

## TEACHER'S INNOVATION IN TEACHING LINGUISTIC KNOWLEDGE: EXPLORING STUDENTS' REFLECTIONS IN LEARNING EFL WITH TECHNOLOGY

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### ABSTRACT

*The foundation of competence for English teachers in the EFL context, as well as for any language teacher, lies in linguistic knowledge (Chang & Kanno, 2010; Kemaloglu-Er, 2017; Marfui, 2016; Medgyes, 1992). However, due to English being a foreign language in Indonesia, teachers who work with EFL learners require innovative strategies to achieve teaching goals and fulfill the profile of future EFL teachers (Chun et al., 2016; Hoopingarner, 2009; Kern, 2006; Kessler, 2018; Köksal, 2004; Salaberry, 2001). This study aims to explore EFL students' reflections on their experience of learning Linguistics with technology and its impact on their linguistic knowledge, which is valuable for their future. A total of 156 prospective teacher students participated in the study. They provided reflections on the learning process for Phonetics and Phonology courses at the end of the semester, using the Three What's reflection writing concept guide: What, So What, Now What (Borton, 1969; Rolfe, 2014). Based on the reflection results, linguistic competence is acquired through a systematic learning process, both offline and online, which incorporates various technology-based learning resources (such as Google Classroom, Quizizz, YouTube, Padlet, etc.), with relevant linguistic content. The use of technology as a teaching strategy to aid student comprehension represents an innovation in language learning, as students become more creative in discussing and creating projects related to the course. Furthermore, they continue to utilize the technology they have experienced in other learning activities. By incorporating technology into the process of understanding essential linguistic concepts, teachers can model the target language being taught, demonstrating that teacher innovation is an integral part of professionalism and contributes to the improvement of learning continuity. In line with this notion of sustainability, it is recommended that further research be conducted to investigate the effectiveness of using technology in assisting and motivating students in assessment as learning, assessment for learning, and assessment of learning.*

**Keywords:** Innovation, reflection, linguistic knowledge, technology

### INTRODUCTION

Innovation is often wrongly associated solely with technology and new inventions, but it can encompass much more. It can involve discovering new approaches to various tasks and activities (Hanin Rahmat, 2020). However, the primary obstacle educators encounter is engaging students and conveying information in a manner that resonates with them beyond the confines of the classroom (D. Kalyani, 2018). To accomplish this, it is necessary to redefine the classroom experience and incorporate innovative ideas that enhance the effectiveness of teaching and learning methods. The utilization of innovative methods within educational institutions holds the potential not only to enhance education but also to empower individuals, reinforce governance, and invigorate endeavours toward achieving the country's human development objectives.

Innovation means that it represents into some terms which are change, development, novelty, and improvement (De Lano et al., 1994). Change impacts existing pedagogy that aims to further promote English language teaching. Development related to curriculum developer and professionalism developer. Novelty is the idea of change, and improvement is refining for better results (De Lano et al., 1994). However, in the case of language teaching, innovation means that a language teacher and students' needs for linguistic knowledge (Cunningham, 2015), which can empower their capacity and professionalism in teaching the language and their future career as the teacher.

Teacher's knowledge can influence the act of teaching and affect children's learning outcomes. Linguistic knowledge of teachers plays an important role in supporting learners at the beginning to read stage (Arrow et al., 2019). It is understanding and awareness of the principles, structures, and components of language. It includes a variety of aspects, such as grammar, syntax, phonetics, phonology, semantics, pragmatics, morphology, and language use. Linguistic knowledge also includes knowledge of how language works, its rules, and patterns, and how to use it effectively in communication. It also includes knowledge of vocabulary, word formation, sentence structure, and the syntax of words. In contrast, numerous research studies have discovered that many primary or elementary school teachers possess a limited understanding of the linguistic components of the language code, such as phonics, phonological awareness, and morphology, which are essential for effective teaching (Arrow et al., 2019).

This study aims to explore the innovation and the teacher/lecturer's profile in conveying it into teaching linguistic knowledge in the English as the foreign language context. It also investigates what is innovation in teaching linguistic knowledge and what is the profile of an innovative teacher formed from this teaching innovation.

## **METHOD**

The topic of this research focuses on the method used to analyze reflective journal writing from 154 prospective participants to explore the innovation in teaching linguistic knowledge, and explore the EFL students' reflections to their experience in learning Linguistics with technology and its impact to their linguistic knowledge useful for their future.. The research employs thematic analysis with the assistance of NVIVO software. The participants in this study are English as a Foreign Language (EFL) students who were engaged in learning the subject of Phonetics and Phonology.

They provide reflections on the learning process for Phonetics and Phonology courses at the end of the semester using the Three Whats reflection writing concept guide: What, So What, Now What (Borton, 1970). Reflective journal writing is a method that allows participants to express their thoughts, experiences, and reflections in a written form. It serves as a valuable tool for researchers to gain insights into the participants' understanding, perceptions, and learning processes related to the Phonetics and Phonology subject. Based on the results of this reflection, linguistic competence is obtained through a systematic learning process via offline or online learning which presents a variety of technology-based learning resources (Google Classroom, Quizizz, YouTube, Padlet, etc.), with related linguistic content.

Thematic analysis, in this context, involves the systematic identification and exploration of patterns, themes, and meanings within the reflective journal entries. The researcher utilizes NVIVO 12 plus, a qualitative data analysis software, to assist in organizing, coding, and analyzing the data. It provides a structured and efficient approach to manage the large volume of reflective journal entries from the 156 EFL students.

By analyzing the data thematically, the researcher will identify recurring topics, issues, and insights that emerge from the participants' reflections. This analysis allows for a deeper understanding of the students' learning experiences, challenges, and progress in the Phonetics and Phonology subject.

