
The Relationship between Inadequate Teaching Method and Students' English Learning Difficulties

Zahratul Fikni¹⁾, Siti Maysuroh²⁾, Muhammad Aldi Soleh³⁾

¹⁾Universitas Hamzanwadi, Lombok Timur, Indonesia
zahratulfikni@gmail.com

²⁾Universitas Hamzanwadi, Lombok Timur, Indonesia
sitimaysuroh@hamzanwadi.ac.id

³⁾Universitas Hamzanwadi, Lombok Timur, Indonesia
muhammadaldisoleh@gmail.com

Received: 22nd August 2023 | Revised: 8th September 2023 | Accepted: 14th December 2023
Email Correspondence: muhammadaldisoleh@gmail.com

Abstract

This research aimed to identify the relationship between inadequate teaching method and student's English learning difficulties. This research used a quantitative descriptive approach. The data source was the students of the third grade of *Junior High School 1 Pringgasela*. The data were taken from the observation and questionnaire designed to identify the relationship between inadequate teaching method and student's English learning difficulties that were shared to the population of the research comprising (90) male and female students to acquire the research objective. Through the finding of the analysis, there were collected about 200 responses from 10 numbers of statements each was answered by 20 students distributed as 10 males and 10 females selected from 90 students as the populations who were then displayed as respective percentage of 50% male and 50% female students. The questionnaire embodied several contexts such as curriculum, teaching method and student's difficulties in learning English language. The results showed that 113 responses agreed with the statement given, while 87 statements disagreed. The number of responses was presented in terms of percentage as 57% of the respondents agreed while the remaining 43% disagreed. The broader findings will be further discussed.

Keywords: EFL Students, Inadequate, Learning Difficulties, Teaching Method

1. INTRODUCTION

Language is a tool of communication that has been used for many years. The notion of language could be described as a speech sound that is used to express an idea, emotion, thought, desire, feeling and many more by human beings (Modrak, 2001). According to Wardaugh (2006) implies that language is a system of communication where a code is employed. The code is used to communicate in speech by two or more people. From above explanations, language then could be understood as not only a speech sound but also a symbol that is used to communicate between speaker and listener that convey meaning on the expressions.

In this world, there are lots of languages that also become an identity of the nation itself, because every nation has their own language that is used in daily activity by the citizens. Therefore, there is one language that is used as a global language namely English language. To consider as a global language, the language has to have a special role that is recognized by other countries in the world (Crystal, 2003). The recognition does not mean that the English language should be spoken in each country as their first language, but more likely to reliance where English language is widely used to communicate in most places of the world. So, that is acceptable even when English language is used as second language or as foreign language.

Gebhard (2006) defines English as foreign language to the study of English language by non-native speakers by means English is not used as the first or even second language by the people in a place or country. Thus, the explanation is supported by Harmer (2007) who defines English as foreign language by the teaching activity where the students who live in a non-speaking English country are studying English language in a short course. In conclusion, English as foreign language could be defined as the study of English language by people in non-English speaking country or by the speaker who live in a country where English is not the first language used in the country. Hence, the English-speaking countries are like United States, United Kingdom, Australia, and New Zealand.

The study of English in non-speaking English country is usually started at elementary school, English is taught by the introduction of basic vocabulary. Then, at the junior level, the student is introduced to a slightly complex sentence structure. The teaching process itself in Indonesia is regulated by the state curriculum, so that the state has the teaching standard contained in the curriculum where then the teacher should conduct the teaching process according to the available curriculum. On its application, the curriculum in Indonesia has undergone several changes or more likely adjustments and developments in search of better ways of ensuring successful English language learning (Jazadi, 2008). At the beginning of the implementation, the curriculum is introduced by School-based curriculum or known as *KTSP* (*Kurikulum Tingkat Satuan Pendidikan*) to the newest version of curriculum 2013 and more recently is *implementasi kurikulum merdeka (IKM)*.

The implementation of curriculum in school is still on the level of intentions and or plans that leads to the students' educational goal. In common ways, learning English in school is taught and guided by the teacher in a formal way where there is an interaction of teaching and learning by teacher and students. In doing so, it becomes substantial for the teacher to teach the students using an appropriate teaching method that could be understandable not only for one but also for all the students in class. Therefore, the selection

of teaching methods that are wrong and inadequate could cause to the students learning difficulties. The inadequate teaching method could derive students' difficulty in mastering any English skills of students.

