
Identifying the Gap between Lecturer Competencies and Student Learning Outcomes in the Challenging Era of the 21st Century

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Abstract: This study discuss efforts to bridge the gap between the competency of applying lecturer technology and student learning outcomes in the 21st century, an era full of challenges and global job market competition. We started this discussion by collecting data from literary sources and international publications. Then proceed with a narrative qualitative analysis involving a coding system, critical evaluation, and concluding by fulfilling the principles of the validity and reliability of the findings. We conducted data searches with the journal Google Doc, Google Scholar, and Eric with various publications from 2010 to 2020. We also analyzed learning strategies and techniques, as well as evaluation approaches. We find that most lecturers' papers have very low teaching technology competence to current standards in backing up their teaching and research. The paper offers solutions and ideas approaches to support active student learning activities with various techniques, methods, and technology-based learning exploration activities, up to date. Some publications offer lecturers an academic work approach that is effective in research-based learning; reduce the traditional lecturing approach, which often hinders the accelerated process of conceptual understanding and application of core content and useful advice to lecturers and students. Several papers also advise on specific college-style learning solutions that are different from school student learning. Finally, this study's results will be useful input for improving student learning in the digital era, which is full of global competition, and for developing higher education curricula.

Keywords: Bridging the gap, Lecturer technology competence, Student learning outcomes and 21st century learning.

INTRODUCTION

Many would agree that any activity is carried out at schools, such as learning, research, conferences, seminars, and other academic activities to achieve the highest student learning outcomes. (Nygaard et al., 2009; Küçükoğlu, 2013). When we ask experts about this, they also agree that in every educational institution and training center that there are quite a lot of activities carried out every day, spending much budget, a lot of human resources, concentration, cooperation, improving all of these facilities to achieve the entire educational process as expected: government, parents, guardians of students, the community and even international people. Everything is to improve the quality of learning and mainly student learning outcomes. That no one can argue anymore is because of the core objective of all educational activities. Bakkenes et al., (2010) agreed that teacher learning programs in the context of training innovation, teaching, and learning activities are carried out to improve student learning outcomes through various sessions of experience and knowledge in learning, and the goal is the expected improvement in student learning. (Hanson-Smith, 2016; Leithwood, 2003; (Haston, 2007). Now we should inquire, as Habgood & Ainsworth, (2011) said, to inspire children to learn successfully by exploring the importance of the inherent inclusion of educational games.. Whether learning applications or educational games are critical to be discussed on various occasions in academic activities because we cannot see that if the final results of student learning at any level are increasingly unhappy because of something, we do not understand?. Brookfield, (2015) also said that a professional instructor might do more about methodology, confidence, and responsiveness in the classroom. The situation that occurs, for example, is how the teaching methodology applied by a teacher or school does not make students happy to learn, and as a result, the teaching

and learning program is not implemented successfully and ultimately has an impact on student learning outcomes. For this, we have to fix possible solutions and ways to fix them. Relating to this solution, Koponen, (2019) also sees a flipped-down approach to teaching cross-cultural communication to millennials. In this way, we educators can find some answer to our classroom dilemma.

Then the next question might be relevant for the solution of teacher competence in supporting current students. If the question is essential, many will agree that teachers who have a scale of professional and personal quality knowledge and all cultures and values will affect students, such as the ability to motivate learning, affecting student learning outcomes that are sometimes too difficult to achieve goals. Ultimately, Dunlosky et al., (2013) agree that enhancing student learning through successful learning strategies is important. Promising directions from social and educational psychology. In this condition, the teachers become a problem of twists and turn to finish the conversation when they help the students who receive the learning to help them know what they are giving. One solution that is common in academia is the presence of researchers to inform teachers through study cereals. Then with this data and information, the teachers will get a solution to this problem. So that problems can be solved through measurable and effective study solutions given to the teacher. Finally, after they know, of course, they will use that for a solution, which will help students achieve learning outcomes what has been the problem so far. This is very important for teachers, so teacher competence in teaching becomes a priority above all education interests. This solution is relevant to what Day et al., (2016) find that leadership's impact on student outcomes can come from how successful school leaders use transformational and instructional strategies to make a difference.

