

External Examiner Report

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Concerning Klaudia Gajewska's PhD thesis

Intelligent Virtual Assistants in Self-Instructed Action-Oriented EFL Mediation Practice. A Case Study of Polish Teenage Learners

In my view the thesis meets the expected standard for the award of a PhD.

Comments on each chapter, assessment of the writing, and the final overall assessment are presented below.

Introductory chapter

The short introduction to the thesis covers the rationale for the research and sets it in context. It highlights the novel concept of Task-Oriented Intelligent Mobile-Assisted Language Learning introduced by the researcher.

Since the notion of 'text mediation' is relatively recent (CEFR 2020), it would be helpful to define it when it is first introduced (pp.15-16 "learning of text mediation"; "learners' ability to mediate a text"; "the latest concept of 'mediation'") - although this is covered later in the thesis.

Regarding the first mention of the research methods adopted in the thesis, it is stated that it will be "experimental and descriptive research" (p.16) but soon after it is described as "quasi-experimental" (p.17) which appears to be inconsistent - although later it is clarified.

Acknowledgements (pages 17-18) could be in a section with a separate heading.

Chapter 1 (Communicative competence/ European trends)

This chapter addresses the notions of communicative competence, action-oriented approach, mediation and task complexity, presented against a background of trends in European policies and practices in foreign language teaching. It includes interesting consideration of terminological issues in translation of key concepts into Polish. The research focus on mediation activities in language learning is thoroughly justified.

The chapter demonstrates a very good level of knowledge and understanding of key historical developments and the landscape of teaching approaches in Europe and beyond. Criticality is evident in the ways in which methods and their proponents are discussed and models of communicative competence are compared with each other. The CEFR framework is carefully assessed in relation to existing critiques of its perceived shortcomings.

The background material on "Teaching traditions in the Pre-Method Era: From the Classical to Direct Method" is not strictly relevant to the thesis and some of it could have been omitted, or the narrative could have been constructed in such a way that reasons for including the distant historical information are apparent (for example, how early ideas led to, or stand in contrast to, the communicative approach and the conversational method). Past traditions were largely concerned with class-based teaching whereas the thesis has a focus on student learning outside of class.

Chapter 2 (EFL in Polish secondary school context)

This chapter provides an overview of EFL education in Poland in a historical context. It describes multiple reforms, fluctuations in emphasis and preferences for different languages, and the role of examinations. Language syllabi and criteria for entrance to schools and higher education are considered. It is clear that the researcher has thoroughly understood and reflected upon all these developments and the narrative is engaging and coherent.

At times there appears to be too much detail and the chapter would have benefited from stronger signposting of aspects that are most relevant to the research study. The broad scope of the review extends to discussion of historical events, several facets of education systems and even details such as students' performance in mathematics and science. Sometimes it is not obvious why a great deal of descriptive detail is provided on certain topics, for example the content and format of high-states examinations in several European countries.

Chapter 3 (IVAs in ESL/EFL)

Following on from Chapter 2's brief discussion of the effects of the pandemic on education and the use of remote digital methods for language instruction, this part of the thesis traces the evolution of CALL, MALL and intelligent MALL, bringing this together with the task-based learning reviewed earlier in the thesis. As in the previous chapters, there is a historical approach to the narrative that reaches back to the origins of computers in the 19th century. Stages in CALL developments are presented in relation to the evolution of language learning approaches in the past century.

The researcher impressively demonstrates comprehensive familiarity with key turning points and concepts in the field, relationships between subfields and overlapping fields of research, debates around the pros and cons of smartphone use in schools and critiques of wholesale pronouncements about the characteristics of generations using technologies. A clear research focus on task-oriented IMALL is identified for the study. The chapter includes a literature review of studies on IPA use in EFL/ESL, with critical evaluation of the various studies, their findings and limitations. The need for more research is established.

Autonomous learning is introduced here for the first time and could have been elaborated upon more fully as an important concept for the thesis.

Chapter 4 (Methodology)

This is a comprehensive chapter covering all aspects of the research process. The originality of the research is convincingly emphasised at the start of the chapter. Research aims, research questions and hypotheses are clearly set out. A mixed-method approach is outlined, with piloting and a main study. The limitations of a convenience sample are discussed and random sampling within this sample is used where possible as well as purposive maximum variation sampling.

A detailed needs analysis procedure is described for the pilot study and results of this analysis are presented. The researcher demonstrates an understanding of quantitative and qualitative analysis and the relationships between them and uses several statistical tests for the analysis. Effective use of Alexa app logs is also demonstrated. Thematic analysis is

reported in general terms and could have included more detailed reporting of how data was coded to arrive at the identified themes. Modifications to the research design based on the piloting are discussed and the procedures for the main study are described and justified. Triangulation and validity are considered. Ethical aspects and decisions are outlined.

