Education*, 22(1), 1-21. <https://doi.org/10.1016/j.tate.2005.07.008>
- Owolabi, O.T., & Adedayo, J.O. (2012). Effect of teachers qualification on the performance of senior secondary school physics students: Implication on technology in Nigeria. *English Language Teaching*, 5(6) 72 – 77. [www.ccsenet.org/elt](http://www.ccsenet.org/elt)

- Richardson, G. (2008) The Relationship between Culture and Tax Evasion across Countries: Additional Evidence and Extensions. *Journal of International Accounting, Auditing and Taxation*, 17(2), 67-78. <https://doi.org/10.1016/j.intaccaudtax.2008.07.002>
- Rice J. K. (2003). *Teacher quality: Understanding the effectiveness of teacher attributes*. Washington, DC: Economic Policy Institute.
- Setiyadi, A. B. (2020). *Teaching English as a foreign language*. Graha Ilmu: Yogyakarta.
- Stronge, J. H. (2018). *Qualities of effective teachers*. Ascd.
- Stronge, W. J. (2002). In-plane dynamic crushing of honeycomb. Part I: crush band initiation and wave trapping. *International journal of mechanical sciences*, 44(8), 1665-1696. [https://doi.org/10.1016/S0020-7403\(02\)00060-7](https://doi.org/10.1016/S0020-7403(02)00060-7)
- Tazilabong, A. J. (2019). Teacher qualification and experience on students attitude towards Physics in selected secondary schools in Buea South West region of Cameroon. *Greener Journal of Education and Training Studies*, 5(1), 1-10. <https://gjournals.org/GJETS/Publication/2019/January/HTML/122918186%20Awandia.htm>
- Uche, L. A. & Osiah, P. C. (2011). Standardizing the motivational competencies of academically qualified teachers and professional teachers in Nigerian secondary schools. *Journal of Educational and Social Research*, 1(3), 49. <https://www.richtmann.org/journal/index.php/jesr/article/view/11730>
- Wenglinsky, H. (2002). The link between teacher classroom practices and student academic performance. *Education policy analysis archives*, 10, 12. <https://doi.org/10.14507/epaa.v10n12.2002>