Before providing solutions or specific ways to solve the learning gap, Stronge, (2018) advised that teachers need strong *qualities of effective teachers where they* must first carry out reading sessions to determine the gap's characteristics. What makes the teacher competencies drops, what is commonly used in current teaching and learning conditions solution. It believes that the learning gap between teachers' competencies and student's study results is due to lecturers' competence in carrying out teaching and research. Moreover Hernandez-de-Menendez & Morales-Menendez, (2019) said that technological innovations and education practices are so essential. (Irfan et al., 2020; Kumar & Ayedee, 2021; Selfe & Hugh BURNS, 1999; Laurillard, 2008). The teachers in this way have a low level of ability to function technology if that is what will be our focus and our intention to find a solution and if it understands student learning why being drawing is not a super bowl has been caused by certain variables or, say in learning the involvement of letters or the role of lectures is very vital. In the lecture itself, there are specific ways. Bring classes, whether offline face-to-face or in online teaching, then if we consider technology to be a concern, maybe we can figure out why the technical capabilities of lectures are major holes that turn student learning results into drugs or not, then in this situation, we need to find out what games make no good teacher here.

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Besides the ability to create a good learning climate, Fithriyyati & Maryani, (2018) also said that the science lesson plan evaluation for better school is also essential in the learning process that reflecting a better result. Other experts also said that good quality teachers are also very good at teaching, starting from preparing good lesson plans to evaluate student learning. Learning becomes the best because teachers know applications and evaluation of lesson plans are right on target so that all their skills are useful to make it easier to deliver lessons best for students so that good lectures can occur. Therefore, teachers and lecturers must have the ability to design highly relevant lesson plans and high quality so that the lesson plans should be used as an essential guide to making it easier for teachers to teach and make it easier for students to absorb lesson content. To support the above statement, Drost & Levine, (2015) have noted that, in the study of teaching methods, a standard-based lesson plan aligns with pre-service students.. Therefore, the lesson plan or RPP must be well prepared in a process. It will be successful in measuring super knowledgeable, measurable, and accessible so that qualified teachers know the basics of the teaching profession and professional teaching administration recommended by the world of modern education.

Because teaching is neither simple nor difficult to do, to become a smart teacher, of course, he must carry out teaching accompanied by a strategic approach such as a combination of methods, techniques, and strategies so that teaching objectives can be achieved perfectly. (Nückles et al., 2020; Eitel et al., 2020; Prinz et al., 2020). A

good teacher can choose the right approach by following the advice of experts who have been tested in their respective fields. For example, a method that can be applied according to field conditions. The right strategy in teaching to achieve planned learning. Once again, the strategy here is essential so that a teacher can choose a design that will be applied and uses a variety of strategies, not only those that are ready, but the variations depending on what content they teach. Golden lesson will do what is characteristic of the lesson and who the learners are and how the situation is in choosing and applying from the selection of the right teaching strategy from a variety of teachings that are already available in many internet sources, books, publications, and other scientific sessions somewhere. (Phillips & Trainor, 2014). The teacher has a certain level and ability to choose to apply and then evaluate whether the method is capable of achieving the expected learning outcomes. On the other hand and other situations are not good, so that teachers can not only use an application but also can evaluate whether a particular strategy can be applied or not. In essence, a teacher is also a person who is adaptable to all situations and conditions of teaching challenges in an era of global competition.

According to Hashim, (2018) the application of technology in the digital era of education is essential for teachers. The following competency that teachers must have is a pleasure to deal with technology so that again an excellent competitive teacher can access any learning resources and learning materials from anywhere, for example, online knowledge sources. They are free from anywhere they can access to use the freely available types. Then take it to their class to learn into their line of work and not save in a place that eventually disappeared from memory. However, take it, bring it to life in a classroom situation with students. So this is a job related to the competence of qualified lecturers as educators or even better. As explained by Schwieger & Ladwig, (2018) in order to meet and attract the next generation, the teacher must adapt the technology to the needs of Gen Z in the classroom. So, with this competence, teachers will be left to the field of teaching.

