

Towards Demystifying Students' Phobia for Phonetics and Phonology: Digital or Analogue Instructional Strategies?

Bankole Olagunju Faloye¹ , Oluwatoyin Tolu Obateru², Olaniyan Ayomiku Samuel³

¹Department of Languages and Linguistics, Bamidele Olumilua University of Education, Science and Technology, Ikere-Ekiti, Nigeria

²Department of Educational Foundations, Faculty of Education, Federal University, Oye-Ekiti, Nigeria

³Department of Arts and Language Education, Ekiti State University, Ado Ekiti, Nigeria

Email: faloye.bankole@bouesti.edu.ng, oluwatoyin.obateru@fuoye.edu.ng, ayomiku.olaniyan@eksu.edu.ng

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Abstract

This study investigated the effect of phobia on analogue and digital interactive instruction on students' performance in phonetics and phonology. Phonetics and phonology facilitate enhanced speech proficiency among pre-service English teachers preparing to teach in Nigerian primary and secondary schools. In addition, this study considered the impact of digital-based pedagogy on students' disposition to eliminate students' phobia of phonetics and phonology. The population comprised all part 1 students studying English as a course in Nigerian colleges of education located in the southwest. The study adopted the quasi-experimental research design of the three-group pretest-post-test type. The study used Multi-staged sampling procedures in selecting a sample size of 90 students due to the seating capacity of language laboratories. As a result, 33 and 34 students were distributed to the experimental and experimental groups, respectively, while the control group comprised 33 students. Data was retrieved with two research instruments: Spoken English Performance Test (SEPT) and the Students Disposition Questionnaire (SDQ). A relatively high-reliability coefficient of 0.78 and 0.82 was obtained for SEPT and SDQ, respectively. Descriptive statistics answered a research question for the study, while the only hypothesis formulated was tested at a 0.05 level of significance. The findings, among others, highlighted the significant potency of digital instructional strategies in demystifying students' phobia of phonetics and phonology.

Keywords

Students' Phobia, Phonetics and Phonology, Digital, Analogue, Teaching Strategies

1. Introduction

The English language evolved into a global means of communication for several communicative and linguistic reasons. To a large extent, English is the official language in almost every part of the world. In the education context, the English language serves as an avenue for instruction in various levels of formal education in Nigeria. These levels of education comprise pre-primary, primary, secondary, and tertiary citadels of learning. Consequent to English's overbearing communicative cum linguistic acumen, Nigerians have adopted it as the principal means of interaction in social, economic, religious, political, and, most importantly, education.

Teachers' proficiency in harnessing the productive language skills comprising speaking and listening for classroom instruction cannot be over-emphasised. Moreover, language is primarily speech. Nevertheless, concerned Nigerians have been astonished by the unending plummeting of students' oral proficiency in the use of English with emphasis on pre-service English teachers.

Furthermore, strategies and methods of teaching phonetics and phonology usually employed in teacher development programmes appear to affect students' disposition towards learning the basic features of spoken English students are trained on how to use proper articulation of sounds in English for instruction. Furthermore, colleges of education, offer courses such as phonetics and phonology with a robust, practical base. However, from experience, many students have shown a negative disposition towards this course, contributing to poor spoken English performance.

Generally, the aim and objective of teaching segmental and suprasegmental features of English in teacher development programmes, among other reasons, is to equip the pre-service teachers with teaching strategies suitable for learners in primary and post-primary schools. Usually, student teachers tend to experience difficulties articulating correct speech sounds during teaching. Perhaps, the teaching methods adopted by lecturers handling phonetics and phonology courses in colleges of education, for instance, are presumably not workable with modern-day pedagogy. Moreover, from a psychological point of view, [Mobarak \(2020\)](#) notices that anxiety, a form of phobic tendencies, can affect learning intrinsic aspects of a second language.

The course content of phonetics and phonology highlights the use of International Phonetic Association (IPA) symbols as a traditional approach to teaching students isolated and context speech patterns of English. From experience, many students tend to develop a phobia of the course. Also, studies on the correlation between students' disposition towards subjects and performance appear to bolster the impression that anxiety could elicit positive or negative traits vis a viz students' performance. [Tuan and Mai \(2015\)](#) opined that courses such as phonetics and phonology have the probability of raising students' anxiety levels with phobic tendencies within academic environments.

