



INVESTIGATING GEOGRAPHY TEACHERS' EXPERIENCES AND ASSESSMENT PRACTICES ON FIELDWORK IN LESOTHO SECONDARY SCHOOLS

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Presentation outline

- Introduction
- Purpose of the study
- Research questions
- Significance of the study
- Literature review
- Theoretical Framework
- Methodology
- Findings and discussions
- Conclusions and recommendations



Introduction



Geography fieldwork:

- engages learners with the physical environment, to attain competencies that foster commitment to the earth's sustainability (de la Vega 2022).
- develops skills that enable learners to address socio-economic and environmental challenges (Wilson et al., 2016)
- Fieldwork experiences are integral in geography as real-world manifestations of geographic processes are observed and analysed (Lambert & Reiss 2014)



Purpose of the study

Problem statement

Underperformance of LGCSE candidates in Geography fieldwork-based questions, and there is limited literature on teachers' experiences and assessments practices of fieldwork in the Lesotho context.

Purpose

To explore Geography secondary school teachers' experiences and assessment practices in Geography fieldwork.

Research questions

Main research question

What are the Geography teachers' experiences and assessment practices in fieldwork?

Research questions

1. What are the Geography teachers' experiences in assisting learners carry out Geography fieldwork?
2. How do teacher's assess Geography fieldwork?
3. What are the teachers' challenges in assessing Geography fieldwork?

Significance of the study



Inform:

- Education policy makers
- Teacher training institutions
- Teachers

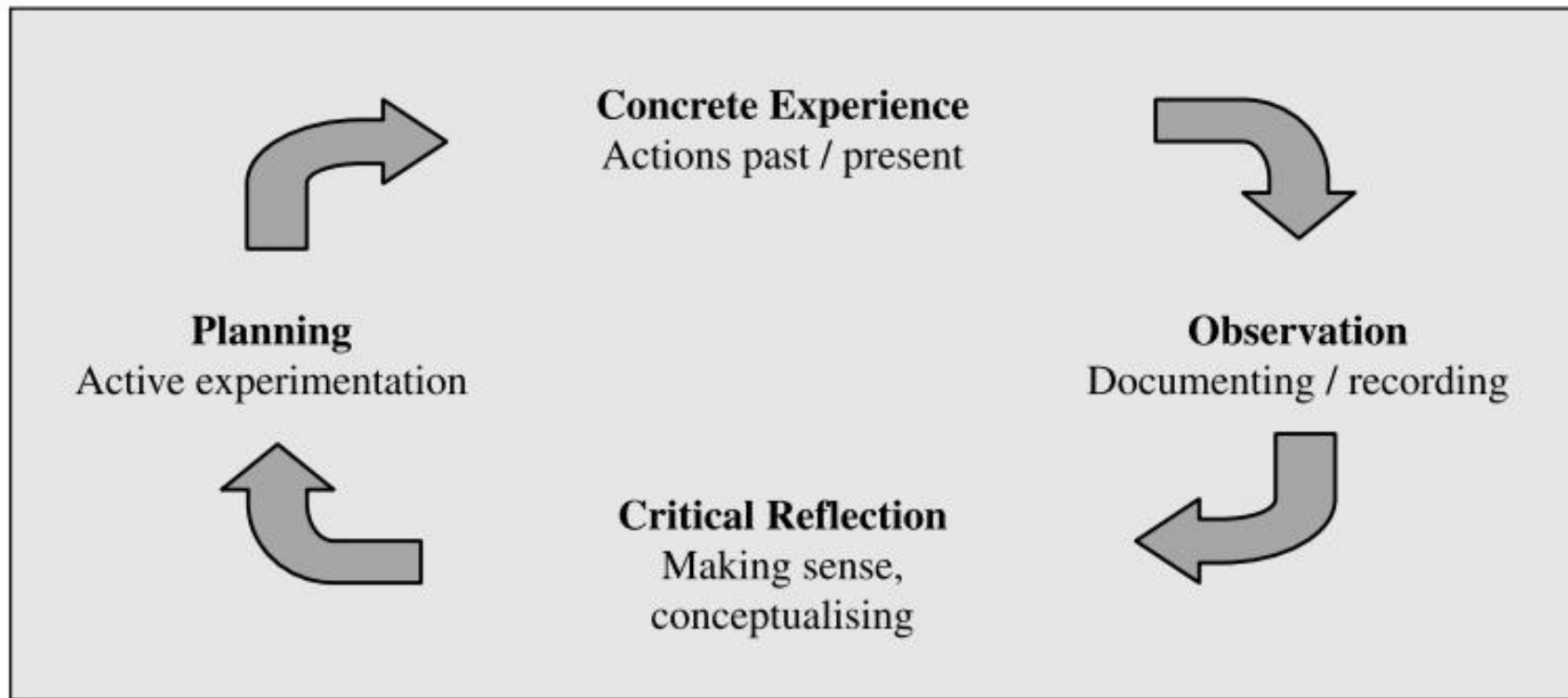


Literature review

- Fieldwork allows observation of geographical phenomena on its own environment (Balci & Tuna 2014).
- Assessment practices promote transferable skills in learners (Wilson et al., 2016).
 - Assessment in Geography should not be left behind, in inculcating and promoting the 21st century skills.
- Fieldwork assessment - takes place in stages; use of tools in the field, project report and post field portfolios or articles (Munandar et.al., 2020)