As the explanation above, it could be concluded that the teaching process that is regulated on the state curriculum often not delivered properly because of the insufficient teaching method used by the teacher which is then cause to the students' difficulties on the learning process. Thus, depart from those reasons this study will present and analyze the relation between inadequate teaching methods towards students' English language learning difficulties. Based on the background of the study that is mentioned above, the researcher comes with two problems of the study. First, the researcher tried to identify the difficulties in learning English experienced by the student at *SMPN 1 Pringgasela*? Second, the researcher tried to find out what are the relationship between inadequate teaching method and students's learning difficulties at *SMP 1 Pringgasela*.

Teaching method is a comprised of principles and methods used by teachers to enable student learning. These strategies are determined partly on subject matter to be taught and partly by the nature of the learner. For a particular teaching method to be appropriate and efficient it has taken into account the learner, the nature of the subject matter, and the type of learning it is supposed to bring about (Webb, 2013). The approaches for teaching can be broadly classified into teacher-centred and student-centred. In a teacher-centred (authoritarian) approach to learning, teachers are the main authority figure in this model. Students are viewed as "empty vessels" whose primary role is to passively receive information (via lectures and direct instruction) with an end goal of testing and assessment. Vermunt & Van Rijswijk (1988) classified five kinds of teaching method that are used in education, and those can vary depending on the subject matter, student age, and learning objectives by, here are the explanation of some common teaching methods:

According to McLeod (2015), the behavioral teaching method, also known as behaviorism, is an approach to education that focuses on observable behaviors and the use of reinforcement and rewards to shape and modify behavior. It is rooted in the belief that behavior is learned through conditioning and that desired behaviors can be reinforced through positive reinforcement and discouraged through negative consequences. Key principles of the behavioral teaching method include: Stimulus and Response; Conditioning; Reinforcement; Punishment; Clear Expectations and Rules; Repetition and Practice; Incremental Learning; Data and Measurement. Critics of the behavioral teaching method argue that it focuses primarily on external behaviors and may neglect students' internal motivations, emotions, and individual differences. However, proponents of behaviorism argue that the method can be effective for teaching specific skills and behaviors, especially when combined with other teaching approaches that

address students' cognitive and affective needs. It's important to note that contemporary educational practices typically incorporate a range of teaching methods and approaches to accommodate the diverse needs of students and promote a holistic approach to learning.

The cognitivism teaching method, also known as cognitive psychology, is an approach to education that focuses on the mental processes involved in learning, such as perception, memory, attention, problem-solving, and thinking. According to Marquardt & Waddill (2004), It emphasizes the role of internal mental processes in understanding and acquiring knowledge. The cognitivism teaching method includes: Active Mental Processing: Schema Construction: Meaningful Learning: Metacognition and Self-Regulation: Problem-Solving and Critical Thinking: Individual Differences: Transfer of Learning: Technology and Multimedia. Cognitivism complements other teaching methods by emphasizing the mental processes involved in learning. It promotes active engagement, critical thinking, and the development of metacognitive skills. By understanding how learners process information and construct meaning, teachers can design instructional strategies and activities that support effective learning and promote deep understanding.

According to Kalpana (2014), the constructivism teaching method is an approach to education that emphasizes the active role of learners in constructing their own knowledge and understanding of the world. It is based on the theory of constructivism, which suggests that learning is a process of actively constructing meaning through interactions with the environment and social interactions with others. Key principles of the constructivism teaching method include: Active Learning: Prior Knowledge and Schema Activation: Learning as a Social Process: Authentic and Real-World Contexts: Guided Discovery: Reflection and Metacognition: Multiple Perspectives and Personal Meaning: Continuous Learning and Adaptation: Student-Centered Approach. Based on the explanation above the engaging students in active learning, promoting social interaction, and focusing on the construction of meaning, the constructivism teaching method fosters a deep understanding of concepts and promotes critical thinking skills. It encourages students to become active participants in their learning, leading to long-lasting and meaningful knowledge acquisition.