Consequently, as Shan et al., (2014) said, the importance of communication, success sharing, and supportive classroom experiences on learning success is strong as everyone understands; one key skill today is that a teacher must have strong communication skills.. Maybe if our other professions do not talk much, then we do not deal directly with students with people. Nevertheless, being a teacher, Darling-Hammond (2000), Malikow, (2005) in their work being an effective teacher professional development, a teacher is like being a reporter to being an entertainment person, so they must have an excellent ability to communicate; talking communicating here and only communicating directly, talking face to face, also communicating remotely, communicating using the written word, and communicating in various educational contexts that have been included in papers and then sent to publications, communicating the contents of the head's thoughts with their ideas, then published and the communication is excellent and easy for everyone to understand. That is the communication competence that is very important for lecturers. Because it is an individual who must have the ability to convey both verbally, online, and offline in the classroom directly or under any circumstances, so this is a more critical competency from teachers to be well what the audience needs, in this case, the audience of students and other teacher colleagues. (Jethro et al., 2012; Chu et al., 2021; Ganayem & Zidan, 2018).

Other qualifications or competencies that a good teacher must have are willingness and having skills because there are people who want but do not have the ability. Likewise, some can but do not want to teach. So we have the will and can all collaborate. So today's professional world can no longer work alone but collaborate. With friends, only people around us who know that we should have the skills to work together among our people and in other departments of other universities, with knowledge of disciplines and even with people from other countries and other cultures, contact situations other. So especially today, teachers live and work in the 21st century, where there are no more work boundaries so that people can have excellent abilities to collaborate with other people even from educational backgrounds with different interests and priority backgrounds, so this is a type of ability—required from highly qualified and competent.

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The next good lecturer's competence is the ability to maintain their professional appearance. (DeCastro-Ambrosetti & Cho, 2011). Teachers have to show their audience that they are people who work professionally, so they become educators who are needed. To maintain such a professional performance most of the time when they can show from the way they are respected people so well. So we now ask very well in a professional manner, and the teacher must be like being different from the workgroup of others who are not included in the classroom's teaching rules. Once again, let us say that when the teacher speaks, the teacher must be very

professional in using polite language who can do the same in his condition so that respected people are understood. Respect can come from how teachers talk about how they behave and how they act, and how to dress. That is how the competence of a good teacher can look very professional all the time if possible. Otherwise, at least when they do it with students in class and the teacher has to be very professional. (Groundwater-Smith & Mockler, 2009; Tanang & Abu, 2014; Harslett et al., 2000). Furthermore, the last one is like having an outstanding teaching commitment to work based on preferred work with responsibility so that teachers must show love to students. With a high commitment to do work professionally, a teacher like exemplary health commitment to provide a professional job they want to develop has good knowledge of sufficient strategies and the ability to research to make him continue to learn to do research. Endlessly improving themselves all the time so that they can modify the way of teaching and then they can teach in a certain way not using the same method all the time so this is part of such a very demanding of a teacher to be professional in themselves so that they can fail that all the time being someone with a very professional club. (Hong, 2010).

Based on the importance of teacher competence as described above, we researchers are called to gain knowledge, skills, and behaviors that must be possessed, lived in, and mastered by lecturers in carrying out tasks in the academic world. (Chong et al., 2011). Finally, we decided to review the professional competency literature for lecturers so that we were able to build a new understanding of working with better quality. With a good understanding of lecturers' competence, we will be able to become educational staff in helping students and the academic community advance and improve the quality of student learning outcomes. Understanding the competence of other academic and social assignments can be prepared through various lecturers' scientific studies and coaching the competence of students, which is the responsibility of all lecturers. For this reason, we need to continue this study so that we can transform academic competencies into valuable input. (Wiek et al., 2011);

METHOD

Efforts to identify gaps between lecturers' teaching competencies and student learning outcomes in the challenging era of the 21st century are one of the development activities to improve the quality and progress of education. For that purpose, we have collected data from a variety of sources in the educational literature. Then we analyze it with an exploratory and phenomenological approach. Our data search was carried out with the help of the Google Scholar application, Google doc, ERIC publications, and other reading sources. We estimate that there are 40 publication topics that we visited, and we have presented ten publications that discuss study issues relevant to our study topic. We limit our publications between 2010 and 2020 so that we can keep the data accurate. Meanwhile, our analysis process includes a coding system, in-depth evaluation, and decision-making based on the findings' validity and reliability. Likewise, we chose a qualitative descriptive review design method under the guidance of experts' findings such as Parker, (2019), Sutrisno et al., (2014).

