



Integrating Indigenous Knowledge in Teaching During Work-Integrated Learning: Perceptions of Preservice Teachers

Moeketsi Elias Dlamini^a

Email: dlaminime@ufs.as.za

a. Department of Curriculum Studies and Higher Education, Faculty of Education, University of the Free State, QwaQwa Campus, South Africa

Article Info

Received: June 25, 2025

Accepted: November 15, 2025

Published: April 23, 2026



10.46303/jcsr.2026.16

How to cite

Dlamini, M. E. (2026). Integrating Indigenous Knowledge in Teaching During Work-Integrated Learning: Perceptions of Preservice Teachers. *Journal of Curriculum Studies Research*, 8(1), 297-311.

<https://doi.org/10.46303/jcsr.2026.16>

Copyright license

This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 International license.

ABSTRACT

Globally, Indigenous Knowledge Systems are overruled by Western educational systems because of colonial economic and geopolitical domination. Indigenous Knowledge Systems are seen as less important or irrelevant in the education system, resulting in teachers and learners losing their self-determination. This study explores preservice teachers' perceptions of integrating the Indigenous Knowledge System in teaching during Work-Integrated Learning. The Indigenous Knowledge System guides the study as a theoretical framework, which advocates for local people's interactions with each other and their environment to pass knowledge from generation to generation. Participants in this study are five preservice teachers on work-integrated learning and two experienced teachers who are their mentors in one high school. Guided by Critical Emancipatory Action Research theory, this qualitative paper discusses the perceptions of five preservice teachers on using Indigenous Knowledge Systems during their Work-Integrated Learning. Generated data was analyzed through thematic analysis. The study responds to a research question of the challenges and the benefits of integrating the Indigenous Knowledge System in teaching during Work-Integrated Learning. The findings revealed that Indigenous Knowledge Systems are the basic teaching strategies to engage learners in teaching and learning. In light of the findings, the paper suggests ways in which preservice and service teachers could use Indigenous Knowledge Systems to enhance their classroom teaching.

KEYWORDS

Indigenous knowledge systems; participatory action research; preservice teacher; service teachers; work-integrated learning.

INTRODUCTION

The concept of Indigenous Knowledge Systems (IKS) is defined differently by many scholars, and its meaning is used and interpreted differently from one country to another. Kaya and Seleti (2013) see IKS as a non-Western way of knowledge and understanding. This definition of IKS shows that the perception of an individual influences knowledge and understanding. Interpretation may be from Western ways of looking at things or from local points of view. Hlalele (2019) put forward that IKS is “a cumulative body of knowledge” that African people have been using for many years. It becomes clear from this definition that IKS is based on local people’s knowledge, including their local practices and traditions. IKS aligns well with one of Paul Freire’s principles for curriculum planning, which concentrates on rural reality so that education can adapt to reality (Ayob Mahmoudi et al., 2014). Khawary and Ali (2015) also indicate that educational organizations should provide a more humane environment for their teachers to be motivated. In this study, IKS refers to a knowledge system that arises from the local community through life experiences incorporated into the school curriculum (Mawere, 2015).

IKS is also supported in the South African Constitution, which aims to heal past divisions and establish a society based on democratic values, social justice, and fundamental human rights (SA Constitution, Act 108 of 1996). The Constitution further aims to improve all citizens’ quality of life and free each person’s potential. Considering the above, teaching and learning may be done fairly without prejudicing the indigenous knowledge system, as it was in place long before the Constitution. The challenge in this current study is the Western education system, which overrules the use of IKS in the teacher education programme. IKS is mostly put as informal in the school curriculum. The formal curriculum is all activities for which the school timetable allocates specific periods of teaching time. In contrast, informal curriculum is usually voluntary, at lunchtime, after school hours, weekends, or holidays (Läänemets et al., 2018).

Various studies have been conducted on the use of IKS in teaching (Kugara & Mdhluli, 2023; Nevhudoli et al., 2023; Omadan et al., 2024). Hlalele (2019) noted that rural life relies on IKS for survival and sustainability. He further indicated that Western knowledge and modes of knowing infused the knowledge landscape in many African countries. Mji et al. (2020) argued that Western education ignored IKS because it only covers surface culture without a scientific way of life. Their study showed that IKS involves many essential aspects of life that are not documented in various learning institutions. Another study conducted in the US showed that Western knowledge became the basis of the curriculum in the Twentieth Century, with the assumption that it is the only knowledge leading to viable economic opportunities (Urrieta, 2016). This study from the US argued that the use of native (indigenous) language was considered inappropriate and unfit for formal schooling.

