To the Discipline Council of the School of Languages and Literatures at Adam Mickiewicz University

Review of MA Kacper Łodzikowski's dissertation "Innovative methods for the teaching of second language metalinguistic awareness"

I would like to thank the Discipline Council of the School of Languages and Literatures at Adam Mickiewicz University for asking me to review MA Kacper Łodzikowski's manuscript for his PhD degree at the Department of English Studies.

I have read through the dissertation that consists of two published journal articles (both 11 pages and published in well-known journals in the field), one accepted book chapter (that should be published by Springer in September 2024; 23 pages), a 17-page introduction to the articles, and a 5-page conclusion. One of the articles and the book chapter have been co-authored, and the dissertation also includes a clarification of this, demonstrating Mr Łodzikowski's important role in them. The dissertation ends with an impressive 14-page list of references (over 140 sources mentioned). In general, the dissertation, therefore, fulfills the criteria set by Adam Mickiewicz University. It is also impressive that the dissertation claims that it "presents a selection of three most impactful publications from a wider body of work by the present author" (p. 16) implying that there would have been many more to choose from.

Description and evaluation of the dissertation

The dissertation is titled "Innovative methods for the teaching of second language metalinguistic awareness". I am sure that the author has thought about the title for a long time, as the dissertation seems to have two parts. The first two articles ("Board games for teaching English prosody to advanced EFL learners" and "Association between allophonic transcription tool use and phonological awareness level") are teaching experiments that focus on university-level Polish learners' metaphonetic awareness of English and clearly focus on second language (L2) pronunciation teaching. The book chapter ("Generative AI and Its Educational Implications"), on the other hand, is a "theoretical exploration of the future of teaching and learning enabled by artificial intelligence" (p. 2) in general. The book chapter is not directly linked to the theme of metalinguistic awareness, and the articles are, as mentioned, related to an even more strictly defined theme of metaphonetic awareness. What combines the texts is that they are focusing on innovative methods for L2 teaching. I wonder if editing the title to include two parts would describe the whole project more accurately, for example, in lines of "Innovative methods for the teaching of second languages with special reference to metaphonetic awareness and the use of artificial intelligence". It also seems to be the case that one of the leading themes of the dissertation is the focus on advanced students and L2 learners (of English) at university level that could have been integrated into the title.

The author writes (p. 1) that the PhD was created "out of curiosity and necessity". The initial steps were taken with first teaching experiments that have led to two published articles. My impression of the dissertation, as a whole, is that it demonstrates quite well Mr Łodzikowski's growth as a researcher starting from more narrowly focused empirical projects to international co-authoring and theoretical depth in thinking.

Part 1 demonstrates the author's wide knowledge of the field of L2 pronunciation teaching research. Section 1.1 is even a bit surprisingly a concise descriptive historical introduction to L2 pronunciation teaching from the 1850s onwards, instead of grounding the dissertation from the very beginning with present-day needs or theoretical and methodological gaps in earlier research. Section 1.2 is a fairly short treatment of a central topic: namely, how much the monolingual native speaker of the target language can be used as a model for multilingual L2 learners. I wonder if the evidence in this section actually points more to the direction that university-level L2 pronunciation teaching needs more thorough thinking, as it could be that beginning students need more awareness-raising of various models and possibilities because more advanced students seem to have more realistic beliefs about their own needs and goals. Instead, there have been claims that

could be used to support the argument in this section, as English is also often the language for international and even intra-national competition and the language one has to master very well to win a place in education and employment (e.g. I-C Kuo. 2006. "Addressing the issue of teaching English as a lingua franca" *ELT Journal*, 60, 3, 213-221).

Section 1.3 discusses a central theme in the two articles, namely factors affecting L2 pronunciation acquisition. It gives strong theoretical claim and demonstrates a research gap with the role of grit in L2 learning, and the reader almost assumes that this must be a research question in this study based on the gap shown. It was also a bit unclear what is meant by 'lexical frequency effects' in this section. Section 1.5 deals with explicit pronunciation instruction, and section 1.6 includes another central topic for the two articles, namely metaphonological awareness training. These two topics are, as the author admits, almost identical. It would have been possible to visualize or more clearly explain at the end of this section what metaphonological awareness instruction includes and what falls outside of it.