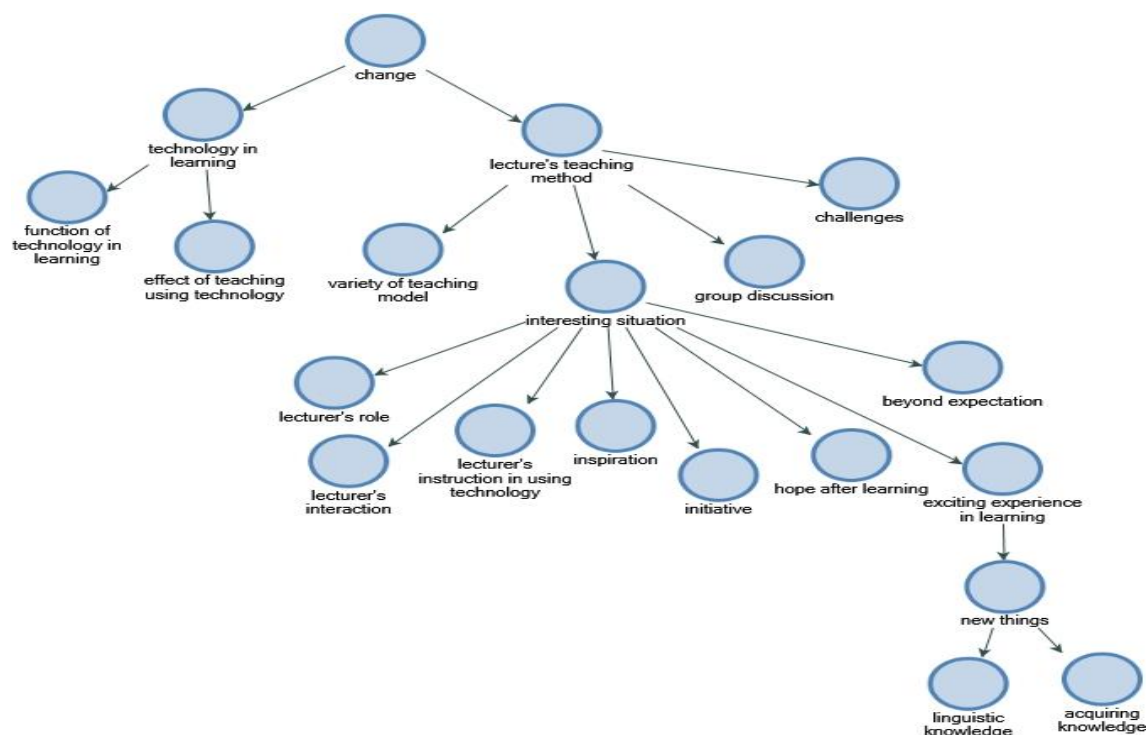
## **FINDINGS AND DISCUSSION**

Data collection involved 156 participants, from whom reflection data was obtained. The analysis of this data yielded 58 nodes, indicating the emergence of themes related to innovations implemented by lecturers in teaching Phonetics and Phonology courses. These nodes represent innovations characterized by change, development, novelty, and improvement.

The analyzed innovations from the reflection data are based on students' perspectives, using the innovation framework (De Lano et al., 1994) as a foundation. This framework outlines the various aspects of innovation implementation, including changes in promoting the target language, content development, teaching professionalism, generation of new ideas, novelty in teaching methods, and motivators for students to enhance their language learning abilities. The research findings are derived from the data to address the following research questions: What constitutes innovation in teaching linguistic knowledge, and what are the characteristics of an innovative teacher resulting from these teaching innovations? The findings for each element of the framework are described as follows:

### **Change in Teaching Linguistic Knowledge**

The change in the teaching of linguistic knowledge is carried out by the teacher. In Figure 1 below, it is explained how the innovation process is carried out by teachers in learning.



Picture 1. Change in Teaching Linguistic Knowledge

This change is based on data from reflection, namely how much of the content provided can still be learned and accepted cognitively by students because the lecturer introduces new technology-based methods. Students are given access to know and understand various variations of linguistic knowledge. This knowledge gain is supported by group study options in learning, as well as interactions that open opportunities for students to engage in question-and-answer interactions with lecturers. Synchronous media also really supports the lecture process, and the main thing in this case is the use of technology that helps to understand the material, opens opportunities for discussion and questions and answers (Husnawadi & Sugianto, 2018). Participant 049 reflects this in the following data:

“In this first semester, I have learned a lot of materials, and the most memorable for me is when I learned about PRAAT. In this subject, Mrs L introduced a new learning method, utilizing technology by using a new application on our laptops and teaching us how to use the application, how to record sound in the application, how to determine the sound frequency in the application, and how to learn to pronounce English words correctly with various accents. Moreover, we learned in groups, allowing us to have discussions and learn together. Sometimes, aside from face-to-face learning, we also learned asynchronously, usually through Zoom. During the Zoom sessions, Mrs L always explained the material in detail, engaged in Q&A sessions with us, and used Quizizz to assess our understanding of the material. Additionally, during Zoom, we were allowed to have Zoom sessions with other classmates, which I personally found helpful for understanding the material because we could discuss and ask each other questions if there were parts of the material that I didn't fully understand”. (File 049)

### Data 1. Change

Some notes from the data to describe the change are that innovation is challenging. Students felt this challenge in the Phonetics and Phonology course. In addition, the students perceived the challenge from the initial introduction to the course and the new atmosphere they had after graduating from high school (Abdur Rohim, 2020). In the data below, this challenge was overcome because the lecturer was a good motivator (Taopan, 2020). In the eyes of students, course lecturers encourage them to study, support learning, so they can understand the lecture material. In the end, the students considered that by following the lectures in this course they had gained rich experience in Phonetics and Phonology.

### Challenging

“Although studying Phonetics and Phonology was challenging, I enjoyed the class because my lecturer, Mrs. L, was an excellent motivator. She encouraged me to continue learning and helped me understand the material better. Overall, I found the Phonetics and Phonology class to be an enriching experience that taught me a lot about the English language”. (File 018)

### **Data 3. Challenging**

Change means that the lecturer uses learning methods to anticipate possible problems with conditions that occur in lectures with first year students studying English at university. The learning method is presented by observing students' needs, although the treatment provided by the lecturer is to use English as the dominant language of instruction in class with the aim of familiarizing knowledge of the target language with EFL challenges (Berdiyev, Sukhrob, and Ikromov, 2023). However, lecturers continue to adjust by explaining material, especially technology-based material. The use of technology is one variation in implementing lecture methods because with this variation, lecturers believe it will support students' understanding and self-confidence in participating in lectures (Andriani et al., 2021, 2023; Parwati & Pramatha, 2021; Pérez et al., 2017).