Other studies have been conducted about Work-integrated learning (WIL) (Dlamini & Tsotetsi, 2024; Mabungela & Mtiki, 2024; Mudaly, 2025). A study conducted in Australia proposed a framework that could improve the capacity of students, academic staff, and

Indigenous communities to prepare for and engage in WIL (Gajendran et al., 2022). Amankwah et al. (2017) explains WIL to expose preservice teachers to real-life classrooms and develop a positive attitude towards teaching. It aims to allow preservice teachers to experience the profession and discover their strengths and weaknesses in teaching. It is a forum for preservice teachers to translate educational theories and principles into practice, to provide them with the necessary skills, competencies, personal characteristics, and experiences for full-time teaching after graduation. WIL practice helps preservice teachers gain knowledge and interest in teaching and helps in personal development, such as decision-making and critical thinking skills. It increases confidence and self-esteem (Rebellow & Patra, 2017). This WIL practice supports Banda and Banada (2018), embracing IKS to connect to day-to-day practical knowledge and information for transmission from generation to generation without formal education.

WIL allows preservice teachers to practice the art of teaching in an authentic environment (Nel et al., 2021; Rusznyak & Bertman, 2021). Preservice teachers are sent to school for the WIL programme while studying for the profession. The study by Rusznyak and Bertman (2021) showed that WIL can be constructed as a platform whereby preservice teachers engage in pedagogical reasoning. Their study recommends that WIL should provide opportunities for preservice teachers to consider how the teachers they observe enact their teaching and why. This follows the study by Eppley (2015) that successful teaching and learning in schools require understanding the school context as a unique site of practice. The implication is that the above two studies advocate for IKS, which promotes local knowledge as the best practice in learning. The WIL programme is one component in the teacher education curriculum that integrates theory and practice (Batholmeus & Pop, 2019).

While the above studies have contributed to using IKS in education, this current study is an extension of Hlalele (2019), who conducted a study on “IKS and Sustainable Learning in Rural South Africa”. This study looked at the IKS from the perspective of serving teachers, while this current study focuses more on the perceptions of practice of IKS by preservice teachers during WIL. The problem in this current study is preservice teachers’ perceptions of using IKS. To address this problem, the study is responding to a research question of the challenges and the benefits of integrating IKS in teaching during WIL. Therefore, this study explores preservice teachers’ perceptions of integrating IKS into teaching during WIL.

THEORETICAL FRAMEWORK

This study is couched in Critical Emancipatory Research (CER) as a theoretical framework. I adopted CER as a theoretical framework to encourage effective means of creating favourable conditions under which the co-researchers can deal with distorted consciousness (Humphries et. al., 2020). Using CER in the study helped co-researchers and me work cooperatively throughout the study (Alvesson & Stanley, 2020). Couched in CER, the study empowers and capacitates preservice teachers during WIL with constructivist teaching and learning skills for future practices in their profession. CER is relevant to this study because preservice teachers as

co-researchers and beneficiaries of learning in the study were equal to the role of the researcher and had equal powers to interrogate the study. The inputs and critical contributions of co-researchers in the study were welcomed, appreciated and respected. Mahlomaholo (2009) indicated that quality criteria in CER include advancing the agenda for equity in all its forms and advocating social justice, peace, freedom and hope. In CER, coresearchers are free from the repressive conditions that frequently exist within the social context (Singh et al., 2012). Participants were allowed to own the problem and process, provide solution(s) to the challenge, and provide the conditions that make the solution work. Preservice teachers are analytical in their learning and go for the deeper meaning of the content to learn, allowing learners to do the same in their teaching. They are also allowed to come up with ideas and positively criticize the misunderstanding in the study.

METHODOLOGY

Research approach and design

This study employs a qualitative approach using Participatory Action Research (PAR) to generate data by allowing preservice teachers to reflect on their perceptions of using IKS during WIL. Jacobs (2018) again defines the PAR approach with three themes. Firstly, as it is against the systematic reproduction of unequal power relations between the researchers and the researched, it occurs with the conventional research methodologies, such as quantitative research. All these themes assisted in aligning this study to a non-positivist approach to research, as Netshandama and Mahlomaholo (2010) indicated, to do research with people, rather than on people. PAR created a discursive space for critical discussion of IKS without fear, giving power to all participants, including the marginalized and oppressed, to be listened to and express their opinions on issues that affect them daily and which are about them (Eruera, 2010). All participants became co-researchers through PAR to voice their concerns without leaving their fate to the researcher. Secondly, Eruera (2010), Netshandama and Mahlomaholo (2010), and Cassidy et al. (2023) describe PAR as openly political. The researcher works with participants instead of on participants, marginalized and oppressed groups and individuals as co-researchers.