Theoretical Framework

Kolbs' Experiential Learning Cycle (Dummer et al., 2008)



Methodology

Approach & design	QUANT+ qual concurrent mixed method (Fetters et al.,2013, Koskey & Stewart 2014, Han 2019)
Population	Geography teachers from 3 regions (North, Central and South) of Lesotho.
Sample	54 teachers (27 secondary schools; 9 North, 9 Central, & 9 South region).
Sampling	Purposive sampling was used to select the 54 teachers.
Instruments	Semi-structured online questionnaire and document analysis Response rate: 49 (91%)
Data analysis	descriptive statistics of quantitative and thematic analysis of qualitative data

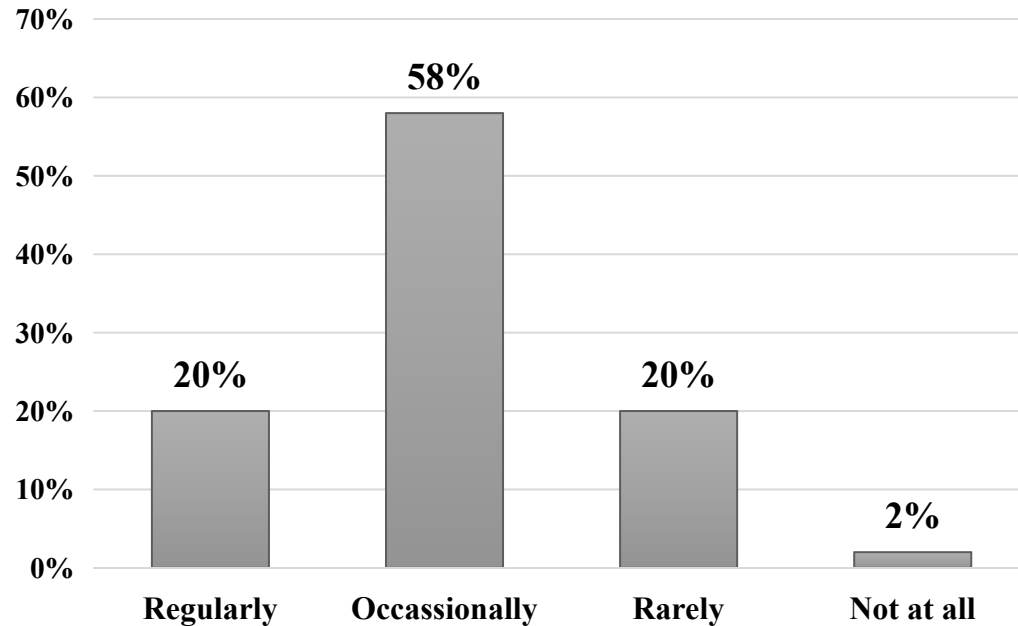
Findings and discussions

- Qualitative and qualitative data from the questionnaire and the documents (LGCSE candidates' scripts) are presented simultaneously.
- Data is presented according to the themes generated from the qualitative data.
- Themes are categorised according to the study research questions as illustrated in Table 4.2.

Categories	Themes
Teachers' fieldwork experiences	factors dictating teachers' fieldwork experiences
	factors influencing types of fieldwork activities teachers engage learners
Teachers' fieldwork assessment practices	assessment strategies and methods teachers use in fieldwork
	contradicting data on fieldwork skills teachers engage learners
Teachers' challenges on fieldwork	no fieldwork guidelines and marking descriptors
	limited skills in developing inquiry-based questions
	difficulty of assessing individual learners