#### **Lecturer's Teaching Method**

“Initially, I felt tense and hesitant due to Mrs. L's firm and elegant demeanour. I was also slightly surprised when she explained the material entirely in English. However, with each passing meeting, I felt more at ease and adapted to Mrs. L's teaching style. By the final session, I was touched and saddened, especially when Mrs. L asked for our thoughts and impressions at the end of the meeting. I also felt moved when she patiently explained the final task, PRAAT, to us”. (File 034)

### **Data 2. Lecturer's Teaching Method**

#### **Variety of Teaching Method**

“With the varied and interactive learning methods offered by Mrs. L, both offline and online, over time my understanding of Phonetics and Phonology has deepened. I felt more confident in applying the material, and I started connecting these theories to real-world experiences, such as hearing differences in accents, the way people make sounds, or noticing phonological variations”. (File 026)

### **Data 13. Variety of Teaching Method**

In the field of Phonetics and Phonology, the integration of technology has significantly impacted the learning process. Lecturers play a crucial role in instructing students on how to effectively use technology to enhance their understanding of these linguistic concepts. Through clear and comprehensive instructions, lecturers guide students in utilizing various technological tools and resources that facilitate the exploration and practice of Phonetics and Phonology. By incorporating technology into the learning experience, lecturers provide students with opportunities for interactive and engaging learning activities that promote a deeper understanding of the subject matter.

Lecturer takes the responsibility of providing explicit instruction on the utilization of technology in Phonetics and Phonology learning (Bardovi-Harlig & Griffin, 2005; DE COSTA & NORTON, 2017; Kemaloglu-Er, 2017). They guide students through the functionalities and features of specific software, applications, or online platforms that enhance the study of these linguistic disciplines. Lecturers ensure that students are equipped with the necessary knowledge and skills to navigate and effectively utilize technological tools in their learning journey. By providing clear instructions, lecturers empower students to harness the benefits of technology and maximize its potential in Phonetics and Phonology education.

#### **Technology in Teaching**

“In this course we are taught various ways of learning Phonetic and Phonology because Mrs.L teaches various ways and uses many creative platforms. For example, learning with an asynchronous system, filling in padlets, quizzes, group work, and making video education like a teacher, and in my opinion the learning system is not boring because we students are always taught various methods for new learning”. (File 042)

### **Data 14. Technology in Teaching**

#### **Lecturer Instruction Using Technology**

“However, practicing how to pronounce or speak English words live and imitating a native speaker's voice is the best way to learn to speak with better pronunciation. Also, imitating native speakers in YouTube vlog videos has become a habit for me in learning to speak like a native speaker...” (File 096)

### **Data 11. Lecturer Instruction Using Technology**

Lecturers play a pivotal role in fostering interaction and engagement among students in the learning process (Arslan, 2006; Mononen et al., 2023; Zhi & Wang, 2023). They create a supportive and collaborative environment where students feel comfortable to ask questions, seek clarification, and actively participate

in discussions related to Phonetics and Phonology. Lecturers facilitate meaningful interactions by providing guidance, feedback, and encouragement to students, ensuring that they grasp the fundamental concepts and develop critical thinking skills. Through their expertise and guidance, lecturers promote an enriching and dynamic learning experience that strengthens students' comprehension and engagement in the subject matter.

### **Lecturer Interaction**

“During the Zoom sessions, Mrs L always explained the material in detail, engaged in Q&A sessions with us, and used Quizizz to assess our understanding of the material. Additionally, during Zoom, we were allowed to have Zoom sessions with other classmates, which I personally found helpful for understanding the material because we could discuss and ask each other questions if there were parts of the material that I didn't fully understand”. (File 049)

#### **Data 12. Lecturer Interaction**

### **Lecturer's Role**

“There are many things that I got in this phonetics and phonology class, not only about the material but also I got a new motivator, Mrs. L. Thanks to her, my dreams have increased to be able to get a doctor's degree and be able to use the British accent like her, so now I often watch videos about the British accent so that I can do it even better. Also, memorizing phonetics symbols is added to my daily to do list. For some time to come I hope I can consistently do these two things, at least with this can be better”. (File 105)

#### **Data 13. Lecturer's Role**

In the realm of Phonetics and Phonology, lecturers strive to create interesting and stimulating learning situations that surpass students' expectations and ignite their excitement for learning. By incorporating real-life examples, interactive exercises, and multimedia resources, lecturers captivate students' interest and curiosity, making the learning experience enjoyable and engaging (Ramli, 2018). Lecturers design activities that challenge students to think critically, apply their knowledge, and explore new perspectives, fostering a sense of enthusiasm and discovery in the study of Phonetics and Phonology.

### **Interesting Situation**

I am always excited to learn phonetics and phonology because Mrs. Agis explains them very well and often uses interesting methods, for example, using Padlet. Although I find certain sounds, such as the affricate [dʒ] at the word end, challenging to pronounce, I enjoy the classes because of Mrs. Agis's excellent explanations. She always gives us YouTube videos that relate to the topic we discussed to help us deepen our comprehension of the subject matter. She also always makes sure we understand the topic under discussion. (File 021)

#### **Data 6. Function of Group Discussion**

### **Beyond Expectation and Exciting**

The process was both fun and challenging, from working with phonetic symbols. It provided an exciting experience and heightened my sensitivity to nuances in spoken language. I felt like exploring the inner layers of how these sounds shape the meaning and essence of language. Each deciphered phonetic symbol and understood phonological pattern gave a sense of accomplishment and a deep understanding of the richness of language. It's like opening a door to a broader world where sounds become key components in understanding the beauty a complexity of language. All of this not just about learning but also about experiencing and feeling it deeply”. (File 147)

#### **Data 7. Beyond Expectation**

Group discussions are an integral part of Phonetics and Phonology learning, facilitated by lecturers to encourage collaboration and peer-to-peer interaction. Through group discussions, students have the opportunity to exchange ideas, share insights, and collectively analyze and interpret linguistic patterns and phenomena (Arminen & Heino, 2022; Lo, 2018). This collaborative learning approach enhances students' understanding of Phonetics and Phonology concepts, promotes effective communication skills, and encourages active engagement in the learning process. Group discussions also foster a supportive learning community, where students learn from one another and develop a deeper appreciation for the subject matter.