Participants

Convenient sampling was used to select five third-year preservice teachers in a high school for WIL and two experienced teachers. The five preservice teachers were conveniently selected based on their availability at the research site, a primary school closer to the researcher's reach (Rahi, 2017). The inclusion criteria targeted preservice teachers from the university because of their availability for 11 weeks of WIL, as well as experienced teachers who were mentors in one high school close to the university (Golzar et al., 2022). Participants were requested to participate in the study and sign consent forms. The five preservice teachers in the study were two males and three females on the WIL programme in the same school. Their age ranged between 20 and 25 years. These preservice teachers taught mathematics to Grade 10 learners

under the mentorship of two experienced teachers for the duration of WIL. The preservice teachers were in a school for an 11-week WIL programme. The two experienced teachers also participated in this study because of their availability in the selected school as mentors to the preservice teachers. The age of the experienced teachers in this study ranged between 30 and 40 years, with teaching experience of three and five years, respectively.

Data collection

The study employed focus group discussions and Participatory Action Research (PAR) with the principles of Free Attitude Interviews (FAI) to generate data. Focus group discussions were used to facilitate discussions with participants on IKS in teaching and for participants to get relevant information about IKS and WIL (Shabina et al., 2024). The principles of FAI were used for their elements of respect for people and to allow questions to be used only to initiate a conversation (Tshelane & Tshelane, 2014). PAR was used because of its sense of respect for people, and for research questions to only be used to initiate conversations (Tshelane, 2013). The study engaged with preservice teachers and serving teachers who were mentors to discuss using IKS during WIL. PAR created conditions for meaningful and successful collaboration between the researcher and participants throughout the study (Home & Rump, 2015). Therefore, the study applied the objectives of PAR, achieving social justice in teacher education institutions through inclusion, by creating a space for empowerment of students and teachers, who are invaded by colonial marginalization (Eruera, 2010).

Three meetings were held following the cycle of PAR, planning, reflection, observation, and implementation with classroom observations of participants (Ayaya et al., 2020). The first meeting was held with participants, who later became co-researchers, to introduce the research topic and plan how the study would be conducted, and we observed the teaching in class. The second meeting was to reflect on what was happening and discuss the observations, and the last meeting was for member checking. The process of PAR allowed co-researchers and me to distinguish common practices and differences in the use of IKS and how IKS could be integrated into the WIL programme in South Africa.

Data analysis

Data was analyzed using thematic analysis. Thematic analysis assisted in looking for meaning, identifying and writing reflective statements of participants that described the use of IKS in the teaching and learning (Oyelana et al., 2018). Data addressing the same content were then grouped into themes or patterns to describe the final products of data (Kiger & Varipo, 2020). For trustworthiness, this study relied on the criteria of credibility and member checking of quantitative assessment criteria. Credibility in this study is evident because all participants, two teachers, preservice teachers and the researcher were involved in the WIL programme; they could recognize the impact of the programme and were also operationalized through the process of member checking to test the findings and interpretations (Nowell et al., 2017). All data collected was recorded, and the scribe listened to the recording to verify the correctness of what he wrote.

Reliability and validity of the study

The reliability of this study is based on Participatory Action Research as the method used for data generation and analysis. Data were collected using two methods, observation and group interviews. Each preservice teacher was observed twice teaching Mathematics in a Grade 10 class on different topics, and the strategies used for IKS were found to be consistent. Two group discussions were also held during the study. For validity, the findings revealed performance of what the study predicted in a different situation and the extent to which IKS as a measure relates to an outcome (Taherdoos, 2016). Discussions during meetings were used to confirm the validity and reliability of the study. During the meetings, participants were able to voice their observations.

Limitations of the study

The study was set and limited to only five third-year Bachelor of Education (B.Ed.) degree students, registered for the Senior and Further Education and Training (Sen and FET) phases in one South African University. Similar studies using IKS are recommended to strengthen the results of this study from a different context.

FINDINGS

The findings discussed below are classified into the challenges and the benefits of using IKS to respond to the study's research question, which is the challenges and the benefits of integrating IKS in teaching during WIL. Pseudonyms are used to hide the names of participants in this section. I used T for a teacher and PS for preservice teacher. This paper presented the responses that came from the participants when others were only emphasising and repeating what was mentioned.

CHALLENGES OF USING IKS

This section discusses the challenges of using IKS in the Mathematics Grade 10 classroom that emerged from the discussions with participants.

Lack of resources

Mathematics teachers seem to have experienced challenges accessing the relevant resources to use in their teaching art to help learners comprehend content. Maodi (2018) criticize the use of IKS by stating that its content is a cumulative narration of the past being handed down as uncontested, incontestable knowledge to the body of knowledge and a way of learning. Consequently, it can be agreed that the criticisms around the study can only be addressed through improved teaching strategies that involve the use of relevant resources for teachers to narrate the content to the learners. The mathematics teacher mentioned that even if they ask learners to bring resources to use in class from home, some learners cannot access them, making it difficult for teachers to meet the intended objective of the designed lesson.

Preservice Teacher 1 (PS1): "It is difficult to get IKS resources related to mathematics. We do not have access to those resources; even here at school, you need to ask learners to bring their own objects from home."

PS2 added: “You tell learners to bring a relevant IKS related to the topic, the learner will bring a picture from maybe a magazine, showing that there are no authentic objects available in relation to the IKS.”