RESULT

Hanapi & Nordin, (2014) findings have firmly proven that unemployment among graduates in Malaysia is closely related to graduates' attributes, competencies, and the nature of education and teaching during college. The paper is verified by examining the research factors that cause unemployment among Malaysian alumni. Graduate credit, the competence of lecturers, and the nature of academic activity are among the essential elements in their studies. This study feels it is essential to assess the reasonableness of educational programs in the areas of higher education under investigation to ensure quality education programs to create quality and highly skilled human resources that meet labor market expectations. This evidentiary study was carried out using the meeting technique, which resulted in seven respondents involved in briefings and business work.

Evidence of the correlation between lecturers' superior competencies with student and alumni learning outcomes was also studied by Faltis et al., (2010). They succeeded in differentiating lecturer competencies applied to students into additional English competency skills as the national English language. This study investigates the information base of English Learner (EL) instructors from three perspectives. They recognize a common characteristic goal between what is seen as an essential competency for all educators and what additional teaching teachers need to know and do. Their study also distinguishes educators' critical abilities and competencies to become optional for English-speaking students to improve understanding of where we start. (Lucas & Grinberg, 2008). This distinguishes the types of information and practices approached by lecturers to study, question, execute and consider to develop student higher study results.

The competence of lecturers and their influence on student learning outcomes is also proven by Arifin, (2015) which proves how competence, motivation, and organizational culture influence secondary school teachers' teaching satisfaction in Indonesia. The study aims to find and dissect the impact of capability, inspiration, and authoritative suitability on the fulfillment and implementation of secondary school teachers' work in Jayapura City, Papua, Indonesia. The investigation was directed at 117 respondents from 346 educators using the polling method, which was analyzed using SEM examination techniques in the AMOS program. The results show that

hierarchical training and learning have a firm and insignificant influence on teacher work fulfillment. Meanwhile, work motivation has a real and fundamental effect on the work of educators. However, the results do not have a critical influence on the work performance of the teachers. The fulfillment of training and teaching has a decisive and fundamental influence on the implementation of educators on student learning outcomes; in fact, hierarchical learning only has a positive impact but is not relevant to the satisfaction of teachers' work.

The following findings are from Weinert et al., (1990). They prove that there is a relationship between educators' competence to eliminate the gap between the ability to carry out educational learning and teacher educators' performance. At that time, the research implementation was characterized by weak publication results that did not have a high impact and were relevant to teacher performance in schools. The study results are evidence that primary school readiness is critical to school work's main goal. According to them, an essential step in solving the gap between research ability and teaching practice in the classroom can be seen by collaborating two positions: education expert or teacher method in the concept of learning models. In other words, by reconciling theoretical methods focused on functional interactions between variables with a more systematic approach and instructor actions. The incorporation of the two methods into the definition of teaching skills is illustrated by the study of two causal models in which separate components of knowledge obtained from studies on the inexperienced expert framework are related to conventional variables.

Danner & Pessu, (2013) study, which examined the ability of informatics and communication technology among students in the readiness program of educators as highly competent trainers at the University of Benin, Nigeria, was evidence. Technology plays an inevitably important role in the lives of individuals. It is estimated that technical expertise will soon become a valuable prerequisite for individual, social, and even close home life work. Computer skills and correspondence innovation will be needed for social and monetary purposes to live effectively in an information-based society. The use of ICT Understudies is still low, especially the use of the web and email. Only two percent (2%) of respondents saw themselves as capable of using PowerPoint, with about (70%) having no ability at all. No critical differences in incompetence were seen between students as indicated by gender orientation and year/scholastic level. Those who are preparing a formal PC appear to be generally equipped with ICT skills, with those formally prepared to see themselves as having the most ICT skills. The results showed that: The utilization of students' ICT was low, with only 70% having PowerPoint skills.

The findings of Hordijk et al., (2019) successfully characterized the ability and competency structures of clinical teachers to demonstrate ethnic and social diversity with the consequences of studying at Delphi Europe. The study describes what skills lecturers and instructors need to deliver responsive medical services is unclear. The essence of the exam is to design an ability structure for variation education. The structure consists of 10 competencies that are deemed fundamental to any clinical instructor in serving the teaching, which results in reliable clinical staff skills. This teaching skills and competency structure can be used in staff improvement projects and adequately train clinical instructors.