Section 1.6., again, is very central introducing the three innovative methods that the dissertation is interested in. This discussion stays at a fairly descriptive level. It is to note that subsection 1.6.3. (page 12) is the first time the text starts discussing artificial intelligence (AI). Here the emphasis is, to a large extent, also on computer-assisted pronunciation teaching, to create links between the use of AI and L2 pronunciation teaching. The four research goals are presented in section 1.7. These are 1) more focus on advanced learners, 2) understanding how learners engage with novel tools teaching metaphonological awareness, 3) follow reproducible research practices, and 4) provide a theoretical investigation of AI technologies for education. It would have been helpful to see, visually or in clearer terms, how these goals are then intertwined in the general theme (e.g. the title) of the dissertation and how the articles and the book chapter complement each other here. One idea of the links between the publications is given to the reader at the very end by saying that the theoretical book chapter provides "a starting point for developing future [intelligent tutoring systems] targeting metalinguistic awareness training" (p. 15).

The publications

The first article (section 2.3) is 11 pages long, but the page numbering suggests that it is 16 pages. Therefore, the page numbers of the dissertation are incorrect from section 2.3 onwards, but in this evaluation, I use the page numbers as they are used in the dissertation. The article focuses on a teaching experiment, with unfortunately no control group, using board games to teach L2 prosody. It considers learners' in-class engagement, performance on assessment, and perceived usefulness of the games. It demonstrates interesting results with statistical testing, and also implies that learners like to be taught by teachers and value direct exercises. The article has many good ideas for future directions, but it is unclear how much the author(s) has/ve continued with these.

The second article (section 2.4) is another teaching experiment with allophonic transcription tool, this time focusing more on individual segments. A crucial part of this article is also designing the tool. The analysis focuses on learners' study practices and the association between tool use and phonological awareness level. This study is motivated by "curiosity" (p. 27 in the article). Again, the article has ideas for the classroom and future studies, and this experiment has also been later replicated and validated by other researchers.

The book chapter (section 2.5) is different in its approach and also demonstrates international co-authoring. The chapter is an interesting introduction to generative AI and its implications for education. It includes a historical overview of how AI related to education has evolved, discusses how it can be used in learning contexts, argues how societal issues will impact AI in education, and finally, provides four recommendations for educational researchers. The article emphasizes how AI tries not to replace teachers in the classroom but aims to help them be more effective teachers. Overall, the chapter is a very timely and much needed contribution to educators in the era of AI.

Dissertation's conclusions

The dissertation concludes by re-addressing the four research goals and discussing them based on the publications. As the answers demonstrate, the articles are complementary and are used to answer goals 1-3. The book chapter is a separate contribution and related to the fourth goal. The author admits that "this

publication did not focus on metalinguistic awareness per se" (p. 72), and interestingly, motivates the link of this study to the main theme of the dissertation with a call that has not been mentioned previously. The author shows that he is aware of the main limitations of the two articles, many of which are based on the educational context of data collection that is hard to change by researchers. The future directions presented are very interesting and, as the are partly already on-going, also demonstrate how Mr Łodzikowski's research career is in a very active stage and quite directly continuing in the post-doctoral phase. The three areas of AI literacy listed on p. 75 are thought-provoking and also, in my opinion, could be linked with teachers' knowledge in the TPACK model (e.g. Matthew Koehler and Punya Mishra. 2009. "What is Technological Pedagogical Content Knowledge (TPACK)?" *Contemporary Issues in Technology and Teacher Education,* 9(1)).

Evaluation based on the stated criteria

Centrality of the research problem

L2 (pronunciation) teaching is always developing with new methods. Mr Łodzikowski's dissertation is to be applauded for its very applied nature and take on this issue. During the course of this project, he has been able to create (sometimes with colleagues) methods that will benefit other teachers. The analysis has examined how learners react to and benefit from these methods. Metalinguistic awareness is crucial for L2 learners at university level, as the focus of university level teaching is more on knowledge and awareness than skills as such. The latest innovative method, theoretically discussed in the dissertation, the use of AI could not be any more current in academia, as teachers and researchers are in the middle of an AI revolution wondering about the risks and benefits of using AI in teaching and research, as well as contemplating on how to teach responsible and ethical use of AI applications for future generations. For this, the third publication brings important modern and much needed perspectives.