Potočník (2017) indicates that resources used in teaching and learning should vary from textual to modern media. The teacher suggested that using IK resources should also be included in media because the class of learners they are teaching are more technologically exposed. It will thus work to the teacher’s advantage if media and IK collaborate so learners can access it easily. Following the statement means that the Grade 10 Mathematics classroom will have each learner attached to their computer screen, watching the music and objects from past generations. On the contrary, literature by Adu-Gyamfi and Anderson (2021) indicates a debate about educational resources that will complement the post-colonial system, thus meaning that Indigenous people are more than willing to share their knowledge as a gesture of humanity. The significance of using IKS in formal education is that learners sit down and discuss content they all understand and can relate to using their knowledge. As a result, the intended goal of using IKS in Mathematics Grade 10 also includes promoting social change and equity.

Teachers’ and learners’ knowledge of IKS

The second challenge of using IKS to teach Mathematics in a Grade 10 class is the learners’ distinctive backgrounds, including their different cultural backgrounds and morals learned from the community and their surroundings. Teachers state that they are not sure which cultural knowledge they should include in class and should not be regarded as biased at the same time, because public schools are filled with diverse cultures of learners. Participants responded this way to show that learners’ different backgrounds and knowledge of IKS are challenging when teaching mathematics in Grade 10 classes using IKS.

Teacher 1 (T1): “In my understanding, IKS has to do with what we call the millennium ancient things that were there in past that assist in prevailing the situation of today. I do not know how it is related to Mathematics... IKS has to do with where we are coming from as a system, which is this country or maybe the world in general, to where we want to go.”

T2 added: “The IKS resources related to Mathematics are not easy to find, you struggle to find them. We do not have access to those resources; even here at school, you must ask learners to bring their own objects from home.”

Teaching Mathematics using IKS strategies requires a teacher who employs critical discourse to engage with bias and injustice, not one who shies away from that challenge (Kgari-Masondo, 2019). Following this statement, teaching African learners from different backgrounds and cultures cannot be considered a problem for a teacher using IKS, unlike when using technology that some learners do not have the background or access to. The case of diversity in South African schools has been ongoing since 1994, so it is not something that teachers should react with surprise (Van Vuuren et al., 2016). Moreover, the cultural background of the learners cannot be completely different; they will still correlate with one another. The point of departure is that teaching different African learners with IKS will promote

interrelations and social balance. Therefore, it should not be considered a challenge as it benefits African learners.

Influence of technology and media

Technology and media were highlighted as challenges that Mathematics Grade 10 teachers face regarding using IKS in teaching and learning. Teachers explained that learners today are more into technology than they are into their own traditions and culture. Learners' interest in technology is hampering teachers' use of IKS in the Mathematics curriculum. Learners show no interest in learning about past experiences; they are more interested in social media.

T2 "The learners are coming from different family backgrounds, also different from me, when trying to incorporate resources of IKS from my area they see them outdated to them. These learners become more interested if you come with technology in your teaching."

PS3 supported: "The learners rely more on technology than anything else. They even complain when you say they must leave their cellphones home when coming to school"

Equally important to what the teacher says, technological resources such as projectors, computers, the internet and interactive whiteboards, as well as films, videos and television, enable teachers' presentation of the past to look real to learners and reduce the abstract nature of Mathematics. On the contrary, there is limited use of folk tales and traditional songs at home and school due to several factors, such as urbanization and the influence of television, which may be used in the classroom (Nomlomo & Sosibi, 2016). The two empirical sources further assert that although some folktales are featured in a few television programmes, they lack cultural authenticity as market needs drive them. The current study does not intend to replace technology in education with IKS completely.

Limited support from parents

The concern of teachers under this sub-section is insufficient support from parents. Teachers were quick to state that whatever is learned in the classroom, learners will again see it the next day when coming to school. Consequently, parents are less involved in their children's education, making it difficult for learners to grasp what is taught in class successfully.

PS4: "Parents are also not supportive to these learners. You teach something in class; when they go home, it is the last time they hear that lesson. When they close their books and go home, that was the last time they opened them."

The use of IKS in a Grade 10 Mathematics classroom will also mean that the knowledge from learners' homes is valued as significant in the classroom and can only be absorbed through the active involvement of parents. Consequently, the involvement of parents in this regard is paramount to the use of IKS in Mathematics classrooms. The involvement of the parents in using IKS to teach Mathematics in a Grade 10 classroom enables teachers to access the knowledge and resources needed to comprehend the content of Mathematics. The strategy of using IKS will also warn parents that educating their children is not Western but something they can integrate into and give their children a helping hand without using funds.

BENEFITS OF USING IKS

This section discusses the benefits of using IKS in the Mathematics Grade 10 classroom that emerged from the discussions with participants.