Global trends in education indicate an increase in learners susceptible and influenced by various teaching styles. [Gros et al. \(2012\)](#) opined that the 21st century, with the immense influx of digital ware, would require a tilt towards educa-

tional tools designed for the cognitive levels of this generation of digital natives. In colleges of education, the pedagogical context is not different, to some extent, from the other tiers of tertiary education aforementioned. Furthermore, stakeholders in education have attempted and appear to be succeeding in propagating a shift from conventional teaching of courses hinged on spoken English in general and phonetics and phonology in particular to a more learner-friendly mode of instruction. In 2015 and beyond, taking steps towards encouraging learner-friendly strategies globally are necessary for good performance in spoken English. Towards this end, core skills training and digital capacity-building programs for teachers are expected to be in tandem with the goals and objectives of the Incheon Declaration (UNESCO, 2015).

Digital Bridge Institute (DBI) has recently been involved in digital training and capacity development in almost all spheres of human endeavour, including academics of colleges of education, to enhance their digital capacity for teaching and learning. As earlier mentioned in this study, the trend of formal instruction in colleges of education, to a large extent, appears to be tilting towards learner-friendly pedagogy while teaching in abstract is gradually waning.

Given the vast opportunities provided by analogue and digital teaching strategies, the researcher believes that using conventional methods is expected to boost the dwindling performance of students in spoken English in teacher development programmes. Consequently, the NCCE document (NCCE, 2012) serves as a guide in using digital and analogue-based instruction for teaching oral communication in English.

Review of literature

The need for discovering antidotes to students' poor performance in spoken English at various educational levels in Nigeria, in particular, is being extended beyond socio-linguistic boundaries to include psychological perspectives. Furthermore, literature on students' proficiency in the somewhat poor use of English as an oral communicative implement connects, to some extent, the teaching methods or strategies employed in the school context. According to Mobarak (2020), phobia for learning English in a second language context, emphasizing speaking skills, can be a vital variable for its emancipating effect on learners' performance. Students' phobia of teaching styles associated with spoken English courses can impede a learner's learning process and achievement.

Straus (1945) believes in the influence of social psychology as one of the numerous factors that determine the learning outcomes of the learner, with emphasis on students studying in tertiary institutions of learning. According to Ajzen and Fishbein (2010), second language learning delves into various concepts related to social psychology, such as disposition, attitude, and anxiety. In addition, Izuagba and Obiefuna (2016) bolster the intricacies of learning and teaching a second language, including systematic phonological features of speech patterns. For instance, student-teachers would require adequate exposure to teaching strategies to develop a cheerful disposition and interest in grappling with the course contents of phonetics and phonology (Olaniyi, 2020).

Ali Khan (2019) suggests that students' disposition to learning can be determined by the type of teaching strategies and educational tools deployed in the classroom. In this regard, Faloye (2022a) reports that interactive teaching strategies used in spoken English lessons appeared to significantly impact the interest of pre-service English language teachers in teacher development programmes. This assertion lends credence to considering the practical importance of pre-service English language teachers' disposition as a prerequisite for proficiency in classroom communication. Invariably, phonetics and phonology are expected to be taught in an exciting and enjoyable environment devoid of extreme teacher-centred instruction.

With the influx of upgraded technology into the education system, Adeoye and Adeoye (2017) observe the importance of integrating relevant digital educational tools with the teaching strategies beneficial to the 21st-century learner. In pedagogy, Faloye (2022b) considers the appropriate use of teaching methods, approaches, and strategies as vital acts that could make or mar the spoken English lesson. In line with Gowda (2015), students are expected to overcome the phobia of certain phonetic elements in the phonetics and phonology course if any substantial learning of speech sounds occurs. Similarly, Ofodu (2012) underpins the efficacy of instructional strategy and the favourable disposition of learners involved in the teaching and learning process. Furthermore, experience has underscored scenarios where students show anxiety in second language lessons over-saturated with boring and teacher-centred methods.