### **Group Discussion**

“...Group discussion was one of the most effective ways for me, as it encouraged a lively exchange of ideas between me and my peers”. (File 033)

#### **Data 4. Group Discussion**

##### **Function of Group Discussion**

Not only in things like that, from this group work I learned things that I didn't know before like, how to use it ? how to pronounce it ? from my other friends we help each other if one of us is having trouble and share knowledge. (File 141).

#### **Data 5. Function of Group Discussion**

Lecturer encourages students to take initiative in their learning journey, empowering them to explore beyond the classroom and develop a genuine passion for Phonetics and Phonology. Lecturers inspire students by providing meaningful and relevant examples, showcasing the practical applications of these linguistic disciplines in various contexts (Atamturk et al., 2018; Chen et al., 2011). As students embark on their learning journey, they gain insights, overcome challenges, and discover the immense potential and opportunities that lie within the field of Phonetics and Phonology. The knowledge and skills acquired through learning Phonetics and Phonology instill a sense of hope and optimism, as students envision the possibilities for personal growth, academic success, and future professional endeavours.

##### **Inspiration**

"I'm inspired by Mrs. L, who I think is the most fluent non-native English speaker I've ever met". (File 092)

#### **Data 10. Inspiration**

##### **Initiative**

"In addition to applying knowledge in the field of linguistics, I also plan to explore ways in which this knowledge can be applied in other fields. For example, how an understanding of phonetics and phonology can help in teaching languages to foreigners or in the development of speech recognition technology, for example, what my lecturer recommended is PRAAT". (File 116)

#### **Data 9. Initiative**

##### **Hope after learning**

"Hopefully, all the knowledge I gained this semester can be useful for me or for others. Whether it's material about phonetics and phonology itself or about how to teach students or technology that can be used in the teaching process". (File 032)

#### **Data 8. Hope After Learning**

There is a strong correlation between innovation and hope after learning (Erling, 2015; Kirna et al., 2015). Innovation in education refers to the implementation of new and creative approaches, strategies, and technologies to enhance the learning experience. When innovative methods are incorporated into the learning process, they can have a profound impact on students' engagement, motivation, and overall learning outcomes. One of the key outcomes of innovation in education is the cultivation of hope after learning. Innovative teaching methods often provide students with opportunities to explore, discover, and apply knowledge in meaningful ways. These methods can inspire students by showing them the relevance and applicability of what they are learning to real-world situations. When students see the practical value and potential impact of their learning, it instills a sense of hope and optimism about their prospects.

Innovative teaching practices also foster a sense of excitement and curiosity among students. By introducing novel and engaging approaches, educators create an environment that encourages active participation, critical thinking, and problem-solving. This sense of excitement and curiosity fuels students' motivation to learn and explore further, leading to a greater sense of hope and belief in their abilities to succeed.

##### **Development in Teaching Linguistic Knowledge**

Development refers to the process of growth, progress, and improvement in various aspects of life, including education (De Lano et al., 1994). In the context of innovation, development involves the continuous advancement and refinement of new ideas, methods, and technologies to enhance the learning experience. Development in innovation is driven by the goal of creating more effective, engaging, and impactful teaching and learning practices (Martínez-Álvarez et al., 2020). By embracing ongoing development in innovation, educators can stay abreast of the latest trends and research in their fields, and continually adapt and improve their teaching approaches to meet the evolving needs of students.

“In essence, my plan revolves around a holistic approach, merging theoretical knowledge with practical application, real-world interaction, and technological tools. This multifaceted approach ensures a comprehensive and effective refinement of my speaking skills in the fascinating realm of phonetics and phonology”. (File 146)

#### **Data 15. Development**

##### **Lecturer’s Choice of Teaching Method**

The choice of teaching method by lecturers plays a crucial role in shaping the learning experience. Lecturers have the opportunity to select and employ various teaching methods that cater to the diverse learning styles and preferences of their students. Whether it's lectures, discussions, group work, hands-on activities, or multimedia presentations, the choice of teaching method can greatly impact students' engagement, comprehension, and overall learning outcomes. By selecting appropriate teaching methods, lecturers can create an environment that fosters active participation, critical thinking, and meaningful interactions, leading to a more effective and enriching learning experience for students (Delgado et al., 2020).

“Doing group assignments with members I already know is very fun because we distribute tasks well. I really enjoyed working on the PRAAT project with my group members because we worked quickly and together. The contribution of all members to this task was very good, because each member had their own contribution to the work”. (File 035)

#### **Data 21. Lecturer’ Choice of Teaching Method**

The ability of lecturers to give clear and effective instructions is essential for facilitating student learning (Listiaji & Subhan, 2021). Lecturers must possess strong communication skills to articulate concepts, provide guidance, and explain complex ideas in a manner that is easily understandable for students. Clear instructions help students grasp the learning objectives, navigate through tasks, and make the most of their learning experiences. Additionally, in today's digital age, lecturers should also be proficient in using technology as an instructional tool. By leveraging technology, such as multimedia presentations, online platforms, and interactive resources, lecturers can enhance their instructional delivery, engage students, and create a dynamic and interactive learning environment.

##### **Ability to Give Instructions**

“There are a lot of interesting situations happened in this lecture, such as demonstration of sounds and group works. When Mrs. L gives demonstration of the sounds, we should imitate her, so we know how to say it correctly. Before that, I didn’t realize that I made some mistakes from the sounds I produced”. (File 093)

#### **Data 16. Ability to Give Instruction**

##### **Ability to Use Technology**

“In this course we are taught various ways of learning Phonetic and Phonology, because Mrs. L teaches various ways and uses many creative platforms. For example, learning with an asynchronous system, filling in padlets, quizzes, group work, and making video education like a teacher, and in my opinion the learning system is not boring because we students are always taught various methods for new learning.” (File 042)

#### **Data 17. Ability to Use Technology**

“In this course, Mrs. L uses various teaching techniques, such as direct face-to-face learning and also online learning using the Zoom application. In addition, she also utilizes technology as a learning tool, such as using the PRAAT application”. (File 028)

#### **Data 18. Ability to Use Technology**

Student enthusiasm is a vital component for successful learning. When students are enthusiastic about the subject matter, they are more likely to be motivated, engaged, and willing to invest time and effort into their studies. Lecturers play a significant role in fostering student enthusiasm by designing engaging lessons, incorporating real-life examples, and creating opportunities for active participation and hands-on learning experiences. By igniting enthusiasm in students, lecturers can inspire a genuine passion for learning and encourage students to explore and delve deeper into the subject matter.

