



JEAR: the CERD Educational Journal
ISSN 2957-8051(Online) |ISSN2413-5992(Print)



1(7) 2023

Journal homepage: Journal.pce.edu.bt

Perceptions and Technical Challenges Faced by Teachers while Conducting an Action Research: A case from Lhuentse Dzongkhag

Author: Nidup Wangdi
Teacher

<http://doi.org/10.17102/jear.7.1.98> | Accepted September 2023 | Published November 2023

Abstract

This study examined perceptions and technical challenges encountered while conducting action research from 150 teachers of Lhuentse Dzongkhag, Bhutan. A quantitative research approach was employed and data were gathered with a modified version of a previously used survey questionnaire. The results indicated that the teacher-respondents possess positive perceptions toward action research and recognized its benefits for their teaching practice and students' learning. However, the study also divulges challenges faced by teachers, particularly a lack of research knowledge and skills, including questionnaire design, methodology selection, literature review, problem identification, intervention planning, research gap identification, and situational analysis. As a result, the study recommends that school principals, the Dzongkhag Education office, and the Ministry of Education and Skills Development (MoESD) may take the present findings into consideration to enhance the teacher-researcher policy and offer professional development opportunities related to action research which in turn would help to boost teachers' research skills.

Key words: Action research, perceptions, challenges, teachers

Introduction

Research is a systematic and organized process of inquiry aimed at discovering new knowledge, deepen understanding, and contribute to the existing body of knowledge in a particular field. Action research is one of the systematic approaches to inquiry that focuses on solving real-world problems or improving specific practices in a practical setting. It involves active participation by practitioners, who collaboratively investigate and reflect upon their own practices, make changes based¹on their findings, and evaluate the impact of those changes. Action research has gained significant recognition worldwide as a valuable tool for improving teaching quality and promoting the professional development of teachers. Its effectiveness in enhancing teaching practices and empowering educators is

widely acknowledged on a global scale. Mills (2007) explains that action research is “any systematic inquiry conducted by teacher researchers, principals, school counselors, or other stakeholders in the teaching/learning environment to gather information about how their particular schools operate, how they teach, and how well their students learn” (p. 5). Teachers conduct action research with the intention of learning more and establishing reflective habits that will improve the educational approaches they use in general as well as the outcomes of their pupils.

Many studies and previous literature had proven the positive outcomes of action research to many academic aspects such as improvement of teaching and learning, reflection of teachers’ practice, professional growth of teachers, and most especially leads to positive educational outcomes of students such as improved academic performance, promotion of positive behavior and values, and enhancement of life and survival skills (Burns, 2011; Dick, 2006; Taylor & Medina, 2013).

Realizing the importance of action research, MoE and the teacher education colleges in Bhutan introduced action research for in-service and pre-service teachers as a tool for improving their teaching practices (Gyamtsso, 2020; Maxwell, 2003; REC, 2018; RUB, 2018). Action research for in-service teachers was further advocated in the Bhutan Education Blueprint 2014-2024 (MoE, 2014a), a ten-year reform roadmap formulated by the MoE to enhance access to education, quality education, equity in education, and system efficacy. Moreover, in 2014, the Government launched financial support for in-service teachers known as the Sheyrig Endowment Fund to support and encourage teachers to carry out action research projects in their schools (REC, 2018). Furthermore, in 2018, the REC (2018) developed an action research guidebook for in-service teachers. The guidebook was developed based on the recommendations of the Bhutan Education Blueprint 2014-2024 (MoE, 2014a), the resolution of the National Curriculum Conference (2016), and the launch of the action research fund (REC, 2016).

Although the Royal Government of Bhutan (RGoB), Ministry of Education and Skills Development (MoESD), and Royal University of Bhutan (RUB) have made efforts to foster a research culture within their organizations, numerous obstacles have hindered the effective implementation of these initiatives. Sherab and Schuelka (2020) asserts that the lack of a strong research culture in Bhutan can be attributed, to the absence of national-level organisation that would oversee all research and development activities, including research ethics oversight and approval. Additionally, there is a notable absence of financial support at the national level for research and innovation initiatives.