Clarity of the research aims and methodology

The dissertation is well written and is easy to follow. The language has been polished well (for very minor comments, see appendix) and is accurate. One minor aspect of the precision of writing and using references was that sometimes it was not clear how the sources were used to back up some claims in the text. As two examples from page 2, it is not clear how the general reference to Kirkova-Naskova et al. (2021, which is an edited book) can justify the claim that metalinguistic training can aid the effectiveness of pronunciation instruction, or how Chapelle and Sauro (2017, an edited handbook) shows the successes of computer-assisted language learning. It may more be the case that some authors or studies within these collections are the actual sources for these claims, or possibly the introductory sections written by the editors, rather than the collections as a whole. As this dissertation is based on three publications, they have their own aims and methods that have been explained in the publications separately, depending on the nature of the publication.

Coherence and consistency

As I have demonstrated above, the two published articles and the book chapter approach the question of L2 teaching from fairly different perspectives, which hurts the overall coherence and consistency of the dissertation. Sections 1.1-1.5 serve as a good introduction to the questions addressed in the two articles on metaphonetic awareness and the teaching of L2 pronunciation, but the theme of artificial intelligence and the broader framework of education addressed in the book chapter are not discussed to the same extent. This gives the impression that the dissertation, as a whole, is mostly based on the first two articles, and the third publication is added later with the addition of the fourth research goal. I would have welcomed a clearer discussion intertwining these aspects. I also feel that the author could have considered some kind of visualization, a table or a figure or even both, to demonstrate how the articles and the research questions in them point to the same central question(s) and theme(s). At present, as said, 1.6.3 tries to combine the third publication with the first two by addressing computer-assisted pronunciation teaching, but a quick search of the third publication did not find it addressing computer-assisted pronunciation teaching, metalinguistic or metaphonetic knowledge, pronunciation or phonetic information explicitly in the text, emphasizing its slightly remote connection with the first two publications.

Overall contribution

Although I have critically discussed some aspects of the dissertation at hand, mainly focusing on the descriptive nature of the introductory pages in general and the coherence of the three publications in particular, I think Mr Łodzikowski's dissertation on innovative methods in teaching makes an important contribution to the research field and L2 English studies as a whole. In his dissertation, Mr Łodzikowski shows academic maturity and growth during the process, demonstrates a good knowledge of the field, offers important practical implications and theoretical contributions to L2 (pronunciation) teachers around the world, and introduces a very profound treatment of the possibilities of AI in education. A PhD is an "academic driver's license" for researchers who have demonstrated that they are able to conduct coherent, insightful, and rigorous research and independently contribute new knowledge to the field. Mr Łodzikowski's dissertation reveals his high level of expertise and research capability within L2 studies and includes three peer-reviewed publications. Therefore, in my clear opinion, Mr Łodzikowski's dissertation **should be accepted as part of his PhD degree**.

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Appendix – minor typos etc.

-Notice the page numbering mentioned above – Publication 1 is not the same length as the table of contents suggests, which also makes the final page numbers incorrect.
-Page v, check consistency in using italics with journal names
-Page 2, final paragraph: and → an
-Page 8, abbreviation PI not explained or used elsewhere
-Page 10, second paragraph: on → of
-Page 12, third paragraph: such systems _do_ not fit
-Page 81, check spelling of reference "Krzysik"
-Page 82-83, check order of references for Łodzikowski and Mompean
-Page 83, check journal of reference "Moorhouse et al."

References mentioned in the text not included in the list of References:
Becker & Edalatishams 2019, Bernstein 1999, Birdsong 2018, Saito 2015, 2018, Sudina & Plonsky 2021, Suzukida 2021, Teimouri et al. 2020

References included in the list of References not mentioned in the text:
Kohnke et al. 2023, Schwartz & Kaźmierski 2020, Wrembel 2015