In the current chapter, autonomous foreign language learning - also referred to as 'self-instruction' and 'self-regulated out-of-class learning' - seems to be equated with learning in the 'digital wilds' (p. 182), although a task-based homework design does not seem to be consistent with learning in the wilds. Later on page 229 "performing obligatory homework" is described as an autonomous activity. It would have been helpful to discuss learner agency, especially since the use of the Alexa IPA calls into question whether learners are acting autonomously or in tandem with the IPA.

Chapter 5 (Study results and discussion)

This chapter reports on the main study, which has a clear focus on task-based language learning for the development of skills in intralinguistic text mediation with the aid of an intelligent virtual assistant, Alexa. It connects well with the earlier literature review and the pilot study. The multiple methods tried out in the pilot are adopted for the main study over a longer period of time and with larger numbers of participants. A quasi-experimental design was employed.

Data analysis of pre- and post-tests, learner logs and Alexa usage data is thorough, with the use of several appropriate statistical tests. Similarly, the post-study questionnaires and semi-structured interviews have been skilfully analysed. Results are reported in a rigorous way with sufficient detail. A detailed analysis of "breakdowns" based on the collected data is provided along with successful communication despite grammatical and pronunciation errors on the part of the learners.

Each research question is answered and discussed in relation to a broad literature on studies in task-based learning, CALL and ICALL (though not specifically IMALL) across multiple language skills and in relation to interactionist theory and multimodal interaction. Findings are triangulated and interpreted with reference to possible reasons, the novelty effect of using Alexa, the evolution of the technology and models of technology adoption. Pedagogical implications are drawn out, the limitations of the research are acknowledged, and future research is considered. Reasonable conclusions are generated from the research.

Writing and presentation

The thesis is generally very well written in appropriate academic language. It demonstrates a good command of specialist terminology.

There are a few minor issues of style/grammar/accuracy/clarity, including the following:

p. 15 "This obviously creates a pressing need" – "obviously" is best avoided in scientific discourse since nothing is obvious in science

p.19 "Three subchapters have been isolated for this purpose" – The chapter is divided into three subchapters for this purpose (Note the same on page 258)

p.20 "well-known" – this word is best avoided in scientific discourse because it makes an assumption about what is, or is not, well known by readers (and/or by contemporaries in a historical context). p.49, 138, 143 "well-known publication"; p.60 "well-known German researchers"; p.146 "a well-known example" – and so on. The same applies to "famous", e.g. p. 43 "famous quotation"; p.114 "famous SAMR"; p.120 "the famous Programmed Logic"; p.120 "famous definition" – and so on.

p.22 "pointed out to" – pointed to (or, pointed out)

p.23 'Age of Methods' and 'Method Era' are mentioned but it is unclear whether these designations refer to the same thing.

p.26 "during classroom practice, that is the one involving lexico-grammatical and pronunciation errors" – The meaning is unclear. Perhaps it should be: during classroom practice where lexico-grammatical and pronunciation errors were allowed

p.27 "was regarded as short of revolutionary" - was regarded as nothing short of revolutionary?

p.29 "carries no distinctive social significance" (p. 41) – should that be p.350?

Also on p.29 There could be more clarity around the idea that communicative performance "carries no distinctive social significance", since Paulston also "stressed the socio-cultural aspect of communication". This could be achieved by clarifying that Paulston was discussing classroom-based language practice.

p.33 "effects they manage to achieve on" – effects they have on

p.33 Hymes' – Hymes

p.33 Hypothesis, – Hypothesis.

p.41 Eurocentres Foundations – Eurocentres Foundation

p.47 "the concept of action, rather than the task, is put first in English, French, and German" – "put first" does not make sense here. A better way to phrase this might be:.... is foregrounded in... (see also page 175 "put to the foreground")

p. 51 refers to a 'nomadic notion' – this should probably be attributed to Stengers (1987) rather than Lenoir 1996. (Stengers, I. (1987). *D'une science à l'autre.: Des concepts nomades*. Paris, Le Seuil.)

p.53 "access to text, concept, and communication" – access to a text, concept, or communication

p.61 "As demonstrated in Table 1.4" – Table 1.5?

p.72 "a bit of pragmatic dimension" – Colloquial. Could be rephrased as: some pragmatic elements

p.72 "Only around a dozen percent of learners attended secondary (approximately 14-20%) and technical schools (approximately 30%)" – only around a quarter?