Yusuf & Balogun, (2011) examined the competence and disposition of lecturers who understand information innovation and correspondence through contextual investigations at the University of Nigeria. The continued disharmony between created countries and non-industrialized countries is a genuine concern for academics and instructors. The scarcity of studies on ICT coordination in non-industrialized countries must be addressed. This exam analyzes the observation of lecturers' ability, competence, and attitudes to data innovation and correspondence, which is no critical contrast between the mentality of student and female students and the use of ICT. This underlines the need to improve ICT learning outcomes in educator teaching programs in tertiary institutions in agricultural countries. The investigation was led by the Faculty of Education, Ilorin University, Nigeria.

Likewise, the study of Cheng et al., (2010) closes the gap between hypotheses and teaching practices that have implications for competency training and education programs in Hong Kong. This gap between hypotheses and teaching practice is a matter of concern in educators' training and preparation. This paper analyzes hypotheses - practice gaps by means of analyzing the results utilizing that explores the irregularity between the procedures best assigned to substitute instructors and the ones they use most frequently. The findings found three measures of thought principles ascribed to disorder in the origins of teaching. The impact of educators' teaching programs that might close this gap is distinguished. Suggestions for improving the educator school program are also discussed so that the skills and competencies of the education can cover the length of the students' educational outcomes.

The next finding is from Jennings & Greenberg, (2009) who examined prosocial learning spaces where social teachers and vigorous exercise are proportional to student and homeroom teacher outcomes. This study suggests a prosocial classroom model that describes the value of social skills, which are educational competencies and enthusiasm (SEC) and teachers' success. This study model proposes that these variables be applied to the learning hall's teaching area, which is more useful for students. This article analyzes the momentum that recommends the relationship between the SEC and educators' efforts to acquire competencies that can be used to prepare qualified graduate students.

Likewise, the study of Wiek et al., (2011) examined the main competencies in improving education. Reference structure for students' academic progress outcomes program. Further, students have discussed what key competencies are seen as the main qualities for graduate students. For more than ten years, management education has been created and instructed in further education. However, complete scholastic projects in support have emerged prominently in recent years. This study's experiences lay the preparation for institutional progress in planning and reconsidering highly competitive scholastic projects. The investigation results differed from writing related to the main competencies in empowering students and supporting the improvement of learning quality.

DISCUSSION

We want to link the results of this study to Law No. 14 of 2005 article 69 paragraph to classify lecturer competencies into four competencies; namely 1) pedagogical competence, namely the ability to process the development of courses in the curriculum, developing teaching materials, and designing learning strategies, 2) professional competence, namely the ability to master materials in any field of study with various other scientific substances, 3) social competence, namely the ability conduct social relations with students, colleagues, employees and the community to support education, and 4) personality competence, namely personal abilities that reflect a stable, stable, mature, wise and dignified personality, become role models for students and have noble character. Here we can explain that the findings of this study are very relevant to the problems and objectives of lecturer law in Indonesia, where the recognition that lecturers are required to have high skills and competencies to increase students' degree and learning outcomes. Referring to the findings of Hanapi & Nordin, (2014) in the context of education in Malaysia, it supported the expectations of this study in increasing jobless among undergraduates in the neighboring country. It is near proven by its impact on graduates' quality, low competence, and educational systems and culture. not yet in favor of university outcomes. This finding is believed by field evidence that has led to an increase in the unemployment rate with higher education qualifications but whose competence cannot compete in an increasingly global labor market.

The same finding also came from Leonard, (2016) study, which examined the low competency of lecturers in Indonesia, which impacted decreasing the quality of human resources for school teachers, so that it was increasingly challenging to find improvement solutions. Evidence of the relevance of lecturer competence with improving student learning outcomes is also presented by Payne et al., (2015) with the theme of the study "Implementation of mock competency skill assessments to improve student outcomes. So we can emphasize that lecturers and learning models at universities with high competence will undoubtedly impact graduates who are ready to face the era of business competition and a free economy.