Access to various IKS resources

Teachers demonstrate that one of the significant benefits of using IKS to teach Mathematics is access to various IKS resources, like artefacts such as brooms, African hats, and clay pots, to demonstrate the content to the learners; this indicates that the IKS resources are available.

PS4: "I think the benefit will be that learners will be exposed to Indigenous knowledge."

Although the issue of resources was mentioned as one of the challenges hampering the use of IKS in Mathematics teaching and learning, it was also noted that using IKS allows learners to get information from pictures, objects, and stories. This became evident during observation of the content of communication, a book that was used, which indicated how communication started in the past. Consequently, this shows that there are resources related to IKS that teachers could use but are not aware of. The problem is that teachers think that when using IKS resources, each learner should be in the position of their object provided by the Department, correlating to the day's content. Literature indicates the importance of informing local people about the surrounding resources from their communities that can be utilized and integrated into children's education (Sukul, 2017).

Exposure of learners to IKS

The second benefit, as discussed, is that using IK in teaching mathematics in a Grade 10 classroom helps expose learners to the local knowledge of mathematics. Learners come to the realization that Mathematics as a subject contains things that exist in their community and can be traced back to their own culture and tradition.

PS5 "Using IKS will help learners to get information from various resources. They can get information from pictures, writing, objects, interviews, and stories."

The use of IKS in the Mathematics Grade 10 classroom exposes learners to IKS that exists in their communities and families by raising awareness that the content of Mathematics relies heavily on their own culture and background. As a result, learners' performance and interest in studying Mathematics improve because they are not taught something foreign. It is also important to note that Africans are willing to share their knowledge of IKS if given the right to do so, supporting the New Curriculum Statement, striving toward the recognition and the critical role of IKS in education (Tagle, 2017). For this ideal to be accomplished, Africans must take a crucial role in valuing their IKS for other ethnic groups to learn to respect, and this can only be done through teaching and learning with the use of IKS. This becomes a social capital for people experiencing poverty and their way of living and surviving. The valuing and integration of IKS into education means that Indigenous people are included through sharing their own knowledge with teachers and learners.

DISCUSSIONS

After data saturation from participants, the preservice teachers recorded the following themes.

Integration of IKS as a teaching strategy in the WIL

It emerged from the findings that there is a need to integrate IKS in the teaching and learning of Mathematics as a strategy for preservice teachers during their WIL programme. The use of IKS as a strategy assisted learners in getting a better understanding of the topics taught in class. This supports Batholmeus and Pop (2019), who argued that the WIL programme is one component in the teacher education curriculum that integrates theory and practice. Guided by Critical Emancipatory Research theory in this study, participants could practice local knowledge inherited and acquired over time in their teaching during WIL (Banda & Banda, 2018). Preservice teachers could use IKS to present lessons in class, and it was found to be working.

Use of IKS motivates learners

Another idea from the findings was that using IKS motivates learners in their learning. One preservice teacher who was teaching Mathematics concepts, space and shape, invited a parent to demonstrate how to draw the foundation of a round hut. The teacher was happy that the parent had no knowledge of Mathematics as a subject, but could draw an accurate circle, showing the “radius” (line from the centre to the circumference of the circle). The parent also appreciated an opportunity to demonstrate his knowledge to learners and the teachers. This appreciation by the parent shows that they are not happy to work with the school only when problems affect their children. The finding from this statement aligns with what Mji et al. (2017) argued: Western forms of education ignore IKS because it is seen as covering only surface culture without a scientific way of life. The parent in this Mathematics class was so motivated that indigenous knowledge does not depend on the scientific way of life; it is independent as knowledge. Khawary and Ali (2015) support this, stating that the passion in the teaching profession comes with the teachers’ commitment to the organization where they teach, which increases with job satisfaction and motivation.

Use of IKS to inform curriculum development

It also came to light that IKS is the base for curriculum development. The use of IKS in class showed that knowledge existed long before colonialism. Participants indicated that all the topics they taught during the four weeks in WIL aligned with indigenous knowledge. This finding supports one of Paul Freire’s principles: curriculum planning concentrates on rural reality so that education can adapt to reality (Ayob Mahmoudi et al., 2014). The finding also suggests that IKS should not be regarded as an informal curriculum, which is considered voluntary, after school hours, at weekends or during holidays (Läänemets et al., 2018). The Western curriculum is based on existing knowledge, so curriculum development should include IKS. PAR methodology successfully created conditions for meaningful collaboration between participants throughout the study (Home & Rump, 2015).