Therefore, this study investigated perceptions towards action research and technical challenges encountered by the teachers of Lhuentse Dzongkhag in conducting action research.

Research Questions

The following questions were taken into account and addressed in this present study:

1. How do teachers of Lhuentse Dzongkhag perceive doing action research in relation to teaching?
2. What are the technical challenges and issues encountered by the teachers of Lhuentse Dzongkhag in conducting action research?

2

Literature Review

Teachers’ perceptions in conducting action research

Ferrance (2000) defines action research as “a process in which participants examine their own educational practice, using the techniques of research” (p. 1). This definition also characterizes action research as a structured investigation conducted by teachers to examine and investigate their own teaching practices. Teachers perceived action research as a valuable and meaningful process. They appreciate the opportunity it provides for self-reflection, professional growth, and improvement of their teaching practices. Many teachers reported that action research helped them gain a deeper understanding of their students' needs, identify effective instructional strategies, and tailor their teaching to better meet student learning outcomes (Johnson, 2011; and Chen & Kessler. 2013).

Moreover, Steele (2007) claims that the most appropriate method to explore how to improve one's teaching practices and to improve quality learning outcomes for learners was through action research. Educational action research involves practitioners in the research process, allowing them to actively participate and contribute. Through this engagement, practitioners are able to expand and enhance their self-understandings, leading to transformative experiences. Based on the aforementioned concepts, action research serves as a tool utilized by educators and teachers to identify approaches for enhancing their teaching methods. It empowers teachers to take on the role of practitioners and offers opportunities for continuous learning through the improvement of instructional practices.

Dimiyati (2009) claims that classroom action research serves two primary objectives. Firstly, it aims to enhance teachers' professionalism by encouraging reflection and offering systematic alternatives in the form of various learning models to address existing challenges. Second, it develops teachers' skills in facing actual problems. Khasinah (2013) argues that classroom action research serves a role in addressing and resolving issues that arise within the classroom setting. In addition, through classroom action research, teacher or lecturer could apply new methods and propose an innovative learning. Furthermore, by engaging in classroom action research, educators have the opportunity to implement novel teaching methods and introduce innovative approaches to learning. Various studies reveal that the implementation of classroom action research encourages positive changes in the form of improving teacher competency, self-reflection, and overall learning improvement that improves the process and outcomes of classroom learning practices (Rossouw, 2009; Hine, 2013). Furthermore, Kukari and Honan (2010) assert that teacher professional development is reinforced by the view that in order to develop teacher quality, teachers should be required to upgrade their teacher education qualifications through in-service programs offered by teachers colleges and universities, including attending in-service activities and conducting action research at school and classroom levels. Therefore, they believe that conducting action research can contribute to the growth of teachers' professional abilities and improve their knowledge and skills in research endeavours.

Challenges in conducting action research

Researchers such as Johnson (2012), Tindowen et al (2019), and Ulla et al (2017) identified time constraints as a significant challenge in implementing action research. Teachers often struggle to find dedicated time within their busy schedules to engage in the research process, including planning, data collection, analysis, and reflection. The demanding nature of teaching responsibilities and other administrative tasks can make it difficult to allocate sufficient time for action research.

Another commonly cited challenge is the lack of research skills and knowledge among

teachers. Studies by Norasmah and Chia (2016), Othman (2011) and Abelardo et al (2019) highlight that the lack of in-depth knowledge of action research in selecting relevant methodology, data analysis techniques, and interpreting research findings impeded teachers' ability to effectively conduct action research.

Furthermore, obtaining support and resources for action research is often cited as a challenge. Teachers may struggle to access relevant literature, research tools, and technology to support their research endeavors. Yohannis (2011) indicated that lack of sufficient research skills, lack of resource materials, and support from educational systems as a serious problem that hinder secondary school teachers not to involve in educational research activities. Similarly, a study on the practices and challenges in doing research in Sululta Secondary School in Ethiopia revealed that only a few teachers were engaged in research due to lack of enough research knowledge. (Biruk, 2013).