As described in the findings section above, most of the findings of the papers we studied were aimed at assessing the potential and competence of lecturers who teach at universities and other training institutions to improve the quality of student learning outcomes. In the end, their findings reflected an effort to improve student achievement. One of the essential factors to improve student achievement in tertiary institutions is the improvement of educators' competence. Because teachers who are low competent in their specialist areas can hinder, increasing graduate education outcomes in an era of challenges was essential. The average findings above are evidenced by the study of various contexts and countries of origin with the study design of high impact peer-review journals consisting of more than 40 publications with different statements, but the goal is the same, namely narrowing the gap between lecturer skills and student outcomes. Their research results have implications for the application context in Indonesia because the majority of the data show that the competence and skills of lecturers are closely related and have a significant relationship with the academic achievement of students and other staff in each study unit run. Grann also made the same effort, Grann & Bushway, (2014) in their study "Competency map: Visualizing student learning to promote student success"

CONCLUSION

Based on the discussion of the findings of this study, it can be concluded that the research hypothesis is aimed at identifying the separation between the competence of lecturers and the improvement of the learning program outcomes of college students in modern times, which are full of challenges and global competition. The majority of publications we have reviewed indicate that they agree that efforts to solve the education gap among the academic community are increasing the competence of lecturers so that an increase will follow it in student learning outcomes. The competencies referred to include communication competence, mastery of content in the field of study, skills in mastering learning technology, high commitment, and divine spirituality that are distinctively Indonesian. So with the mastery of all these competencies, the hopes and expectations of the parties will become real that university human resources in Indonesia will become substantial human resources in the future, entering the 21st-century era.

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REFERENCES

1. Arifin, H.M. (2015). The Influence of Competence, Motivation, and Organisational Culture to High School Teacher Job Satisfaction and Performance. *International Education Studies*, 8(1), 38–45.
2. Bakkenes, I., Vermunt, J.D., & Wubbels, T. (2010). Teacher learning in the context of educational innovation: Learning activities and learning outcomes of experienced teachers. *Learning and Instruction*, 20(6), 533–548.
3. Brookfield, S.D. (2015). *The Skillful Teacher: On Technique, Trust, and Responsiveness in the Classroom*. John Wiley & Sons.
4. Cheng, M.M., Cheng, A.Y., & Tang, S.Y. (2010). Closing the gap between the theory and practice of teaching: Implications for teacher education programmes in Hong Kong. *Journal of Education for Teaching*, 36(1), 91–104.
5. Chong, S., Low, E.L., & Goh, K.C. (2011). Emerging Professional Teacher Identity of Pre-Service Teachers. *Australian Journal of Teacher Education*, 36(8), 50–64.
6. Chu, S.K.W., Reynolds, R.B., Tavares, N.J., Notari, M., & Lee, C.W.Y. (2021). *21st century skills development through inquiry-based learning from theory to practice*. Springer.
7. Danner, R.B., & Pessu, C.O. (2013). A survey of ICT competencies among students in teacher preparation programmes at the University of Benin, Benin City, Nigeria. *Journal of Information Technology Education: Research*, 12(1), 33–49.
8. Darling-Hammond, L. (2000). Teacher Quality and Student Achievement. *Education Policy Analysis Archives*, 8(0), 1-44. <https://doi.org/10.14507/epaa.v8n1.2000>
9. Day, C., Gu, Q., & Sammons, P. (2016). The impact of leadership on student outcomes: How successful school leaders use transformational and instructional strategies to make a difference. *Educational Administration Quarterly*, 52(2), 221–258.
10. DeCastro-Ambrosetti, D., & Cho, G. (2011). A Look at "Lookism": A Critical Analysis of Teachers' Expectations Based on Students Appearance. *Multicultural Education*, 18(2), 51–54.
11. Djigic, G., & Stojiljkovic, S. (2011). Classroom management styles, classroom climate and school achievement. *Procedia-Social and Behavioral Sciences*, 29, 819–828.
12. Doğançay-Aktuna, S., & Hardman, J. (2018). Teacher qualifications, professionalism, competencies, and benchmarks. *The TESOL Encyclopedia of English Language Teaching*, 1–7.
13. Drost, B.R., & Levine, A.C. (2015). An analysis of strategies for teaching standards-based lesson plan alignment to preservice teachers. *Journal of Education*, 195(2), 37–47.
14. Dunlosky, J., Rawson, K.A., Marsh, E.J., Nathan, M.J., & Willingham, D.T. (2013). Improving students' learning with effective learning techniques: Promising directions from cognitive and educational psychology. *Psychological Science in the Public Interest*, 14(1), 4–58.
15. Eitel, A., Endres, T., & Renkl, A. (2020). Self-management as a bridge between cognitive load and self-regulated learning: The illustrative case of seductive details. *Educational Psychology Review*, 1–15.
16. Faltis, C., Arias, M.B., & Ramírez-Marín, F. (2010). Identifying relevant competencies for secondary teachers of English learners. *Bilingual Research Journal*, 33(3), 307–328.
17. Fithriyyati, N., & Maryani, I. (2018). Science lesson plan evaluation for 7th grade secondary school: A learning process reflection. *Psychology, Evaluation, and Technology in Educational Research*, 1(1), 9–18.
18. Ganayem, A., & Zidan, W. (2018). 21st Century Skills: Student Perception of Online Instructor Role. *Interdisciplinary Journal of E-Learning & Learning Objects*, 14.
19. Grann, J., & Bushway, D. (2014). Competency map: Visualizing student learning to promote student success. *Proceedings of the Fourth International Conference on Learning Analytics and Knowledge*, 168–172.
20. Groundwater-Smith, S., & Mockler, N. (2009). *Teacher professional learning in an age of compliance: Mind the gap* (Vol. 2). Springer Science & Business Media.
21. Habgood, M.J., & Ainsworth, S.E. (2011). Motivating children to learn effectively: Exploring the value of intrinsic integration in educational games. *The Journal of the Learning Sciences*, 20(2), 169–206.
22. Hanapi, Z., & Nordin, M.S. (2014). Unemployment among Malaysia graduates: Graduates' attributes, lecturers' competency and quality of education. *Procedia-Social and Behavioral Sciences*, 112, 1056–1063.
23. Hanson-Smith, E. (2016). Teacher education and technology. *The Routledge Handbook of Language Learning and Technology*, 210–222.