CONCLUSION

This study explored preservice teachers' perceptions of integrating IKS in teaching during WIL. The study responded to a research question about the challenges and benefits of integrating IKS in teaching during WIL. Based on the data collected and the findings, it can be concluded that IKS is vital in teaching and learning and should not be taken lightly during WIL. Data showed that IKS could be used in teaching and learning by integrating it as a teaching strategy, using it as a motivational strategy in teaching and learning, and using it to inform curriculum development. In line with the findings, the study recommends that IKS be included in the curriculum as a teaching strategy. The National Education Policy (NEP) 2020 in India promotes integrating traditional Indian wisdom into the modern education system to foster holistic development, cultural awareness, and critical thinking (Ramanbhai & Patel, 2025). The policy aims at introducing the inclusion of IKS in the school curriculum, and training teachers to value and teach indigenous knowledge. The same approach is supported by South African Protection, Promotion, Development and Management of Indigenous Knowledge Act, 2019 that encourages facilitation of commercial use of indigenous knowledge (RSA, 2019). The Act aims to recognize, affirm, develop, promote, and protect indigenous knowledge and its holders. The policies support the integration of IKS into national education and qualification frameworks, foster collaboration with knowledge holders, and aim to create databases and provide financial support for IKS-related projects. Hence this study continues to further recommend preservice teachers be taught to use the IKS while still studying for the profession. Learning how to use IKS by preservice teachers while training for their teaching profession would prepare them for self-determination.

REFERENCES

- Adu-Gyamfi, S., & Anderson, E. (2021). History education in Ghana: A pragmatic tradition of change and continuity. *Historical Encounters*, 8(2), 18-33.
<https://doi.org/10.52289/hej8.201>
- Alvesson, M., & Deetz, S. (2020). *Doing critical research*. Sage.
- Amankwah, F.; Oti-Agyen, P., & Sam, F. K. (2017). Perception of Preservice Teachers Towards the Teaching Practice Programme in College of Technology Education, University of Education, Winneba. *Journal of Education and Practice*, 8(4), 13-20. ISSN 2222-288X (Online).
- Ayaya, G., Makoelle, T. M., & van der Merwe, M. (2020). Participatory Action Research: A Tool for enhancing inclusive teaching practices among teachers in South African Full-Service Schools. *Sage Open*, 10(4). <https://doi.org/10.1177/2158244020963576>
- Ayoub Mahmoudi, D., Khoshnood, A., & Babaei, A. (2014). Paulo Freire's critical pedagogy and its implications in curriculum planning. *Journal of Education and Practice*, 5(14), 86-91. ISSN 2222-1735.

- Banda, F., & Banda, D. (2018). Framing Theoretical/Conceptual Frameworks and Research Processes in African Indigenous Knowledge Systems and Everyday Experiences. *Excellence in Higher Education*, 8 & 9, 14-22. <https://doi.org/10.5195/ehe.2018.156>
- Batholmeus, P., & Pop, C. (2019). A multidisciplinary approach to work-integrated learning preparedness. In K. E. Ziegwaard, & M. Ford (Eds.), *Refereed Proceedings of the 21st WACE World Conference on Cooperative and Work-Integrated Education, 2019, University of Cincinnati, Ohio, United States* (pp. 27-38). World Association for Cooperative Education (WACE).
- Cassidy, L., N. G. Pricope, F. R. Stevens, J. Salerno, D. C. Parry, M. Murray-Hudson, J. Hartter, and A. E. Gaughan. (2023). Assessing long-term conservation impacts on adaptive capacity in a flagship community-based natural resources management area in Botswana. *Ecology and Society* 28(4):12. <https://doi.org/10.5751/ES-14487-280412>
- Dlamini, M., & Tsoetsi, C. (2024). Engagement of Preservice Teachers in the Assessment of Their Work-Integrated Learning. *Journal of Culture and Values in Education*, 7(2), 1-15. <https://doi.org/10.46303/jcve.2024.9>
- Eppley, K. (2015). "Hey, I saw your grandparents at Walmart": Teacher education for rural schools and communities. *The Teacher Educator*, 50(1), 67-86. <https://doi.org/10.1080/08878730.2014.975061>
- Eruera, M. (2010). Ma te whānau te huarahi motuhake: Whānau participatory action research groups. *Mai Review*, 3(1), 1-9.
- Gajendran, T., Tucker, C., Ware, S., & Tose, H. S. (2022). Integrating Indigenous, Western and Inclusive Pedagogies for Work-Integrated Learning Partnerships in Architecture and Design Disciplines. *International Journal of Work-Integrated Learning*, 23(2), 259-277.
- Golzar, J., Noor, S., & Tajik, O. (2022). Convenience Sampling. *International Journal of Education & Language Studies*, 1(2), 72-77. <https://doi.org/10.22034/ijels.2022.162981>
- Hlalele, D. J. (2019). Indigenous knowledge systems and sustainable learning in rural South Africa. *Australian and International Journal of Rural Education*, 29(1), 88-100. <https://doi.org/10.47381/aijre.v29i1.187>
- Home, R., & Rump, N. (2015). Evaluation of a multi-case participatory action research project: The case of SOLINSA. *The Journal of Agricultural Education and Extension*, 21(1), 73-89. <https://doi.org/10.1080/1389224x.2014.991112>
- Humphries, B., Mertens, D. M., & Truman, C. (2020). Arguments for an 'emancipatory' research paradigm. In B. Humphries & C. Truman (Eds.), *Research and Inequality* (pp. 3-23). Routledge. <https://doi.org/10.4324/9781003071679-2>
- Jacobs, S. D. (2018). A history and analysis of the evolution of action and participatory action research. *The Canadian Journal of Action Research*, 19(3), 34-52. <https://doi.org/10.33524/cjar.v19i3.412>