##### **Student’s Enthusiasm**

“I enjoy the classes because of Mrs. L's excellent explanations. She always gives us YouTube videos that relate to the topic we discussed to help us deepen our comprehension of the subject matter. She also always makes sure we understand the topic under discussion”. (File 021)

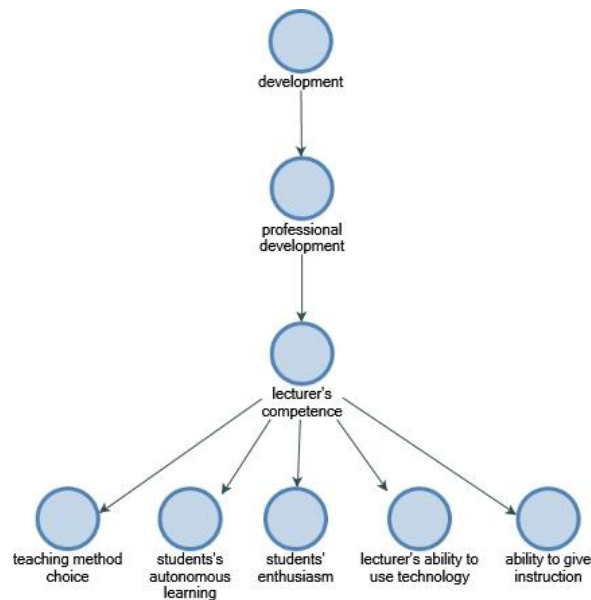
**Data 19. Student’s Enthusiasm**

**Students Autonomous Learning**

Autonomous learning refers to students taking ownership and responsibility for their own learning process (Khotimah et al., 2019). It involves self-directed learning, independent thinking, and the ability to set goals, manage time, and seek resources to enhance knowledge and skills. Lecturers can cultivate students' autonomy by creating a supportive and empowering learning environment that encourages critical thinking, problem-solving, and self-reflection. By fostering autonomy, lecturers equip students with the necessary skills and mindset to become lifelong learners who are proactive, self-motivated, and capable of adapting to new challenges and opportunities in their educational and professional journeys.

“Phonetics and phonology are sciences that cannot be learned in a short period of time, in my opinion, because I am also someone who must study material many times to understand it. Therefore, I will deepen more about phonetics and phonology, so that I understand more, and will not forget the knowledge I have gained this semester”. (File 064)

**Data 20. Students Autonomous Learning**



**Picture 2. Development in Teaching Linguistic Knowledge**

**Novelty in Teaching Linguistic Knowledge**

Novelty in teaching linguistic knowledge is a key aspect of innovation in education. It involves introducing fresh and innovative approaches to imparting linguistic concepts and skills to students. By incorporating novel teaching strategies, educators can engage students in unique and captivating ways, making the learning experience more exciting and meaningful. This may include incorporating multimedia resources, interactive activities, real-life examples, and technology-enabled tools and platforms. Novelty in teaching linguistic knowledge not only captures students' attention but also encourages active participation, critical thinking, and problem-solving. It helps students develop a deeper understanding of linguistic principles and their practical applications in various contexts. By embracing novelty in teaching, educators can create an enriching and dynamic learning environment that promotes creativity, curiosity, and a lifelong love for language and linguistics (Young & Walsh, 2010).

“In this group work, I found out about English sound system and Indonesian sound system are different”. (File 093)

**Data 22. Novelty in Teaching Linguistic Knowledge**

Innovation is closely tied to lecturer creativity, as it requires educators to think outside the box and come up with fresh ideas and approaches to teaching. By embracing their creativity, lecturers can design innovative learning experiences that captivate students' interest and foster a sense of excitement and curiosity. They can explore new teaching methods, incorporate interactive technologies, and create engaging activities that challenge students to think critically and apply their knowledge in practical ways.



Through their creative endeavors, lecturers inspire students to look at linguistic concepts from different angles, sparking new insights and perspectives (Mudra, 2020).

Creating situations that are both complicated and fun is another aspect of innovation in education (Putra & Dianti, M.Pd, 2022). Lecturers strive to design learning experiences that present challenges to students while maintaining an enjoyable and engaging environment. By introducing complex linguistic problems or scenarios, lecturers encourage students to think critically, problem-solve, and collaborate with their peers. These challenging situations serve as opportunities for students to apply their knowledge and skills in creative and innovative ways, fostering a deeper understanding of linguistic concepts and promoting higher-order thinking.

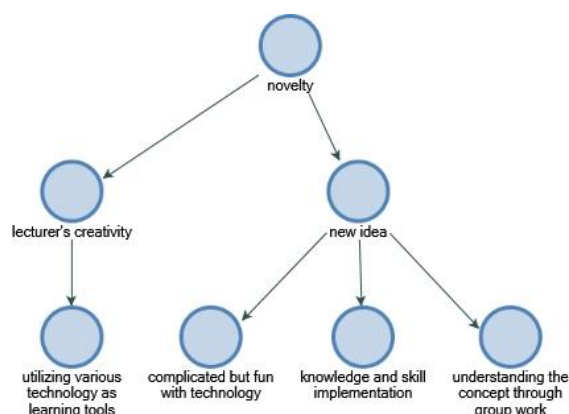
### Lecturer's Creativity

“Upon attending the phonetics and phonology class for the first time, I experienced feelings of nervousness, surprise, fear, but also enthusiasm. Why? Because Mrs. L explained the material directly in English, something different from my school experience where English teachers more often used Indonesian”. (File 076)

#### Data 23. Lecturer's Creativity

“When studying this material, the teaching lecturer explains the material in very detail, provides many examples from various sources, and our teaching lecturer even gives examples of how to produce each letter well. This certainly has a good impact on us students in learning something”. (File 039)

#### Data 24. Lecturer's Creativity



Picture 3. Novelty in Teaching Linguistic Knowledge

“From some of this material, what I really understood and made an impression on me was when studying PRAAT, because the PRAAT material taught me how to use new applications on a laptop, record sound, know sound frequencies, and learn to pronounce words in English from various accents. This made me gain new knowledge not only from the material but also from how to pronounce it and how to use information and technology”. (File 029)

#### Data 25. Lecturer's Creativity

The implementation of knowledge and skills acquired through learning is a crucial outcome of innovation in education (Azian et al., 2013; Bui, 2022). Innovations in teaching aim to go beyond mere content delivery and focus on equipping students with the necessary tools and capabilities to apply their knowledge in real-world contexts. By providing practical applications and integrating hands-on experiences, lecturers help students bridge the gap between theory and practice. Through innovative approaches, such as project-based learning or experiential activities, students gain valuable skills that enable them to transfer their knowledge to new situations and solve linguistic problems effectively.