Additionally, managing the complexity of data collection and analysis is another challenge reported by teachers. Studies by Johnson and Henderson (2003) highlight the difficulties teachers face in selecting appropriate data collection methods, organizing and analysing data, and drawing meaningful conclusions from their research findings. The technical aspects of research can be overwhelming for teachers without prior experience or guidance. Further, Abdelkader and Al-Omari (2015) found out that the participants in their research sample lacked an understanding of the basic elements of action research and the important skills required to conduct an action research study. As a result, only a small number of teachers engaged in conducting action research studies.

In Bhutan, while limited research has explored the difficulties faced by school teachers in conducting research, a few studies have focused on the experiences of Bhutanese tertiary (university) teacher-researchers, such as Gyamtso et al. (2019) and Sherab and Schuelka (2019). These studies identified significant challenges that included inadequate time due to extensive teaching responsibilities and other academic obligations, insufficient funds for research activities, limited knowledge and confidence in publishing research articles, scarcity of primary and secondary data sources, and a lack of interest and support from organizations or institutions.

In conclusion, the literature reveals that teachers face several challenges when conducting action research, including time constraints, lack of research skills, limited support and resources, and difficulties in managing data collection and analysis. Addressing these challenges requires providing adequate time, training, and support to teachers, as well as institutional commitment to fostering a research-friendly environment within schools and educational institutions.

After reviewing the previous studies, the researcher did not find adequate national study that explored the perceptions and challenges encountered by Bhutanese school teachers in conducting action research although there are few studies which focused on the experiences of Bhutanese tertiary (university) teacher-researchers, Therefore, this study attempted to bridge the gap in related literature by investigating the perceptions toward action research and the technical challenges in implementing action research by the teachers of Lhuentse Dzongkhag. It is also expected that the result of this study might be considered by the schools' principals, Ministry of Education and Skills development and policy makers in order to promote and encourage⁴ school teachers to do action research.

Research Methodology

This section includes detail of research design and respondents, research instruments, data

collection procedure, and process involved in data analysis.

Research design and respondents

The study employed quantitative research approach. The data on school teachers' perceptions and technical challenges in conducting action research were gathered using the survey questionnaire which involved convenience and snowball sampling techniques. The snowball sampling method was used because the target participants needed for this study were not easily accessible (Ghaljaie et al., (2017).

A total of 150 teachers teaching in Lhuentse Dzongkhag with 1 to 25 years of teaching experience participated in the survey which comprised of 120 male and 30 female, teaching different subjects at different class levels.

Research instruments

For this study, a questionnaire from Ulla et al. (2017) was modified, adapted and used. The survey questionnaire comprised of three parts (A, B & C). Part A consisted of the demographic profile of the teacher-respondents. Part B contained 7 items that gathered teachers' perceptions and part C contained 11 items which pertains to challenges encountered by the teacher-respondents in doing action research. All the items in part B and C followed a 4-point Likert scale format ranging from (strongly disagree = 1 to strongly agree = 4).

Further, the reliability and validity of the survey items was conducted by piloting questionnaire to 30 teachers. The Kuder-Richardson formula (KR-20) was applied to find out the reliability coefficient of the items .The result showed a score of 0.87, which was an indication that the test items were reliable. The Kuder and Richardson Formula 20 is a statistical tool used to assess the internal consistency of measurements that involve dichotomous choices. It is akin to conducting a split-half analysis on all possible combinations of questions. This method is suitable when each question can be answered correctly or incorrectly, with a score of 1 assigned to a correct response and 0 to an incorrect one.

Data analysis

The survey questionnaire data was transferred from a spreadsheet to the SPSS (Statistical Package for the Social Sciences) version 23. Descriptive analyses of frequency and percentage were used and tabulated to describe the quantitative findings of the present study.