p.81 "Second of all" – Second (or Secondly) (also on p. 418)

p.97 Eurydice, 2015) Since then – missing full stop

p. 103 students' manage – students manage

- p.107 "The threshold both levels" – The threshold for both levels
- p.108 "achieved by examinees' " – achieved by examinees
- p.113 "Both negative and positive aspects of the recent global health crisis has been isolated so far" – ... have been identified so far
- p.117 "education system have undergone" – has undergone
- p.120 "Instructed Consortium" – Instruction Consortium
- p.132 "recently acquired the nickname 'pocket computer'" – but note that the term already existed in the 1980s
- p.134 "the time people spent mobile" – people spent on their mobiles?
- p.138 "a lot significance" – a great deal of significance
- p.140 "each of which standing" – each standing
- p.152 "argued well in favour of the use" – *augured* well for the use?
- p.188 "adding up to" – adding to?
- p.188 "task-based NA" – spell out NA the first time it is used
- p.194 "(Very " (in table 4.1) – missing bracket
- p.207 and p.214 "chatting with all-round entertainers at hotels" – Not clear what that means. Page 202 mentioned "checking in and out at the hotel reception", which seems to be a very different need
- p.214 "admitted" – reported would be the correct word to use here (this should be checked throughout the thesis as it seems to be a common misuse of the word admitted)
- p.235 – "reported to employ" – reported employing
- p.311 "Instead of asking enormously complex questions" – meaning is not clear
- p.389 (Question 2) "jak bardzo lubisz uczysz się" – uczyć się
- p. 413 (Abstract) "bringing the concept of a method into disrepute" – meaning not clear/ incorrect (in Polish "zakwestionowano").

Overall assessment

This is a very good thesis that clearly demonstrates the researcher's ability to develop a rationale for research, identify gaps in the literature, consider theoretical inputs, design and carry out a complex research study, analyse the data and interpret the findings. As can be seen from the comments on each chapter, the thesis content leaves no doubt as to the researcher's professional skills and good judgment. The researcher should be furthermore congratulated on completing this research during the very challenging times of the Covid-19 pandemic.

The thesis makes an original contribution to the field of computer-assisted language learning, and specifically to the emerging subfield of intelligent CALL accessed on mobile devices. It addresses the acquisition of an important skill in language use and language

learning, namely mediation. The research is presented against a background of evolving ideas on language education in Europe and in relation to the specific circumstances pertaining to education in Poland. IMALL research is currently concentrated in a handful of countries, so it is very pleasing to see the research carried out with students in Poland.

The early, historical parts of the thesis (Chapters 2 and 3) are perhaps longer and more detailed than they need have been. The reader has to work out what key points are being made, and which parts of the narrative are likely to be most pertinent to the research study. A slightly more succinct account of historical events would have allowed for more space to develop ideas around learner autonomy, in a theoretical perspective as well as in relation to the nature of the homework tasks and the learners' initiative in the course of their interactions with Alexa. Indeed, it seems that the meaning of learner autonomy has not been clearly specified in the thesis. The notion is introduced in Chapter 3, and in the following chapter, autonomous foreign language learning - also referred to as 'self-instruction' and 'self-regulated out-of-class learning' - seems to be equated with learning in the 'digital wilds' (p. 182), although a task-based homework design does not seem to be consistent with learning in the wilds. Later on page 229 "performing obligatory homework" is described as an autonomous activity. It would have been helpful to discuss learner agency, especially since the use of the Alexa IPA calls into question whether learners are acting autonomously or in tandem with the IPA. The Results chapter refers to possibilities to individualise student learning and enable them to perform tasks at their own pace (p. 308-309).

Another area that could have benefitted from more incisive analysis is the issue of what constitutes communication breakdowns. Research question 2 addresses these communication breakdowns. Although breakdowns are mentioned several times in the literature review, a more focused consideration of breakdowns (and repairs) in communication would have strengthened the foundation of this research question. It is not clear in the thesis whether communication 'problems' (and 'severe problems') are equated with breakdowns (pages 235-236); in the Results chapter, page 268 refers to "difficulties communicating with the IVA", "communication breakdowns" and "problems" and well as strategies "to overcome difficulties". Consequently, there is some ambiguity when the results are presented, e.g., the learners reported having experienced "communication problems in 80% of the cases. The breakdowns, however, were considered mainly infrequent (56%)."

The thesis is generally very well written and well organised, but there were times in Chapter 4 when the narrative was less clear. Table 4.1 on page 194 presents mean scores for text mediation at the beginning of the study, but I could not find information about the mediation task the students had completed to obtain their scores, until it transpired it might have been the task described later on page 201. Also the chapter refers to 'traditional homework' but I could not find any description of what that entailed until later there was a reference to the Appendix.

On balance, although there are some improvements and clarifications that could be made to enhance the thesis, I am confident that it fulfils the requirements for a PhD.

In my view the thesis meets the expected standard for the award of a PhD.

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