Findings and discussions

Factors dictating fieldwork frequency



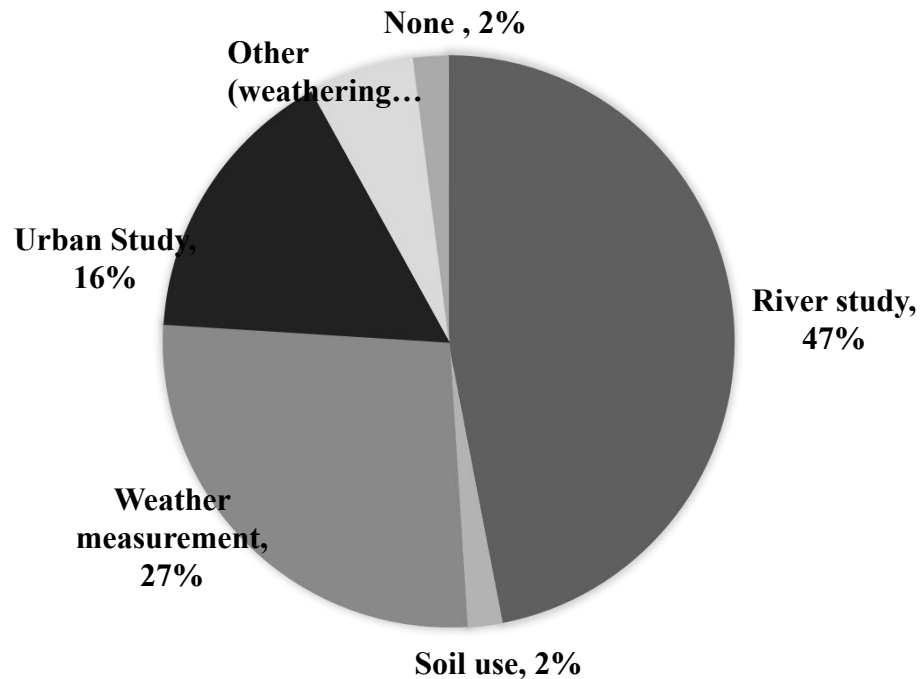
T03: *Time constraint! due to limited number of gadgets learner's struggle to complete the given task.*

T37: *Unpredictable weather conditions, lack of proper tools or equipment such as phones or cameras, financial constraints and limited time are our problems.*

Aligns with - Oost et al., (2011), Lambert & Reiss (2014), Mohammed (2016), Wilson et al., (2017), Tenha (2019)

Findings and discussions cont...

Factors influencing types of fieldwork activities teachers engage learners



T08: *lack of instruments like a clinometer to measure gradient of the slope of a river and flow meter to measure velocity of water.*

T21: *Fieldwork places are sometimes far away and learners are expected to be back at school and attend the other lessons.*

Aligns with - Wilson et al., (2017), Tenha (2019)

Findings and discussions cont...

Assessment strategies and methods teachers use on fieldwork

Assessment during fieldwork
Usage of fieldwork gadgets/instruments
Implementation of guide on fieldwork activities
Participation in teamwork
Oral questions
Assessment in the classroom
Scenarios
Presentations
Report writing
Oral questions, quizzes, tests

T06: *I evaluate their ability to use equipment correctly and organisation of their field notes.*

T34: *I observe their correct use of equipment and participation in teamwork tasks.*

T01: *I give them a scenario on the topic researched and a quiz*

T35: *I make them present their findings and assess their project reports*

Aligns with - Kent et al., (2007), Dummer et al. (2008), Munandar et al., (2020), de la Vega (2022)



Findings and discussions cont...

Contradictory data on fieldwork skills teachers engage learners

Data collection skills	
Survey & interviews	16%
Measurement	18%
Using weather instruments	16%
Observation and sketching	47%
Fieldwork recording methods skills	
Field notes	45%
Sketches	18%
Photographs and videos	35%
Data presentation techniques skills	
Graphs	43%
Tables	41%
Statistics	6%
Pictograms and paragraphs	10%

Contrary to - Mohammed (2016) Wilson et al., (2017), Kim (2020)

(i) Use the data in Fig. 7 to complete the pie graph, in Fig. 8.

[2]