### Complicated but Fun

“Learning phonetics and phonology is complicated but fun too. I liked practicing symbols into sounds and practicing PRAAT, recording our own voice and recording the frequency of the sound. That's a fun new thing”. (File 146)

### **Data 27. Complicated but Fun**

#### **Knowledge and Skill implementation**

Like Mrs L, who in my opinion has an accent that is pleasant to hear and her pronunciation is clear and makes me understand, hearing Mrs L who has a good accent like a British accent makes me even more enthusiastic about learning how to pronounce it, so that one day I become a teacher, my students will enjoy hearing me speak English and it will be easy to understand, so I hope This material is always in my memory, and the most important thing to remember is that when we study we must be sincere and happy in learning something". (File 024)

### **Data 28. Knowledge and Skill Implementation**

Understanding knowledge through various approaches, such as group work, is a fundamental aspect of innovation in education. Group work offers a collaborative learning environment where students can exchange ideas, challenge one another's perspectives, and collectively generate new ideas (Berdiyev, Sukhrob, and Ikromov, 2023). By engaging in group discussions and collaborative projects, students gain a deeper understanding of linguistic concepts through active participation and interaction. This collaborative approach often leads to the emergence of new ideas, innovative solutions, and fresh insights that may not have been achieved through individual learning. The integration of group work as an innovative approach enables students to tap into their collective intelligence and generate novel ideas that contribute to the advancement of linguistic knowledge.

#### **Understanding the Knowledge through Group Work**

"Overall, studying phonetics and phonology not only helped me understand how we speak but also revealed the beauty and complexity of how humans communicate with each other. I also learned a lot about technology in this class, learning how to use PRAAT, using Excel, learning through a Padlet, and many other things. I also learned and understood my friends' characters better when studying in groups. Doing group assignments with members I already know is very fun because we distribute tasks well. I really enjoyed working on the PRAAT project with my group members because we worked quickly and together. The contribution of all members to this task was very good, because each member had their own contribution to the work". (File 035)

### **Data 29. Understanding the Knowledge through Group Discussion**

#### **New idea**

"I got a lot of new knowledge, not only material but also knowledge of digital usage. There we learned to pronounce a word using American English and adapting to the Cambridge Dictionary. Not only that, but we also learned to use a digital application, namely PRAAT. from that application we can know the frequency shape of our sound. And I think it's an exciting project because it's the first time I've come across a project like that. But it's not just the project that we learn from the phonetics and phonology course, there is still a lot of other useful material". (File 020)

### **Data 26. New Idea**

Based on the idea, he acquired a vast amount of new knowledge, encompassing both material content and digital usage. During the course, they not only learned how to pronounce words using American English and adapt to the Cambridge Dictionary but also gained proficiency in utilizing a digital tool called PRAAT (Mohanlal et al., 2013). This application allowed them to analyze the frequency pattern of their own sound. Encountering such a project was particularly exhilarating as it was my first exposure to this type of endeavour. However, the phonetics and phonology course offered much more than just this project. It provided a plethora of other valuable materials for them to explore and learn from.

#### **Improvement in Teaching Linguistic Knowledge**

Improvement in innovation entails the role of the lecturer as a problem solver for students' challenges, and in order to address these issues, lecturers often utilize technology. Lecturers recognize the importance of understanding and addressing the difficulties students may encounter during their educational journey. They act as problem solvers, striving to identify and resolve obstacles that hinder students' progress. To achieve this, lecturers leverage various technological tools and resources available to them. By integrating technology into their teaching methods, they can provide effective solutions that cater to individual student needs and enhance the overall learning experience (Nurutdinova et al., 2016).

"Utilizing technology, I aim to leverage speech recognition tools and language learning apps. These resources offer immediate feedback on pronunciation, aiding me in refining my spoken language skills progressively". (File 146)

### Data 30. Improvement

#### Problem Solver

“Reflecting on the semester, I find a myriad of lessons learned from the Phonetics and Phonology experience. But I also found difficulties, especially in telling sounds apart, showed places where I could get better. My classmates and Mrs. L helped me a lot, and learning more about this subject made me understand better”. (File 103)

### Data 31. Problem Solver

#### Students’s Confident Problem

“I made a strong effort to adapt, get to know new friends and collaborate on group assignments. In the end, I felt happy and comfortable in a conducive learning environment, both in terms of friendship and teaching”. (File 076)

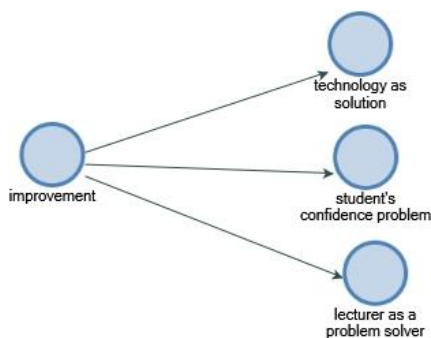
### Data 32. Student’s Confident Problem

Technology serves as a valuable asset for lecturers in their problem-solving efforts (Islam & Hasan, 2020). It enables them to provide personalized and adaptive learning experiences to meet students' diverse requirements. By utilizing educational software, online platforms, and interactive applications, lecturers can offer tailored solutions that address specific challenges faced by students. For instance, they can utilize virtual simulations, multimedia presentations, or online collaboration tools to engage students and facilitate a deeper understanding of complex concepts. Technology also grants lecturers the ability to provide immediate feedback and guidance, helping students overcome difficulties in real-time.