- Kaya, H. O., & Seleti, Y. N. (2013). African indigenous knowledge systems and relevance of higher education in South Africa. *International Education Journal: Comparative Perspectives*, 12(1), 30-44. <https://creativecommons.org/licenses/by-nd/4.0/>
- Kgari-Masondo, M.C. 2019. Historical Significance in the South African History curriculum: An un-silencing approach. *Yesterday and Today*, (22), 119-136. <https://doi.org/10.17159/2223-0386/2019/n22a6>
- Khawary, O., & Ali, S. (2015). The causes and effects of English teachers' turnover: A case from Afghanistan. *Improving Schools*, 18(1), 20-34. <https://doi.org/10.1177/1365480214566280>
- Kiger, M. E., & Varpio, L. (2020). Thematic analysis of qualitative data: AMEE Guide No. 131. *Medical Teacher*, 42(8), 846-854. <https://doi.org/10.1080/0142159x.2020.1755030>
- Kugara, S., & Mdhuli, T. (2023). Integrating African Indigenous Education in the Curriculum: A Learning Curve for South Africa. *Journal of Curriculum Studies Research*, 5(3), 131-143. <https://doi.org/10.46303/jcsr.2023.35>
- Läänemets, U., Kalamees-Ruubel, K., Kiilu, K., & Sepp, A. (2018). Curriculum development considering formal, non-formal and informal education. *Society. Integration. Education. Proceedings of the International Scientific Conference* (Vol. 2, pp. 286-295). <https://doi.org/10.17770/sie2018vol1.3182>
- Mabungela, M., & Mtiki, V. (2024). Accelerating Graduate Employability through Work-Integrated Learning. *Research in Social Sciences and Technology*, 9(1), 291-304. <https://doi.org/10.46303/ressat.2024.17>
- Mahlomaholo, S. (2009). Critical emancipatory research and academic identity. *Africa Education Review*, 6(2), 224-237. <https://doi.org/10.1080/18146620903274555>
- Maodi, M. C. (2018). *Teachers' management of language transition from Grade 3 to Grade 4* (Master's thesis). University of Pretoria.
- Mawere, M. (2015). Indigenous knowledge and public education in sub-Saharan Africa. *Africa Spectrum*, 50(2), 57-71. <https://doi.org/10.1177/000203971505000203>
- Mji, G., Kalenga, R., Ned, L., Alperstein, M., & Banda, D. (2017). Indigenous knowledge exclusion in education systems of Africans: Impact of beingness and becoming an African. In P. Ngulube (Ed.), *Handbook of research on social, cultural, and educational considerations of indigenous knowledge in developing countries* (pp. 36-59). IGI Global Scientific Publishing. <https://doi.org/10.4018/978-1-7998-3019-1.ch027>
- Mosweunyane, D. (2013). The African Educational Evolution: From Traditional Training to Formal Education. *Higher Education Studies*, 3(4), 50-59. <https://doi.org/10.5539/hes.v3n4p50>
- Mudaly, V. (2025). Work-Integrated Learning in a Changing Educational Context. *Research in Social Sciences and Technology*, 10(2), 108-129. <https://doi.org/10.46303/ressat.2025.29>