The humanism teaching method, also known as humanistic education, is an approach to education that focuses on the holistic development of the individual, emphasizing importance of personal growth, self-actualization, and the fulfilment of human potential (Arghode et al., 2017). It is based on the principles of humanistic psychology and promotes a student-centered and supportive learning environment. Key principles of the humanism teaching method include: Student-Centered Learning: Positive Teacher-Student Relationships: Holistic Development: Personal Growth and Self-Actualization:

Student Autonomy and Responsibility: Experiential Learning: Respect for Diversity and Individual Differences: Emotional and Social Development: Focus on the Present Moment. The humanism teaching method values the whole person and aims to nurture students' intellectual, emotional, and social development. By creating a supportive and student-centred learning environment, humanism fosters students' self-esteem, motivation, and intrinsic love for learning, ultimately promoting their personal growth and well-being.

According to Siemens (2004), connectivism is a learning theory that focuses on the power of networks and connections in the digital age. It recognizes that knowledge is distributed across networks of people, information sources, and technology. The connectivism teaching method leverages technology and emphasizes the development of skills for effectively navigating and learning in a connected world. Key principles of the connectivism teaching method include: Networked Learning: Digital Literacy: Personal Learning Networks: Critical Thinking and Evaluation: Lifelong Learning: Collaboration and Participation: Reflection and Metacognition: Access to Diverse Perspectives: Continuous Technology Integration.

The connectivism teaching method acknowledges the changing nature of knowledge and learning in the digital age. It focuses on the power of networks, technology, and the ability to access and leverage information from a variety of sources. By developing digital literacy skills and promoting networked learning, connectivism aims to prepare students for success in a connected and rapidly evolving world. According to Sari & Aminatun (2021), Students may encounter difficulties with vocabulary for various reasons. Here are some common challenges students may face and strategies to address them: Limited Exposure: Lack of Contextual Understanding: Memorization Difficulties: Limited Word Usage: Lack of Word Forms and Collocations: Homophones and Homonyms: Low Vocabulary Strategies: Lack of Review and Reinforcement: Cultural and Conceptual Differences: Individual Learning Styles:

Finally, by addressing these difficulties and implementing effective vocabulary teaching strategies, students can gradually enhance their vocabulary skills and expand their language proficiency. Consistency, exposure, practice, and meaningful context are key elements in supporting students' vocabulary development. According to (Islami et al., 2021), Students may face difficulties with pronunciation in English due to various reasons. Here are some common challenges students may encounter and strategies to help them improve their pronunciation: Lack of Exposure: Phonemic Awareness: Intonation and Stress Patterns: Sound-Spelling Relationships: Articulation and Mouth Placement: Word and Sentence Stress: Reduced Forms and Connected Speech: Peer and Self-Evaluation: Multimedia Resources: Patience and Encouragement.

Consistent and focused practice, along with targeted feedback and guidance, can help students overcome pronunciation difficulties and enhance their overall oral communication skills in English. According to (Al Nakhalah, 2016), students may encounter difficulties with grammar in English due to various reasons. Here are some common challenges students may face and strategies to help them improve their grammar skills: Lack of Foundation: Limited Exposure to Authentic Language: Lack of Practice: Understanding Complex Sentence Structures: Error Analysis and Correction: Differentiating Similar Grammar Structures: Authentic Language Production: Scaffolded Learning: Grammar Resources: Patience and Persistence. By addressing these difficulties and implementing effective grammar teaching strategies, students can gradually improve their grammar skills and develop greater accuracy and fluency in English. Consistency, practice, and providing meaningful contexts for grammar use are key elements in supporting students' grammar development.

2. RESEARCH METHOD

This study is conducted using quantitative correlational research. Quantitative research is an examination of social or human problem, based on testing a theory organized by variables, measured by numbers, and analyzed by statistical procedures, to determine whether the predictive generalizations of the theory are valid (Cresswell, 2013). Punch (1998) supports the definition by emphasizing that quantitative research is an empirical study that explains data of the research in the form of numbers. Meanwhile, correlational is a method of quantitative approach where the aim is to show the relationship of two or more variable in research. Lodico et al. (2006) strengthen the statement by saying that measuring two or more variable and examine the variable to see if there are relationship among its variable is the aims of correlational method. In other words, correlational method is a type of research that focuses on the study of possible relationship between variables in academic research. As for the case of this study, the correlational method will be used to find the relation between curriculum and inadequate teaching method towards students' English learning difficulties at *SMP 1 Pringgasela*.