Darling-Hammond et al. (2020) observe quite correctly that most teaching strategies, including methods, can be traced to psychological perspectives advocated by renowned scholars. Hence, the so-called inter-marriage between psychology and linguistics, to some extent, manifested in traditional teaching methods usually employed in tertiary learning institutions: The lecture method. Meanwhile, Silin and Kwok (2016) quickly point out the positive correlation between students' disposition to active pedagogy employed in the social constructivist environment. Moreover, the general notion of the usual teaching style applied in teacher development programmes for teachers is not far-fetched. Nevertheless, Faloye et al. (2021) posit that the teaching method employed in teaching phonetics and phonology appears to be a no-go area for most students due to lecturers' use of phonetic approaches. Moreover, the intricate patterns of speech sounds based on the IPA system tend to increase students' difficulty in decoding phonemic and phonetic transcription exercises during phonetics and phonology lessons:

| | |
|---|----------------------|
| “strewn” | /strun/ |
| “tenth” | /tenθ/ |
| “clean” | /klin/ |
| Phonemic transcription: Source: (Gimson, 1962). | |
| “strewn” | [stru:n] |
| “tenth” | [t ^h ɛnθ] |
| “clean” | [klj:i:n] |

Phonetic transcription: Source: (Gimson, 1962).

Interactions and discussions with academics in teacher development programmes have revealed that the use of phonetic and phonemic transcription drills in the phonetics and phonology lessons, regarding the illustration shown above, to a large extent, contributes to students' anxiety about learning how to speak it fluently in English.

In the last few decades, teaching methods appear to be skewed towards traditional and teacher-centred instruction in Nigeria's schools, colleges and universities. Concerned educators have often yearned to shift to learner-friendly teaching strategies to benefit learners with inhibitions, including phobic tendencies. In this regard, Osinachi et al. (2011) notice that the merits of digital learning seem to solve various challenges confronting learning in tertiary education, including overburdened traditional teaching approaches and students' demotivation indices and the lack of appropriate instructional tools. Moreover, in 2020, the world experienced the digital benefits of instructional media in the form of digital instruction courtesy of the Covid-19 pandemic. As a result, schools had to redesign the instructional facilities to suit the pedagogical needs of students. Scholars described that scenario as an opportunity to "replicate the global desire for digital literacies in teaching and learning" (Faloye et al., 2021).

On the other hand, analogue instruction comprises non-digital educational tools for teaching and learning. The minimum standard guide for colleges of education (NCCE), 20 emphasis sizes analogue language laboratory facilities for teaching oral components of English. Dansie (2018) reiterates that effective oral English teaching and learning requires quality materials. In addition, analogue instruction is described as a simulation teaching and teaching style that simulates a natural learning environment for students (Qin, 2015). The list of analogue teaching materials dates back to 1904 and, according to (Crisol, 2011), includes microphones, cassette players and recorders, television sets, compact discs (CD), and analogue photographs.

Anyadiegwu and Asonze (2016) and Faloye (2022a) agree that an instructional hybridization becomes expedient in the quest for near-perfect teaching and learning media for enhancing students' disposition toward dis-encrypting information in the seemingly unattractive course content such as phonetics and phonology. The 21st century is amassed with different types of technology in education. Psychologists in the education realm agree that students' phobia of learning affects performance essentially (Asamonye & Ogbonnaya, 2018).

Consequently, ensuring the teaching and learning environment is conducive for the student, in line with Dansie (2018), is expected to fascinate and attract meaningful learning without apprehension or phobia. Hence, phonetics and phonology are scheduled to be taught with exciting strategies. Teacher development programmes have the pedagogical responsibility to use interesting teaching strategies to repackage the course content to eradicate students' phobia (fear).

Statement of the problem

The communicative proficiency vis-a-vis pre-service English teachers' performance has continued bothering concerned educators in Nigeria. This development can best be described as damaging to teacher education. Furthermore, the teaching methods involved in teaching phonetics and phonology course contents appear to be ineffective based on various factors, including inadequate instructional facilities and inappropriate teaching styles. However, this study focused on students' phobia of attending lectures on phonetics and phonology, which involves the conventional use of phonetic and phonemic transcriptions in teaching the International Phonetic Association (IPA) symbols. The anxiety levels of student-teachers towards phonetics and phonology tend to pose a challenge to learning how to communicate using Received Pronunciation (RP).

Research question 1

What is students' disposition toward phonetics and phonology before and after the treatments?

Hypothesis 1

There is no significant difference in analogue instruction strategy, digital instruction strategy, and control group on pre-service teachers' disposition towards phonetics and phonology.