- Nel, C., Botha, C., & Marais, E. (2021). A COVID-19 Re-envisioned Teaching Practicum Curriculum. *Research in Social Sciences and Technology*, 6(2), 249-266. <https://doi.org/10.46303/ressat.2021.29>
- Netshandama, V., & Mahlomaholo, S. (2010). The role of community engagement in higher education: Focus on the discourse relating to knowledge development. In N. Basov, G. Simet, J. van Andel, S. Mahlomaholo, & V. Netshandama (Eds.), *The Intellectual: A Phenomenon in Multidimensional Perspectives* (pp. 109-117). Brill. https://doi.org/10.1163/9781848880276_011
- Nevhudoli, N., & Olive Netshandama, V. (2023). What Do Bachelor of Indigenous Knowledge Systems Graduates Say About Their Curriculum? A Qualitative Tracer Study at the University of Venda. *Journal of Curriculum Studies Research*, 5(1), 141-158. <https://doi.org/10.46303/jcsr.2023.11>
- Nomlomo, V., & Sosibo, Z. (2016). From theory to practice: Beginner teachers' experiences of the rigour of the Postgraduate Certificate in Education programme. *Perspectives in Education*, 34(1), 199-215. <https://doi.org/10.18820/2519593x/pie.v34i1.14>
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1). <https://doi.org/10.1177/1609406917733847>
- Omodan, B., Manquma, N., & Mafunda, A. (2024). Decolonising Minds, Empowering Futures: Rethinking Entrepreneurial Education for University Students in Africa. *Journal of Curriculum Studies Research*, 6(2), 1-19. <https://doi.org/10.46303/jcsr.2024.8>
- Oyelana, O., Martin, D., Scanlan, J., & Temple, B. (2018). Learner-centred teaching in a non-learner-centred world: An interpretive phenomenological study of the lived experience of clinical nursing faculty. *Nurse Education Today*, 67, 118-123. <https://doi.org/10.1016/j.nedt.2018.05.012>
- Potočnik, R. (2018). Effective approaches to heritage education: Raising awareness through fine art practice. *International Journal of Education Through Art*, 13(3), 285-294. https://doi.org/10.1386/eta.13.3.285_1
- Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues and instruments development. *International Journal of Economics & Management Sciences*, 6(2), 1-5. <https://doi.org/10.4172/2162-6359.1000403>
- Ramanbhai, S.N. & Patel, S. (2025). Integrating Indian Knowledge System (IKS) in Education: Roles of Teachers, Schools, and Governments. *International Journal of Scientific Research in Humanities and Social Sciences*, 2(2), 33-59. <https://ijsrhss.com>.
- Rebellow, A. M., & Patra, D. S. (2017). Influence of Self-Esteem in Decision-Making Styles of Indian Corporate Executives—Public & Private Sectors. *Journal of Business and Management*, 19(11), 28-36. <https://doi.org/10.9790/487X-1907042836>
- Republic of South Africa (RSA). (1996). *Constitution of the Republic of South Africa, Act 108 of 1996*. Republic of South Africa.

- Republic of South Africa (RSA). (2019). *Protection, Promotion, Development and Management of Indigenous Knowledge Act*. South Africa.
- Rusznayak, L., & Bertram, C. (2021). Conceptualizing work-integrated learning to support preservice teachers' pedagogic reasoning. *Journal of Education (University of KwaZulu-Natal)*, (83), 34-53. <https://doi.org/10.17159/2520-9868/i83a02>
- Shabina, S., Amit, T.K., Eram, P., Pranav, K. & Deeksha, G. (2024). Focus Group Discussion: An Emerging Qualitative Tool for Educational Research. *International Journal of Research and Review*, 11(9), 302-308. <https://doi.org/10.52403/ijrr.20240932>
- Singh, A., Yager, S. O., Yutakom, N., Yager, R. E., & Ali, M. M. (2012). Constructivist Teaching Practices Used by Five Teacher Leaders for the Iowa Chautauqua Professional Development Program. *International Journal of Environmental and Science Education*, 7(2), 197-216. <http://www.ijese.com/>
- Sukul, B. (2017). Role of local resources in rural development. *International Journal of Business and Management Invention*, 6(7), 69-71. 2319 – 801X www.ijbmi.org
- Tagle, A. M. (2017). Integration of Transmedia in Teaching Ancient Greece Among Grade Nine Students Towards Effective Mainstreaming of Learning. *Proceedings Journal of Education, Psychology and Social Science Research*, 4(1). 1-7. <https://doi.org/10.21016/4.17.17.1030>
- Taherdoos, H. (2016). Validity and Reliability of the Research Instrument: How to Test the Validation of a Questionnaire/Survey in Research. *International Journal of Academic Research in Management*, 5(3), 2296-1747. <https://doi.org/10.2139/ssrn.3205040>
- Tshelane, M. D. (2013). Participatory action research and the construction of academic identity among postgraduate research students. *TD: The Journal for Transdisciplinary Research in Southern Africa*, 9(3), 401-429. <https://doi.org/10.4102/td.v9i3.188>
- Tshelane, E. & Tshelane, M. (2014). Enhancing Teachers' Professional Curriculum Practice in Sex Education in a Grade Ten Life Orientation Class. *Journal of Educational and Social Research*, 4(6), 287-294. Doi:10.5901/jesr.2014.v4n6p287
- Urrieta Jr, L. (2016). Native and indigenous education in the Americas: Indigenous knowledge systems, equity, and economies. In G. Noblit & W. Pink (Eds.), *Education, equity, economy: Crafting a new intersection* (pp. 161-174). Springer International Publishing. https://doi.org/10.1007/978-3-319-21644-7_8
- Van Vuuren, H., Van der Westhuizen, P.C. & Van der Walt, J.L. (2016). Leading and managing diverse schools in South Africa. *Problems and Perspectives in Management*, 14(2), 240-249. [https://doi.org/10.21511/ppm.14\(2-1\).2016.14](https://doi.org/10.21511/ppm.14(2-1).2016.14)