Results

The results obtained from the survey questionnaire regarding the perceptions of teachers and the obstacles they encountered during the action research process are outlined in this section. To quantify the result of the survey questionnaire, the percentages of strongly agree and agree were combined against the percentages of strongly disagree and disagree.

Table 1. Teachers' Perceptions in conducting Action Research

Sl. No	Statements	Strongly Agree/Agree (%)	Strongly Disagree/Disagree (%)
1	Action research is a valuable approach to improve teaching and learning process.	95.2	4.8
2	Action research encourages critical self-reflection and bring positive changes in teaching practices.	95.1	4.9
3	Action research allows teachers to better understand students' needs and challenges.	96.2	3.8
4	Action research helps teachers reflect on and refine their teaching strategies.	97.3	2.7
5	Collaborating with colleagues in action research projects help in acquiring new knowledge and enhances one's professional development.	96.1	3.9
6	Action research enables teachers to examine and explore classroom and school problems and their solutions.	97.1	2.9
7	I view myself as a teacher-researcher.	72.5	27.5

The above table reveals that teacher respondents hold positive perceptions regarding the implementation of action research in their teaching practices. It is evident that more than 95% of respondents strongly agree or agree that action research is a valuable approach to improving the teaching and learning process, encourages critical self-reflection, brings positive changes in teaching practices, allows better understanding of students' needs and challenges, helps reflect on and refine teaching strategies, and enables examination and exploration of classroom and school problems and their solutions. Furthermore, 96% of teacher respondents also perceive that collaborating with colleagues in action research projects contributes to acquiring new knowledge and enhances their professional development.

However, significant portions of research participants (27.5%) do not perceive themselves as teacher-researchers, while, 4.8% of respondents disagree that conducting action research will improve teaching and learning process. Another 4.9 % of teacher respondents disagree with the statement that action research encourages critical self-reflection and bring positive changes in teaching practices. Additionally more 3% of the research participants believe that implementing in action research do not allows teachers to better understand students' needs and collaborating in action research projects also do not help in acquiring new knowledge and enhances one's professional development. These disagreement indicate that there may be a ⁶subset of educators who have not fully embraced the concept of engaging in action research within their teaching roles.

Overall, the data highlights that the majority of research participants recognize the value and benefits of implementing action research in improving teaching practices, promoting

self-reflection, understanding student needs, and fostering collaboration. These positive perceptions can serve as a foundation for further promoting and supporting the integration of action research in education, potentially leading to continuous improvement and innovation in teaching and learning processes. However, efforts could be made to encourage and empower more teachers to view themselves as teacher-researchers, fostering a culture of research-driven professional growth in the education community.

Table 2. The technical challenges encountered in conducting Action Research

Sl.No	Statements	Strongly Agree/Agree (%)	Strongly Disagree/Disagree (%)
1	I struggle in identifying issues and problems to be investigated in an action research.	76.1	23.9
2	I am confident in developing specific action research topic after identifying the problems.	23.2	76.8
3	I face problem in searching for relevant literature to the chosen research topic.	75.4	24.6
4	I encounter difficulty in writing problem statement/situational analysis and research gap.	80.2	19.8
5	I face problem in identifying data plan (methodology) for data collection.	77.0	23
6	I encounter problem in designing survey questionnaires.	84.1	15.9
7	I am confident in developing intervention plan.	36.9	63.1
8	I am confident in using in-text and end-text citations	45.6	54.4
9	I feel more comfortable in analysing quantitative data than qualitative data.	56.8	43.2
10	I know how to organize and interpret the research findings	45.9	54.1
11	I receive full support from Principal in conducting action research.	80.7	19.3

The table 2 reveals several technical challenges that the teacher respondents face when conducting action research. It is apparent that more than 75% of respondents struggle with identifying issues and problems to be investigated in action research, searching for relevant literature, writing problem statements and situational analysis, and identifying data collection methodologies. Additionally, a significant number of participants face difficulties in designing survey questionnaires, developing specific action research topics after identifying problems, and feeling confident in developing intervention plans. Furthermore, the data suggests that 50% of respondents feel less confident in using in-text and end-text citations, analysing qualitative data compared to quantitative data, and organizing and interpreting research findings. However, the majority (80.7%) of participants do feel supported by their principals in conducting action research. In conclusion, the findings highlight the areas in which individuals encounter challenges

when conducting action research. These areas include problem identification, literature review, methodology selection, survey design, intervention planning, citation usage, data analysis, and interpreting research findings. Addressing these challenges through additional support, training, and resources could enhance the effectiveness and quality of action research projects.