The population of this study are the 90 students on the third grade of *SMPN1 Pringgasela*. Meanwhile, the sample of the research refers to the subset of the population selected for the study. Hence, the sample of this research takes 20 students on the ninth grades of *SMP 1 Pringgasela*. Data of the study is distinguished by two kinds, which are primary data and secondary data. Primary data is the data that is collected directly by researcher for the purpose of a particular research. Meanwhile, secondary data refers to any data that has been analyzed by other researchers which the purpose is different from this present research. Instrument of the study refers to the tools that are used to collect the data in research

(Siswanto, 2016). The instrument in this study is the researcher himself as the main instrument and the students of *SMP 1 Pringgasela* on the third level as the second instrument, as well as other theoretical review as a complementary instrument.

Data collection technique refers to the method and approaches that is used to gather information or data for research. According to (Asenahabi, 2019), these techniques are employed to systematically collect relevant data that can address research questions, test hypotheses, or explore specific phenomena. Hereafter, the data collection used observation and questionnaire. According to (Drewal, 2020), observation is using one or more of our senses (such as sight, hearing, touch, taste, or smell) to carefully and attentively examine or perceive something in order to learn more about it is known as observation. It entails paying attentive attention to the specifics, traits, actions, or changes taking place in a thing, an event, a phenomenon, or a scenario.

Observations can be made in a variety of settings, including scientific research, daily life, teaching, and many other professions where it is crucial to gather precise and impartial data. According to (Asenahabi, 2019), the questionnaire is structured sets of questions designed to gather specific information from participants or population of the study. Questionnaire could be in the form of paper-based forms, online surveys, or interview where the researcher asks questions verbally to the object of the analysis. Questionnaire is an important, efficient, and systematic way of collecting data form large number of participants or objects of the analysis.

Data analysis is the process of inspecting, cleansing, transforming, and modelling raw data with the goal of discovering useful information, drawing conclusion, and making informed decisions. It involves various techniques, tools, and methodologies to explore and interpret the data. Gathering relevant data from the sample of the study would be the first step of data analysis. The data that is related to the problems which is proposed and or being discussed in the research is collected and organized in a specific format. Ensuring data of the research would be the next process after data collection. The reduction of the data is needed to ensure that the collected data would be an accurate, complete, and free from errors or inconsistencies.

The step of reduction includes removing any duplicate data, handling missing values, omitting inconsistencies, and then transforming the data into a suitable format for the analysis. Analyzing the data would be presented in data presentation. The data that have been collected and selected would be analyzed under the theoretical framework that is used in this research. The analysis includes describing, classifying, hypothesis testing and summarizing data. An interpretation towards the results of the analysis

would be discussed in this section. It is important to make a statement in a clear and meaningful way to produce a deeper insight of the analysis.

3. FINDINGS AND DISCUSSION

This research has been conducted through a dept analysis by applying a quantitative descriptive method. The data were drawn from the respondents of male and female student responses rates by analyzing questionnaire responses that were collected informally by the researcher. The significant findings that were found in this research were then presented. The respondents of this research were the students of the third grade (class 9) at *SMPN 1 Pringgasela* consisted of 10 male and 10 female students, which initial responses collected were used to assess the quality of the sample. It then could be stated that the categories of the respondents distinguished by gender were equal, with respective percentage of 50% males and 50% females respondent. The next step for the researcher was to analyzed the results of the data that have been extracted from the questionnaire distributed to the respondents and was fully operational.

The data were gathered from 10 numbers of statement which could be answered by agree or disagree and was hoped to be answered honestly by 20 respondents resulting 200 statements in total. Thus, from the data that were collected, out of a total of 200 responses, 113 responses stated that they agreed with the statement given, while 87 statements stated that they disagreed. The number of responses can then could be presented in terms of percentage as 57% of the respondents agreed while the other 43% disagreed with the statement on the implementation of learning about teaching methods and students' difficulties in learning English at *SMPN 1 Pringgasela*.

From the responses of the questionnaire, as many as 65% of the respondents stated that the teaching method that were used by the teacher were not vary, but they were not monotonous and tiresome. Further, from the responses given, the respondents said that they had no difficulty understanding the material given by the teacher with a percentage of 60% answered they had no difficulty and 40% others had. Respondents stated that understanding the material presented by the teacher were assisted by numerous learning media so that it could make it easier for the students to understand the material provided.