2. Methodology

This study utilised the quasi-experimental pretest and post-test design. Three groups comprised digital instruction strategies, analogue instruction strategies, and conventional method groups. The population consisted of all first-year students in the departments of English in government-funded colleges of education in Southwest Nigeria. A multistage sampling procedure was utilized to select 90 students (part one) studying English in Colleges of Education from three southwest Nigeria Colleges of Education. The Spoken English Performance Test ($r = 0.78$) and Students Dispositional Questionnaire ($r = 0.82$) were used for data collection. The experimental procedure comprised three stages: pre-treatment stage with the administration of the questionnaire, performance test, and pretest without treatment; treatment stage comprising treatment with the Instructional Lesson Package (ILP) and the post-treatment stage with post-administration of a questionnaire, performance test, and post-test. Data retrieved from this study were analysed using descriptive and inferential statistic methods for answering the two research questions raised and hypotheses formulated for the study, respectively.

3. Results

Question 1: What is students' disposition toward phonetics and phonology before and after the treatments?

Before treatment, **Table 1** shows that students in the control, analogue, and digital groups had pre-dispositional mean scores of 105.701, 107.429, and 115.271, respectively. However, on exposure to treatment, students exposed to digital instruction strategy had the highest post-dispositional mean score of 116.471,

closely followed by analogue instructional strategy with a post-dispositional mean of 113.469. In contrast, the samples in the control group had the least post-dispositional mean score of 108.301.

Hypothesis 1: There is no significant difference in analogue instructional strategy, digital instructional strategy, and control group on students' disposition towards phonetics and phonology.

The result in **Table 2** shows that ($F_{2,86} = 44.809$, $p = 0.000 < 0.05$). Since the *P-value* is less than 0.05, the hypothesis is thus rejected. The result implies a significant difference in analogue instructional strategy, digital instructional strategy, and conventional teaching methods on students' disposition toward phonetics and phonology.

Table 3 shows that students in the digital instructional strategy group had the highest adjusted mean score of 71.59 ($48.43 + 23.172$), closely followed by those in the analogue interactive strategy group; 38.06 ($48.43 + (-10.361)$) while students in the control group had an adjusted mean score of 35.16 ($48.43 + (-10.361)$). This result implies that the use of digital instructional strategy and analogue instructional strategy enhanced students' disposition toward phonetics and phonology. Hence, 73% ($\text{Eta}^2 = 0.725$) reveals that observed variance in students' disposition towards phonetics and phonology is mainly due to the effectiveness of the treatment.

Table 1. Dispositional mean scores and standard deviation of students in experimental and control groups.

| <i>Group</i> | <i>N</i> | <i>Pretest</i> | | <i>Posttest</i> | | <i>Mean Difference</i> | <i>Ranking Performance</i> |
|--------------|----------|----------------|-----------|-----------------|-----------|------------------------|----------------------------|
| | | <i>Mean</i> | <i>SD</i> | <i>Mean</i> | <i>SD</i> | | |
| Control | 33 | 105.701 | 12.886 | 108.301 | 22.465 | 2.61 | 3 rd |
| Analogue | 34 | 107.429 | 10.529 | 113.469 | 15.983 | 6.03 | 2 nd |
| Digital | 33 | 115.271 | 7.764 | 116.471 | 5.152 | 1.21 | 1 st |

Table 2. There is no significant difference in analogue instructional strategy, digital instructional strategy, and control group on students' disposition towards phonetics and phonology.

| <i>Source</i> | <i>SS</i> | <i>Df</i> | <i>MS</i> | <i>F</i> | <i>p</i> |
|---------------------|------------|-----------|-----------|----------|----------|
| Corrected Model | 23581.692 | 2 | 7861.898 | 30.201 | 0.000 |
| Covariate (Pretest) | 19482.417 | 1 | 19482.418 | 74.853 | 0.000 |
| Group | 23325.195 | 2 | 11662.098 | 44.809* | 0.000 |
| Error | 21865.581 | 85 | 261.293 | | |
| Total | 248967.000 | 91 | | | |
| Corrected Total | 45446.272 | 89 | | | |

* $p < 0.05$ (significant result).