Discussion

The study examined the perceptions and challenges that teachers encounter while implementing action research in schools. Teacher-respondents recognized action research as a valuable approach to improve teaching and learning process. They agreed that doing action research develops and encourages critical self-reflection, brings positive changes in teaching practices, allows better understanding of students' needs and challenges, helps reflect on and refine teaching strategies, and help in exploration of classroom and school problems and their solutions. The findings of several studies carried out by Hine (2013), Young, Rapp, & Murphy (2010), Hien (2009), Johnson (2011), and Khasinah (2013) are consistent with the aforementioned findings. According to Hine (2013), engaging in action research enables teachers to enhance their teaching practice, leading to favourable outcomes for their students. This viewpoint is supported by Young et al (2010), who emphasize that action research improves classroom teaching by allowing teachers to observe both the learning process and its outcomes.

Further, the teacher-respondents believe that collaborating with colleagues in action research projects help them in acquiring new knowledge and enhances one's professional development. Milton et al (2010) corroborate this finding, asserting that action research facilitates collaboration among teachers, fostering shared learning experiences and positively impacting student achievement across multiple grade levels. Furthermore, they recommend that action research projects should be conducted annually by teachers, highlighting its benefits in all subject areas. Overall, the above findings divulge the positive discernments of the teachers toward the implementation of action research.

However, the study findings also disclosed some challenges that hinder teacher-respondents from conducting action research in the schools. These challenges include lack of research knowledge and skills such as designing survey questionnaires, choosing relevant methodology, searching literature review, identifications of problem, developing intervention plans identifying research gap and situational analysis. The above findings align with the study conducted by Ellis & Loughland (2016) which highlighted the significant issue of teachers lacking research knowledge and skills training. Similarly, Zhou (2012), reported similar conclusions, teachers in China exhibited a limited understanding of research and faced challenges such as inadequate time and insufficient knowledge of research methodology. Additionally, the absence of research training had a negative impact on teachers' interest, confidence, and motivation to engage in research activities.

Similarly, Sheikh et al (2013) highlighted that active participation in research seminars, symposiums, and courses can have a positive impact on researchers, as it exposes them to diverse methodologies, styles, and research concepts. Therefore, it is essential to provide research trainings and seminars to all teachers so that they can gain the necessary knowledge and acquire the skills required for conducting action research. Without these skills, teachers would struggle to effectively perform the task (Ulla, 2016). These research trainings could be organised during the summer break and prior to the commencement of the new academic year when teachers are not engaged in teaching responsibilities.

Conclusion

The study revealed that the teachers of Lhuentse Dzongkhag recognize the value of action research in improving the teaching and learning process. They perceived action research as a means to develop critical self-reflection, enhance teaching practices, understand students' needs, and address classroom and school challenges. Collaborating with colleagues in action research projects is seen as beneficial for acquiring new knowledge and professional development. However, the study also reveals technical challenges faced by teachers, particularly a lack of research knowledge and skills, including questionnaire design, methodology selection, literature review, problem identification, intervention planning, research gap identification, and situational analysis.

Based on the findings, it is recommended that efforts should be made to address the challenges hindering teachers from conducting action research effectively. Providing research knowledge and skills training to teachers is crucial to equip them with the necessary tools and competencies. This training should focus on various aspects, including questionnaire design, research methodology, literature review techniques, problem-solving strategies, and data analysis. Additionally, it is important to allocate sufficient time and resources for teachers to engage in research activities. By investing in research training and support, educational institutions can enhance teachers' interest, confidence, and motivation to actively participate in action research projects.