The difficulties felt by the students when the teacher explained the material using full English language, as much as 60% of the respondent stated difficulties and 40% had no difficulties, so that the material being taught by the teacher should be explained again using Indonesian to give better understanding for the students. Moreover, students also experienced a slight difficulty in the study of sentence structure or grammar and pronunciation. There were about 80% of respondents stated that they

had difficulty understanding information or material about sentence structure or grammar, while another 20% stated that they had no difficulty understanding the material.

Besides, there were 95% respondents said that they also had difficulty in pronunciation, and another 5% had no significant difficulty. The difficulty in pronunciation could be caused by lack of confidence from the students to speak English. This could be proven by other subsequent responses regarding students' vocabulary with details of 65% had no difficulty in studying vocabulary. Hence, the students knew the word but had no confidence to utter it, thus made them difficult in pronunciation. To sum up the responses from the questionnaire given, about 80% of the total respondents stated that having a sufficient English skill were very important for the future, whereas 20% others said that English skills were not very crucial.

In addition to the questionnaire given, the researcher also did an observation. From the observation, the researcher found that the factors that influenced student difficulties were the use of learning media as a result of paying less attention to time management, lesson plan, material suitability, and student circumstances, such as lack of understanding of student character that made it difficult to understand learning material. The solution provided was to support the teacher's ability and creativity to create appropriate learning media so that students could understand better the material. As for the overall results on the table and histogram presented on the findings, they represented the proportion of the data or sample response to the previous questionnaire given by the researcher. On the histogram table, it was shown that the response to agree (A) was 57%, while the response to disagree (D) was 43%, indicating that the learning methods and student difficulties in learning English were very influential for student learning quality.

The results from the questionnaire stated that accordance in learning methods and difficulties in learning English have the same relationship in the quality of student learning when there was no conformity in the learning methods and student difficulties can greatly affect the student's learning and the teaching method that was provided by the teacher is in line with the curriculum. It is more important that the teaching method is not varied but still understandable. The problem that was faced by the students of the respondents was not related to the learning method conveyed by the teacher but more likely to the students' ability to absorb and understand the material given. The description provides an overview of the respondent's perception of various aspects of learning English, but it is important to remember that these results represent the responses of a particular sample of respondents and do not fully represent the entire population of students at *SMPN 1 Pringgasela*.

4. CONCLUSION

The results of this study are based on the results of data descriptions carried out at *SMPN 1 Pringgasela* to find out the discussion about the inconsistencies related to learning methods and the difficulty of students in learning English. The study involved 20 respondents who were asked questions directly by the researchers in order to gather data from the results of the questions given to the respondents about the positive and negative changes in the learning methods given by teachers and the difficulties of students in learning English. Thus, research concluded that the learning process on *SMPN 1 Pringgasela* was held in accordance with the curriculum, but in this study, the researcher concluded that the learning methods and students' difficulties in learning English had the same relationship, where the quality of student learning would be very influential when the learning methods given by the teacher were not appropriate, as well as students' learning difficulties would be very influential in the learning process, and on the other side, the difficulties of learning English were faced by the respondents because the ability to absorb the material given by the teacher was different from one to another. Further, the students' difficulties with grammar, pronunciation, and vocabulary were also due to their lack of confidence in using or practicing English. Based on the results of the above research, in the learning of English, the inadequacy of the learning method very influential for the learning process of students, as well as the difficulty of students learning. Most respondents stated that the learning methods provided by teachers facilitated students' learning of English language materials. However, some respondents also stated that there was an incompatibility of learning methods that made it difficult for them to understand English-language material.

REFERENCES

- Al Nakhalah, A. M. M. (2016). Problems and difficulties of speaking that encounter English language students at Al Quds Open University. *International Journal of Humanities and Social Science Invention*, 5(12), 96–101.
- Arghode, V., Brieger, E. W., & McLean, G. N. (2017). Adult Learning Theories: Implications for Online Instruction. *European Journal of Training and Development*, 14(7), 593–609.
<https://doi.org/https://www.emerald.com/insight/content/doi/10.1108/EJTD-02-2017-0014/full/html>
- Asenahabi, B. M. (2019). Basics of Research Design: A Guide to Selecting Appropriate Research Design. *International Journal of Contemporary Applied Researches*, Vol. 6, No(5), 76–89.
https://www.researchgate.net/publication/342354309_Basics_of_Research_Design_A_Guide_to_selecting_appropriate_research_design.
- Cresswell, J. W. (2013). *Research design: qualitative, quantitative, and mixed methods approaches*. SAGE Publications, Inc.
https://www.ucg.ac.me/skladiste/blog_609332/objava_105202/fajlovi/Creswell.pdf