#### Technology as a Solution

And in the future, I want to share my knowledge with other people in my own by a way that is fun and not boring. And from this lesson at least I have realized that this also teaches me how to be a good teacher. And I will learn more about using technology well, so that I can also introduce technology to students later. And I also hope that the knowledge I gain can continue to be useful for many people”. (File 041)

### Data 33. Technology as Solution



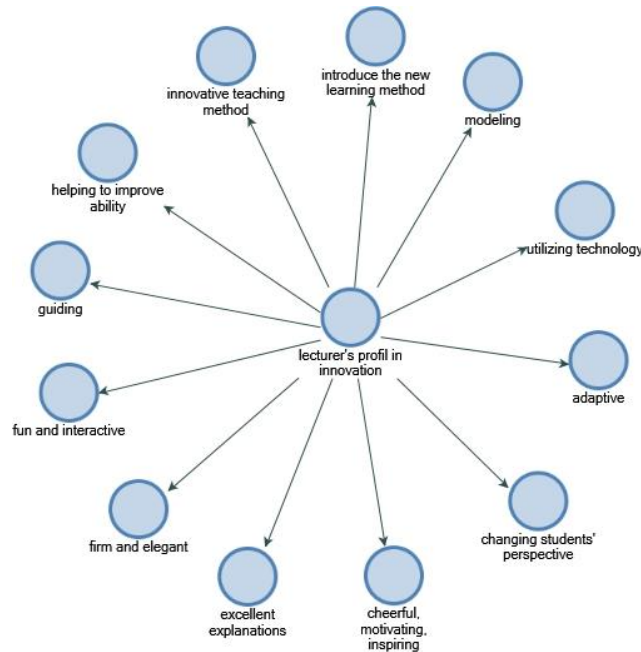
### Picture 4. Improvement in Teaching Linguistic Knowledge

Moreover, technology empowers lecturers to offer innovative approaches in problem-solving, expanding the array of solutions available to students. By harnessing technology's capabilities, such as artificial intelligence or data analytics, lecturers can gain insights into students' learning patterns, identify areas of improvement, and customize interventions accordingly. By leveraging these technological advancements, lecturers can effectively diagnose students' challenges and implement targeted strategies to address them.

#### Lecturer’s Profile in Teaching Linguistic Knowledge

The lecturer's profile in teaching linguistic knowledge encompasses various qualities and skills that contribute to an effective and impactful learning experience (Chang & Kanno, 2010; Economidou-Kogetsidis, 2010; Márquez-García et al., 2022). One crucial aspect is their innovative teaching methods, which aim to introduce new learning approaches and strategies. By incorporating technology into their teaching practices, lecturers can revolutionize the way students perceive and engage with linguistic concepts. This shift in perspective is facilitated through cheerful, motivating, and inspiring teaching styles

that adapt to students' needs. The lecturer serves as a firm and elegant guide, providing excellent explanations and modelling desired linguistic skills. The learning environment is made fun and interactive, fostering student enthusiasm and participation. By utilizing these techniques, the lecturer helps students improve their linguistic abilities, empowering them to excel in their language learning journey.



**Picture 5. Lecturer’s Profile in Teaching Linguistic Knowledge**

**Innovative Teaching Method**

“Mrs. L uses innovative teaching methods that involve technologies like PRAAT”. (File 021)

**Data 41. Innovative Teaching Method**

**Introduce New Learning Method**

“In this subject, Mrs L introduced a new learning method, utilizing technology by using a new application on our laptops and teaching us how to use the application, how to record sound in the application, how to determine the sound frequency in the application, and how to learn to pronounce English words correctly with various accents”. (File 049)

**Data 42. Introducing New Learning Method**

**Utilizing Technology**

“When Mrs L presented the video about speech mechanism, it seemed like a biology lesson to me. I had never imagined that sound production could be understood in that way, and I was amazed. I found the professor's explanations very detailed and easy to comprehend, which caught my interest”. (File 155)

**Data 44. Utilizing Technology**

Innovation has the power to significantly change students' perspectives by introducing new and transformative approaches to teaching and learning (DE COSTA & NORTON, 2017; Machmud et al., 2021; Taylor, Sheryl V, and Sobel, 2011). When educators embrace innovative methods, it can challenge traditional paradigms and expand students' understanding of a subject. By incorporating novel technologies, interactive activities, and real-world applications, innovation can shift students' perspectives from passive receivers of information to active participants in the learning process.

Innovative teaching methods encourage students to think critically, problem-solve, and engage in collaborative activities (Matsumoto, 2015). This shift in perspective encourages students to become more independent and self-directed learners. They are no longer just recipients of knowledge but active contributors who can explore, question, and construct their own understanding of concepts.

### **Changing Students' Perspectives**

“Despite the initial difficulties, the class experience with Mrs. L changed my perspective. In teaching She provides a series of YouTube videos which are valuable references to aid our understanding of sound production”. (File 070)

#### **Data 35. Changing Students' Perspectives**

### **Cheerful, Motivating, and Inspiring**

“Additionally, I feel happy because of Mrs. L's cheerful, motivating, and inspiring teaching style. It motivates me to further study and improve my pronunciation as preparation to become a competent English teacher”. (File 062)

#### **Data 36. Cheerful, Motivating, Inspiring**

### **Adaptive**

“However, all this can be done with pride and joy because it is taught by motivating, adaptive lecturer! Dear Mrs. L., and enthusiastic friends who channelled positive motivation for me to continue to expand”. (File 067)

#### **Data 34. Adaptive**

### **Firm and elegant**

“Initially, I felt tense and hesitant due to Mrs. L's firm and elegant demeanour. I was also slightly surprised when she explained the material entirely in English. However, with each passing meeting, I felt more at ease and adapted to Mrs. L's teaching style. (File 034)

#### **Data 37. Firm and Elegant**

### **Excellent explanation**

“I enjoy the classes because of Mrs. L's excellent explanations. She always gives us YouTube videos that relate to the topic we discussed to help us deepen our comprehension of the subject matter. She also always makes sure we understand the topic under discussion”. (File 021)

#### **Data 36. Excellent Explanation**

### **Guiding**

“The learning was enjoyable, even though at first, I was a little confused about using them, but of course Mrs. L directed us on how to use them”. (File 030)