Table 3. Multiple classification analysis of mean scores of students in analogue, digital, and control groups.

| <i>Grand mean = 48.42</i> | | | | | | |
|---------------------------------|----------|-------------|-----------------------|------------------------|---|-------------|
| <i>Variable + Category</i> | <i>N</i> | <i>Mean</i> | <i>Unadjusted Dev</i> | <i>Eta²</i> | <i>Adjusted For Independent + Covariate</i> | <i>Beta</i> |
| Control | 33 | 35.16 | -13.254 | | -13.256 | |
| Analogue | 34 | 38.06 | -10.361 | 0.72 | -10.361 | 0.72 |
| Digital | 33 | 71.59 | 23.172 | | 23.172 | |
| Multiple R: 0.725 | | | | | | |
| Multiple R ² : 0.526 | | | | | | |

4. Discussion

This study revealed the significant impact of students' phobic tendencies toward learning the phonetic rudiments of speaking English in phonetics and phonology lessons. The findings were in line with [Indrayani and Suherman \(2018\)](#), whose study connected students' high anxiety levels to using IPA in phonetics and phonology courses. Furthermore, this finding corroborated [Baran-Lucarz \(2013\)](#) in a preliminary study that underpinned students' phobia of being taught with phonetic symbols in the phonetics and phonology class. This study also revealed the favourable disposition of students towards digital interactive teaching strategies used in preparing segmental and suprasegmental features of English. This finding corroborates the global shift from teacher-centred learning to learner-friendly pedagogy.

Furthermore, this finding aligns with [Mobarak's \(2020\)](#) view on the positive impact of students' disposition towards learning how to communicate in oral English. In addition, the findings in this study corroborate that of [Molina Leal and Peña Ceròn \(2019\)](#) regarding the anxiety student-teachers usually show involving learning the phonological features of English through the IPA. Hence, it is more likely that students could develop a cheerful disposition to learning spoken English in phonetics and phonology classes if lecturers utilise interactive and learner-friendly strategies in teacher development programmes.

However, the findings of this study negate revelations in a study by [Enaibe \(2012\)](#) that found no significant effect on students' disposition towards learning spoken English with traditional teaching methods.

5. Conclusion

The conclusion of this study is encapsulated in the role of digital instructional strategies in demystifying students' phobia of phonetics and phonology. Moreover, lecturers in charge of phonetics and phonology are expected to utilise digital instructional strategies to prepare pre-service English Language teachers for the learner-friendly task ahead. In this regard, practical steps such as using learner-friendly strategies in providing students with self-evaluation procedures on

the simulation speech software should help boost learners' confidence in enhancing students spoken English. In addition, the gaming features embedded in the digital programme for oral interaction are expected to encourage students to interact with themselves without unnecessary interference from the lecturer. Hence, pre-service English teachers are expected to teach based on the instructional and communicative benefits of digital instruction featuring prominently in the 21st century.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

- Adeoye, A., & Adeoye, B. (2017). Digital Literacy Skills of Undergraduates in Nigerian Universities. *Library Philosophy and Practice*, *1*, 15-20.
- Ajzen, I., & Fishbein, M. (2010). Attitudes and the Attitude-Behavior Relation; Reasoned and Automatic Processes. *European Review of Social Psychology*, *11*, 1-33.
- Ali Khan, T. (2019). A Descriptive Study: Factors Affecting the Pronunciation of English Language (L2). *Journal of Communication and Cultural Trends*, *1*, 1-16. <https://doi.org/10.32350/jcct.12.01>
- Anyadiegwu, J. C., & Asonze, J. I. (2016). Language Pedagogy in Nigeria in the 21st Century: Implications for National Development. *Knowledge Review*, *34*, 211-215.
- Asamonye, C. C., & Ogbonnaya, C. N. (2018). Effect of Student-Teacher Disposition and Quality Teaching and Learning. *Journal of Pristine*, *14*, 73-81.
- Baran-Lucarz, M. (2013). Phonetics Learning Anxiety—Results of a Preliminary Study. *Research in Language*, *11*, 57-79. <https://doi.org/10.2478/v10015-012-0005-9>
- Crisol, J. (2011). *Analog and Digital Electronics: Teaching Notes* (pp. 13-49). Generalitat de Catalunya NILE Norwich.
- Dansie, S. (2018). Teaching Oral English in an ESL Setting: Some Challenges Observed. *International Journal of English Linguistics*, *8*, 172-175. <https://doi.org/10.5539/ijel.v8n6p172>
- Darling-Hammond, L., Flook, L., Cook-Harvey, C. & Barron, B. (2020). Implications for the Educational Practice of the Science of Learning and Development. *Applied Developmental Science*, *24*, 97-140. <https://doi.org/10.1080/10888691.2018.1537791>
- Enaibe, P. U. (2012). Gender and the Attitude of Teachers towards the Teaching of English Language Sounds. *International Journal of Educational Research and Development*, *1*, 6-10.
- Faloye, B. O. (2022a). Instructional Lecture Package and Lecturers' Competency: Examining the Efficacy of Language Laboratory Environment and Spoken English in Nigerian Colleges. *Sapientia Global Journal of Arts, Humanities and Development Studies*, *5*, 91-99.
- Faloye, B. O. (2022b). Sustainable Digital Pedagogy in Language Teacher Education: Perception of Teachers in Ekiti State Government Colleges. *International Journal of English Language Teaching*, *10*, 13-22. <https://doi.org/10.37745/ijelt.13/vol10.no1pp.13-22>
- Faloye, B. O., Obateru, O. T., & Alonge, S. G. (2021). Language Teachers and Digital Literacy: Assessing Viewing and Representing as Language Skills. *International Journal of Education, Learning and Development*, *9*, 82-91.