-
- Crystal, D. (2003). English as a Global Language. In *The Palgrave Handbook of Economics and Language*. Cambridge University press. <https://doi.org/10.1007/978-1-137-32505-1>
- Drewal, H. J. (2020). Sensiotics, or the Study of the Senses in Material Culture and History in Africa and Beyond. *The Oxford Handbook of History and Material Culture*, 275–294. <https://doi.org/https://doi.org/10.1093/oxfordhb/9780199341764.013.24>
- Gebhard, J. G. (2006). Teaching English as a Foreign or Second Language: A Self-Development and Methodology Guide. In *The Modern Language Journal* (Second Edi). University of Michigan Press. https://doi.org/10.1111/j.1540-4781.2008.00729_14.x
- Harmer, J. (2007). *The Practice of English Language Teaching; 4th Edition*. Pearson Longman. <http://library.lol/main/D1C4D67754CE5045FADBC5B66F47BAE3>
- Islami, R., Putrawan, G. E., & Riyantika, F. (2021). An analysis of students' pronunciation errors of friction consonants in spoken production. *International Journal of Educational Studies in Social Sciences (IJESSS)*, 1(2), 81–86. <https://doi.org/10.53402/ijesss.v1i2.19>
- Jazadi, I. (2008). *The Politics of Curriculum (An Interpretive Study of English Language Teaching and Learning at High Schools in Indonesia)*. Paracendekia NW Press.
- Kalpana, T. (2014). A Constructivist Perspective on Teaching and Learning: A Conceptual Framework. *International Research Journal of Social Sciences*, 3(1), 27–29. <http://www.isca.in/IJSS/Archive/v3/i1/6.ISCA-IRJSS-2013-186.pdf>
- Lodico, M. G., Spaulding, D. T., & Voegtle, K. H. (2006). Methods in Educational Research; From Theory to Practice. In *Education and Urban Society* (Vol. 7, Issue 3). Jossey-Bass. <https://doi.org/10.1177/001312457500700301>
- Marquardt, M., & Waddill, D. (2004). The power of learning in action learning: a conceptual analysis of how the five schools of adult learning theories are incorporated within the practice of action learning. *Action Learning: Research and Practice*, 1(2), 185–202. <https://doi.org/10.1080/1476733042000264146>
- McLeod, S. (2015). *Operant Conditioning: What It Is, How It Works, and Examples*. <https://www.simplypsychology.org/operant-conditioning.html>
- Modrak, D. K. W. (2001). Aristotle's Theory of Language and Meaning. In *Journal of Philosophy* (First Edit, Vol. 99, Issue 4). Cambridge University press. <https://doi.org/10.5840/jphil200299423>
- Punch, K. F. (1998). *Introduction to Social Research: Quantitative Qualitative Research*. SAGE Publications, Inc. <http://library.lol/main/9FA95C652B3D8255201985758F7BEBA9>
- Sari, S. N., & Aminatun, D. (2021). Students' Perception on the Use of English Movies To Improve Vocabulary Mastery. *Journal of English Language Teaching and Learning*, 2(1), 16–22. <https://doi.org/10.33365/jeltl.v2i1.757>
- Siemens, G. (2004). Elearnspace. Connectivism: A learning theory for the digital age. *Elearnspace. Org*, 14–16.
- Siswanto. (2016). *Metode Penelitian Sastra; Analisis Struktur Puisi*. Pustaka Pelajar. <https://inlis.mojokertokab.go.id/opac/detail-opac?id=9620>
- Vermunt, J. D. H. M., & Van Rijswijk, F. A. W. M. (1988). Analysis and development of students' skill in selfregulated learning. *Higher Education*, 17(6), 647–682. <https://doi.org/10.1007/BF00143780>
-

Wardaugh, R. (2006). An Introduction to Sociolinguistics. In *The British Journal of Sociology* (Fifth Edit, Vol. 38, Issue 3). Blackwell Publishing. <https://doi.org/10.2307/590702>

Webb, M. (2011). Models for Researching Pedagogy with Information and Communications Technologies. *Journal of Computer Assisted Learning*, 29(1), 53–67. <https://doi.org/https://doi.org/10.1111/j.1365-2729.2011.00465.x>