24. Harslett, M., Harrison, B., Godfrey, J., Partington, G., & Richer, K. (2000). Teacher Perceptions of the Characteristics of Effective Teachers of Aboriginal Middle School Students. *Australian Journal of Teacher Education*, 25(2). <https://doi.org/10.14221/ajte.2000v25n2.4>
25. Hashim, H. (2018). Application of technology in the digital era education. *International Journal of Research in Counseling and Education*, 2(1), 1–5.
26. Haston, W. (2007). Teacher modeling as an effective teaching strategy. *Music Educators Journal*, 93(4), 26–30.
27. Hernandez-de-Menendez, M., & Morales-Menendez, R. (2019). Technological innovations and practices in engineering education: A review. *International Journal on Interactive Design and Manufacturing (IJIDeM)*, 13(2), 713–728.
28. Hong, J.Y. (2010). Pre-service and beginning teachers' professional identity and its relation to dropping out of the profession. *Teaching and Teacher Education*, 26(8), 1530–1543.
29. Hordijk, R., Hendrickx, K., Lanting, K., MacFarlane, A., Muntinga, M., & Suurmond, J. (2019). Defining a framework for medical teachers' competencies to teach ethnic and cultural diversity: Results of a European Delphi study. *Medical Teacher*, 41(1), 68–74.
30. Irfan, I., Sofendi, S., & Vianty, M. (2020). Technological knowledge application on academic writing English education study program students. *English Review: Journal of English Education*, 9(1), 157–166.
31. Jennings, P.A., & Greenberg, M.T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research*, 79(1), 491–525.
32. Jethro, O.O., Grace, A.M., & Thomas, A.K. (2012). E-learning and its effects on teaching and learning in a global age. *International Journal of Academic Research in Business and Social Sciences*, 2(1), 203.
33. Koponen, J. (2019). The flipped classroom approach for teaching cross-cultural communication to millennials. *Journal of Teaching in International Business*, 30(2), 102–124.
34. Küçükoğlu, H. (2013). Improving reading skills through effective reading strategies. *Procedia-Social and Behavioral Sciences*, 70, 709–714.
35. Kumar, A., & Ayedee, D. (2021). Technology Adoption: A Solution for SMEs to Overcome Problems during COVID-19. *Forthcoming, Academy of Marketing Studies Journal*, 25(1).
36. Laurillard, D. (2008). Technology enhanced learning as a tool for pedagogical innovation. *Journal of Philosophy of Education*, 42(3–4), 521–533.
37. Leithwood, K. (2003). Teacher leadership: Its nature, development, and impact on schools and students. *Leadership in Education*, 103–117.
38. Leonard, L. (2016). The competence of teaching staff in Indonesia: An analysis of the impact of the low quality of teacher human resources and solutions for improvement. *Formative: Scientific Journal of Mathematics and Natural Sciences Education*, 5(3), 192-201.
39. Lucas, T., & Grinberg, J. (2008). Responding to the linguistic reality of mainstream classrooms: Preparing all teachers to teach English language learners. *Handbook of Research on Teacher Education: Enduring Questions in Changing Contexts*, 3, 606–636.
40. Malikow, M. (2005). Effective teacher study. *National Forum of Teacher Education Journal-Electronic*, 16(3e), 1–9.
41. Nückles, M., Roelle, J., Glogger-Frey, I., Waldeyer, J., & Renkl, A. (2020). The self-regulation-view in writing-to-learn: Using journal writing to optimize cognitive load in self-regulated learning. *Educational Psychology Review*, 1–38.
42. Nygaard, C., Holtham, C., & Courtney, N. (2009). *Improving students' learning outcomes*. Copenhagen Business School Press DK.
43. Parker, L. (2019). *Race Is...Race Isn't: Critical Race Theory and Qualitative Studies in Education*. Routledge.
44. Payne, C., Ziegler, M.P., Baughman, D.M., & Jones, J. (2015). Implementation of mock competency skill assessments to improve student outcomes. *Nurse Educator*, 40(6), 281–284.
45. Phillips, C.R., & Trainor, J.E. (2014). Millennial students and the flipped classroom. *ASBBS Proceedings*, 21(1), 519.
46. Prinz, A., Golke, S., & Wittwer, J. (2020). To what extent do situation-model-approach interventions improve relative metacomprehension accuracy? Meta-analytic insights. *Educational Psychology Review*, 1–33.
47. Schwieger, D., & Ladwig, C. (2018). Reaching and retaining the next generation: Adapting to the expectations of Gen Z in the classroom. *Information Systems Education Journal*, 16(3), 45-54.
48. Selfe, C.L. & Hugh BURNS. (1999). *Technology and Literacy in the 21st Century: The Importance of Paying Attention* (1st edition). Southern Illinois University Press.