<https://doi.org/10.2139/ssrn.3814763>

- Gimson, A. C. (1962). *Gimson's Pronunciation of English* (5th ed.). Edward Arnold.
- Gowda, N. (2015). *Learning and the Learner* (pp. 10-16). PHI Private Limited.
- Gros, B., Garcia, I., & Escofet, A. (2012). Beyond the Net Generation Debate: A Comparison of Digital Learners in Face-to-Face and Virtual Universities. *The International Review of Research in Open Distributed Learning*, 13, 190-210.
<https://doi.org/10.19173/irrodl.v13i4.1305>
- Indrayani, L., & Suherman, R. (2018). Students' Perception toward the Use of IPA Symbols in Pronunciation Class: An Empirical Study in EFL Classroom. In *The Tenth Conference on Applied Linguistics and the Second English Language Teaching and Technology Conference and Collaboration with the First International Conference on Language, Literature, Culture, and Education—CONAPLIN and ICOLLITE* (pp. 219-223). SciTePress.
<https://doi.org/10.5220/0007164802190223>
- Izuagba, A., & Obiefuna, C. (2016). *Trend and Issues in Teacher Education: The Nigerian Perspective*. Cel-Bez Publishing Co Ltd.
- Mobarak, K. (2020). Reasons for English Language Speaking Anxiety among Students in Private Universities of Bangladesh. *Journal of Education and Social Science*, 16, 35-40.
- Molina Leal, Y. S., & Peña Ceròn, P. L. (2019). *Inner Drive and Disposition as the Fuel to Develop English Language Classroom Activities: A Self-Determination Study*. Licenciatura en Español y Lenguas Extranjeras, Universidad de La Salle.
https://ciencia.lasalle.edu.co/lic_lenguas/848
- NCCE (National Commission for Colleges of education) (2012). *Nigeria Certificate in Education Minimum Standards for Languages*. National Commission for Colleges of Education.
- Ofodu, G. (2012). Instructional Strategy and Resource Utility in Language Learning Among Primary Education in 21st Century Nigeria. *English Language Teaching*, 5, 79-84.
<https://doi.org/10.5539/elt.v5n5p79>
- Olaniyi, B. A. (2020). Learning Approaches and Strategies in Second Language Acquisition. *Nigerian Journal of African Studies*, 2, 96-101.
- Osinachi, A., Ugochukwu, M., & Ekene, E. (2011). Adopting E-Learning in Nigerian Tertiary Education: Implications to Teacher Preparation. *Unizik Orient Journal of Education*, 6, 128-130.
- Qin, K. (2015). Construction of Teaching Simulation Platform in College English Curriculum System. In *Proceedings of the 2015 International Conference on Education Technology, Management and Humanities Science* (pp. 1298-1301). Atlantis Press.
<https://doi.org/10.2991/etmhs-15.2015.286>
- Silin, Y., & Kwok, D. (2016). A Study of Students towards ICT in a Social Constructivist Environment. *Australian Journal of Educational Technology*, 33, 55-65.
<https://doi.org/10.14742/ajet.2890>
- Strauss, A. (1945). The Concept of Attitude in Social Psychology. *Journal of Psychology*, 19, 329-339. https://brocku.ca/MeadProject/Strauss/Strauss_1945.html
<https://doi.org/10.1080/00223980.1945.9917235>
- Tuan, N. H., & Mai, T. N. (2015). Factors Affecting Students' Speaking Performance at Le Thanh Hien High School. *Asian Journal of Educational Research*, 3, 8-23.
- UNESCO (United Nations Educational, Scientific and Cultural Organization) (2015). *Education 2030 Framework for Action*.
<http://www.unesco.org/new/en/santiago/education-2030/>