References

- Abelardo L. J., Lomboy, M. A. A., and Lopez, C. C., Balaria, F. E., Subia, G. S. (2019). Challenges Encountered by the National High School Teachers in Doing Action Research. *International Journal of English Literature and Social Sciences (IJELS)*, 4 (4). Retrieved from <http://journalrepository.co/index.php/ijels/article/view/7>.
- Abdelkader, Mohamed Abdelkader El Sayed, and Amer bin Suhail al-Omari, children. (2015). The degree of teachers' availability of action research skills in basic education schools in Dhofar province - Sultanate of Oman. *Journal of Faculty of Education - University of Banha*. 26. 139–162. 10.12816 / 0022106.
- Biruk, E. H. (2013). The practice and challenges in conducting action research: The case of Sululta Secondary School. *MA Thesis. Institute of Educational Research*. Addis Ababa University, Ethiopia.
<http://etd.aau.edu.et/bitstream/123456789/4842/1/33.%20Biruk%20Haile.pdf>
- Burns, A. (2011). Action research in the field of second language teaching and learning. *Handbook of research in second language teaching and learning*, 2, 237-253.
- Chen, X. B., & Kessler, G. (2013). Action research tablets for informal language Learning: Student usage and attitudes. *Language Learning & Technology*, 17(1), 20–36.
- Dick, B. (2006). Action research literature 2004-2006: Themes and trends. *Action research*, 4(4), 439-458.
- Dame, A. (2011). Action research in Selected Teacher Education Colleges of Oromia: Knowledge base, practice and Challenges. *The Ethiopian Journal of Education*, 31(2), 33-62.
- Dimiyati, D. (2009). Urgensi Penelitian Tindakan Kelas Dalam Konteks Peningkatan Profesionalitas Guru Penjas. *Jurnal Pendidikan Jasmani Indonesia*, 6, (2), 45–52.

- Ellis, N.J and Loughland, T (2016).The challenges of practitioner research: A comparative study of Singapore and NSW, *Australian Journal of Teacher Education*: Vol. 41 : Iss. 2, Article 8. DOI: <https://doi.org/10.14221/ajte.2016v41n2.8>. 122-136
- Ferrance, E. (2000). Themes in education: Action research. Northeast and Islands Regional Educational Laboratory, Brown University, USA.
- Gyamtso, D. C. (2020). Teacher education in Bhutan. In K. Pushpanadham (Ed.), *Teacher education in the global era*. Springer.
- Gyamtso, D. C., & Maxwell, T. W. (2012). Present practices and background to teaching and learning at the Royal University of Bhutan (RUB): A pilot study. *International Journal of Teaching and Learning in Higher Education*, 24(1), 65-75.
- Gyamtso, D. C., Sherab, K. & Maxwell, T. W. (2019). The state of research at the Royal University of Bhutan and ways forward. *Journal of Global Education and Research*, 4(2), 154-172. <https://digitalcommons.usf.edu/jger/vol4/iss2/5/>
- Hine, G. S. C. (2013). The importance of action research in teacher education programs. *Issues in Educational Research*, 23, (2), 151–163.
- Johnson, C. S. (2011). School administrators and the importance of utilizing action research. *International Journal of Humanities and Social Science*, 1(14), 78-84.
- Johnson, A. P. (2012). *A short guide to action research* (4th ed.). New Jersey: Pearson Education.
- Johnson, D. W. (2003). Social interdependence: The interrelationships among theory, research, and practice. *American Psychologist*, 58(11), 931-945.
- Khasinah, S. (2013). Classroom action research. *Journal Pionir*, 1, (1), 107–114.
- Kukari, A. and Honan, E. (2010). Development of Quality Teaching through Action Research. *Spotlight with NRI, Development Issues, Policies, and Trends*, 4(3).
- Maxwell, T. W. (2003). Action research for Bhutan. *RABSEL: the CERD Educational Journal*, 3, 1-20.
- Mills, G. E. (2000). *Action research: A guide for the teacher researcher*. Merrill Prentice Hall Publisher.
- Mills, G. E. (2007). *Action research: A guide for the teacher researcher*. Pearson Education.
- Ministry of Education. (2014a). Bhutan education blueprint 2014-2024. Ministry of Education, Bhutan.
- Ministry of Education. (2014b). Teacher human resource policy. Ministry of Education, Bhutan.
- Mills, G. E. (2007). *Action research: A guide for the teacher researcher* (3rd ed.). Upper Saddle River, NJ: Pearson.
- Milton-Brkich, K., Shumbera, K., & Beran, B. (2010). Action research. *Science and Children*, 47(9), 47–51.
- Norasmah, O. & Chia S. Y. (2016). The Challenges of Action Research Implementation in Malaysian Schools. *Pertanika Journal of Social Science and Humanities*. 24 (1), 43-52.
- Othman, N. (2011). *Research Methodology*. Centre for Graduate Studies INSANIAH University College, Kedah Malaysia.
- Royal Education Council. (2018). *A guide to action research: Enhancing professional practice of teachers in Bhutan*. Royal Education Council, Bhutan.
- Royal Education Council. (2016). National school curriculum conference 2016:

- Rethinking education*. Royal Education Council, Bhutan.
- Royal University of Bhutan. (2018). The wheel of academic law. Royal University of Bhutan.
- Rust, F., & Meyers, E. (2006). The bright side: Teacher research in the context of educational reform and policy. *Teachers and Teaching: Theory and Practice*, 12(1), 69-86.
<http://dx.doi.org/10.1080/13450600500365452>
- Rossouw, D. (2009). Educators as action researchers: Some key considerations. *South African Journal of Education*, 29, 1–16.
- Sherab,K. & Schuelka;M.(2020). The Value of Research Culture. *The Druk Journal*.
 drukjournal.bt/the-value-of-research-culture
- Sheikh, A.S.F., Sheikh, S.A., Kaleem, A., Waqas, A. (2013). Factors contributing to lack of interest in research among medical students. *Advances in Medical Education and Practice*. 4:237-43. <https://doi.org/10.2147/AMEP.S51536>
- Steele, L. (2007). Accessible Portfolios: Making it Happen in My Centre: an Action Research Study. Unpublished MA thesis Victoria University of Wellington.
- Taylor, P. C., & Medina, M. N. D. (2013). Educational research paradigms: From positivism to multiparadigmatic. *The Journal of Meaning Centered Education*, 1(2), 1-13.
- Tindowenl, J.D., Guzman, J. & Macanang, D. (2019). Teachers’ conception and difficulties in doing action research, *Haripur Journal of Educational Research*, 3(1), 1-1.
- Ulla, M. B. (2017). Teacher training in Myanmar: Teachers’ perceptions and implications. *International Journal of Instruction*, 10(2), 103-118.
http://www.eiji.net/dosyalar/iji_2017_2_7.pdf
<https://doi.org/10.12973/iji.2017.1027a>
- Ulla, M. B., Barrera, K. B., & Acompañado, M. M. (2017). Philippine Classroom Teachers as Researchers: Teachers’ Perceptions, Motivations, and Challenges. *Australian Journal of Teacher Education*, 42(11), 61.
- Yohannis Wakjira. (2011). Practice and challenges in conducting educational research in selected secondary school of Ilubabor Zone. Unpublished MA thesis Addis Ababa University.
- Young, M. R., Rapp, E., & Murphy, J. W. (2010). Action research: Enhancing classroom practice and fulfilling educational responsibilities. *Journal of Instructional Pedagogies*, 3(1), 1-10. Retrieved from
<http://search.proquest.com/docview/759646028?accountid=28180>
- Zhou, J. (2021). Problems teachers face when doing action research and finding possible solutions. *Chinese Education & Society* 45(4):68-80, DOI:10.2753/CED1061-1932450405