49. Shan, S., Li, C., Shi, J., Wang, L., & Cai, H. (2014). Impact of effective communication, achievement sharing and positive classroom environments on learning performance. *Systems Research and Behavioral Science*, 31(3), 471–482.
50. Stronge, J.H. (2018). Qualities of effective teachers. ASCD. *The Journal of Educational Research*, 97(6), 311–315.
51. Sutrisno, A., Nguyen, N.T., & Tangen, D. (2014). Incorporating translation in qualitative studies: Two case studies in education. *International Journal of Qualitative Studies in Education*, 27(10), 1337–1353.
52. Tanang, H., & Abu, B. (2014). Teacher Professionalism and Professional Development Practices in South Sulawesi, Indonesia. *Journal of Curriculum and Teaching*, 3(2), 25–42.
53. Weinert, F.E., Schrader, F.W., & Helmke, A. (1990). Educational expertise: Closing the gap between educational research and classroom practice. *School Psychology International*, 11(3), 163–180.
54. Whitty, G. (1996). *Professional Competences and Professional Characteristics: The Northern Ireland Approach to the Reform of Teacher Education In: D. Hustler & D. Mcintyre (Eds.), Knowledge and competence*. David Fulton.
55. Wiek, A., Withycombe, L., & Redman, C.L. (2011). Key competencies in sustainability: A reference framework for academic program development. *Sustainability Science*, 6(2), 203–218.
56. Yusuf, M.O., & Balogun, M.R. (2011). Student-teachers' competence and attitude towards Information and communication technology: A case study in a Nigerian University. *Contemporary Educational Technology*, 2(1), 18–36.
57. Zahoor, F., Jumani, N.B., & Malik, S. (2019). Professional Qualifications and Competencies of Teacher Educators and Subject Teachers of Education: Gender Wise Analysis. *Global Regional Review*, 4(4), 158–167.