#### **Data. 39 Guiding**

### **Modelling**

“There are a lot of interesting situations happened in this lecture, such as demonstration of sounds and group works. When Mrs. L gives demonstration of the sounds, we should imitate her, so we know how to say it correctly. Before that, I didn't realize that I made some mistakes from the sounds I produced”. (File 093)

#### **Data 43. Modelling**

### **Fun and interactive**

“During this first semester of college, I had the pleasure of meeting Mrs. L, a lecturer who was firm but fun and interactive. Under her guidance, I was introduced to the speech mechanism, phonetics and phonology, the production of sounds, PRAAT methods, and much more”. (File 026)

#### **Data 38. Fun and Interactive**

### **Helping to Improve Ability**

“But over time, directly or indirectly, Mrs. L, as my lecturer, really helped me improve my ability to pronounce English words correctly”. (File 027)

#### **Data 40. Helping to Improve Ability**

Innovation in teaching fosters personalized and adaptive learning experiences (Corujo-Vélez et al., 2021; Rochsantiningsih & Aniq, 2023). By utilizing technology and data-driven tools, educators can assess students' individual needs and tailor instructional strategies accordingly. This personalized approach allows students to receive targeted support and challenges, helping them improve their abilities at their own pace. It promotes active and experiential learning. By incorporating hands-on activities, simulations, and project-based learning, students are encouraged to apply their knowledge and skills in practical contexts. This active

engagement enhances their understanding, critical thinking, problem-solving abilities, and overall competence in the subject matter. Moreover, it facilitates collaborative learning. By incorporating collaborative platforms, online discussions, and group projects, students can work together, exchange ideas, and learn from one another. Collaborative learning not only enhances students' abilities to communicate and cooperate effectively but also fosters a deeper understanding of concepts through peer interaction and feedback.

Innovation entails change and contributes to building a strong teaching profile (Carpenter et al., 2019; Yazici & Atay, 2023). It involves teachers making changes to their teaching methods, such as incorporating group discussions and utilizing various learning models, such as online and offline learning. Despite the challenges faced, the use of technology in overcoming learning obstacles can create an engaging and surpassing learning environment that inspires students, fosters their initiative, and instills positive aspirations for future learning. The knowledge acquired in the Phonetics and Phonology learning process can be applied in real-world scenarios. For example, students may plan to familiarize themselves with and utilize other technology-based media to enhance their language proficiency.

The integration of diverse technological tools in the learning process makes the classroom dynamic and inspiring, making previously difficult content enjoyable and easier to comprehend. The teacher's selection and adaptation of technology-based media significantly impact students' interest and motivation to consistently attend classes, as they find enjoyment and are challenged to find solutions to their learning difficulties. When students feel fatigued during the learning process, the teacher's role as a motivator becomes crucial (Kartika Sari, Maya, Suryanti, & Rulviana, 2022; Yang et al., 2021). For instance, in language learning, displaying role models of the target language is important to demonstrate the teacher's commitment to exemplifying the language standards, inspiring students, and gaining their trust in the language acquisition process.

Discussion and group work techniques are popular methods for students to find solutions to their learning obstacles, fostering self-confidence and resilience in tackling challenging content. Innovation also influences the continuity and application of knowledge, as students continue to promote the language they have learned, develop themselves, enhance their abilities, and generate new ideas for learning or teaching strategies in the future (Abdur Rohim, 2020; Moldavan et al., 2022; Rasulo et al., 2022). Innovation involves teachers generating ideas to address students' obstacles effectively, allowing students to experience the impact of their solutions. The use of technology in teaching represents an enjoyable and novel experience for students in the learning process. Teachers blend traditional and modern elements in their teaching practices, utilizing textbooks for content, assignment guidance, and student understanding, while also incorporating online sources such as research articles downloaded from electronic journals. Novelty inspires students to motivate themselves for ongoing competency improvement and fosters a sense of pride in their learning achievements, as they feel valued due to the teacher's dedicated efforts in facilitating their progress.

Employing technology aids students in overcoming learning problems, particularly those related to self-confidence (Parwati & Pramatha, 2021; Zhi & Wang, 2023). Teacher innovation, such as assigning independent recordings for presentations, proves highly beneficial for students who lack confidence. The integration of various media types is perceived as something new in the eyes of students, representing innovative teaching practices. However, policymakers must address the challenges associated with innovation, particularly regarding the use of internet technology in learning. Connectivity disruptions are considered debilitating and disruptive, hindering the learning process, and reducing students' motivation (Elfiona et al., 2019; Phillips & Loch, 2012). While teachers strive to be creative and innovative, there are limitations beyond their control that impede their efforts. Students consider the teacher's sound recognition videos as the most effective way to learn English. Discussion groups are also regarded as an innovative approach that transforms the way students learn. Ultimately, innovation brings about change, impacting existing pedagogical practices and aiming to enhance English language teaching.

## **CONCLUSION AND SUGGESTIONS**

Integrating various types of media in the eyes of students is seen as a new and innovative approach to teaching. This integration allows for personalized and adaptive learning experiences, where technology and data-driven tools enable educators to assess individual student needs and tailor instruction accordingly. By incorporating hands-on activities, simulations, and project-based learning, students are actively engaged in the learning process, enhancing their understanding, critical thinking, and problem-solving abilities.

Collaborative platforms and group projects further foster collaborative learning, enabling students to work together, exchange ideas, and learn from one another. This collaborative approach not only enhances communication and cooperation skills but also deepens students' understanding of concepts through peer interaction and feedback.

Innovation in teaching goes beyond the integration of technology. Teachers play a crucial role in selecting and adapting technology-based media to create an engaging learning environment that inspires students and motivates them to overcome learning difficulties. By incorporating discussion and group work techniques, teachers empower students to find solutions to obstacles, fostering self-confidence and resilience. Furthermore, innovation ensures the continuity and application of knowledge beyond the classroom, as students continue to develop themselves and generate new ideas for learning and teaching strategies. However, policy makers need to think further that the challenges of innovation, especially for the use of internet technology in learning, are connection disruptions which are debilitating and disruptive and hinder the process of learning activities. Students complain about this condition as an obstacle that can reduce motivation. Even though teachers have been creative and innovative, when there are obstacles that are beyond their capacity, they cannot do much. It is essential for policymakers to address challenges such as connectivity disruptions that hinder the effective use of technology in learning.

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