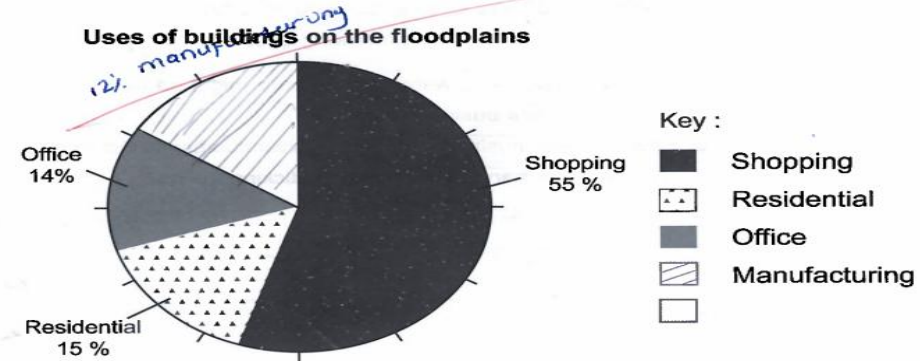
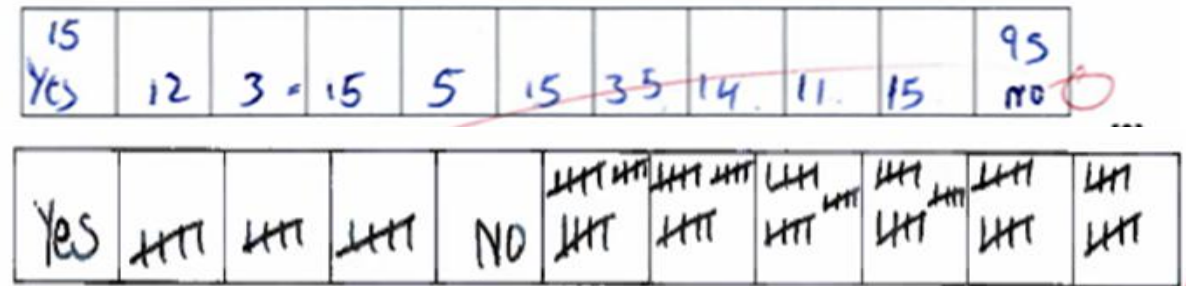


Fig. 8

(ii) Plot the information in Fig. 10 on the divided bar graph below. Include a scale on your graph.



Findings and discussions cont...



Teachers challenges in fieldwork assessment

- Lack of fieldwork guidelines and marking descriptors
- Limited skills in developing inquiry-based questions
- Difficulty in assessing individuals

T22: *No standard lay-out or template to use for fairness in assessing.*

T24: *Limited time and knowledge on structuring fieldwork assessments.*

T08: *Learners copy from others and present the same information so it becomes difficult to see the true picture of their work.*

Aligns with - Dummer et al., 2008, Munandar et.al 2020 Kim, M. 2020



Limitations and research implications

- Although the findings of the study provided insight in Geography fieldwork, the study focused on Geography teachers in 27 schools in Lesotho.
 - Teachers' experiences and assessment practices in other schools may vary.
- Future studies may include other teachers and carry out fieldwork observation for more in depth data.

Conclusion and recommendations

Conclusions:

- limited fieldwork excursions due to time constraints and lack of tools hinders acquisition and application of geographical skills.
- learners responses to inquiry based questions shows limited exposure to data presentation techniques

Recommendations:

- capacitation of teachers in intensive planning of fieldwork and identification of competencies targeted in the excursion
- support teachers on skill-based assessment practices

References

- Balci, A., & Tuna, F. (2014). The effects of fieldwork practices on students' self-efficacy perceptions in geography education. *International Journal of Academic Research in Business and Social Sciences*, 4(3), 2222-6990.
- Dummer, T. J., Cook, I. G., Parker, S. L., Barrett, G. A., & Hull, A. P. (2008). Promoting and assessing 'deep learning' in geography fieldwork: An evaluation of reflective field diaries. *Journal of Geography in higher education*, 32(3), 459-479.
- de la Vega, A. (2022). A Proposal for Geography Competence Assessment in Geography Fieldtrips for Sustainable Education. *Sustainability* 2022, 14, 1429.
- Kent, M., Gilbertson, D. D., & Hunt, C. O. (1997). Fieldwork in geography teaching: A critical review of the literature and approaches. *Journal of geography in higher education*, 21(3), 313-332.
- Kim, M. (2020). Developing pre-service teachers' fieldwork pedagogical and content knowledge through designing enquiry-based fieldwork. *Journal of Geography in Higher Education*, 46(1), 61–79.
- Lambert, D., & Reiss, M. J. (2016). The place of fieldwork in geography qualifications. *Geography*, 101(1), 28-34
- Mohammed, N. (2016). Assessing the implementation of fieldwork in the teaching of geography in some senior secondary schools in Kano, Nigeria. *IOSR Journal of Humanities and Social Science*, 21(8), 05-11.

References



- Munandar, A., Maryani, E., Rohmat, D., & Ruhimat, M. (2020). Establishing the Professionalism of Geography Teacher through Authentic Assessment Field Study. *International Journal of Instruction*, 13(2), 797-818.
- Oost, K., De Vries, B., & Van der Schee, J. A. (2011). Enquiry-driven fieldwork as a rich and powerful teaching strategy–school practices in secondary geography education in the Netherlands. *International Research in Geographical and Environmental Education*, 20(4), 309-325.
- Tenha, J. (2019). The Effectiveness of Fieldwork in the Teaching and Learning of Geography at Rukariro Secondary School in Zimbabwe. *An International Peer-Reviewed Journal on Humanities & Social Sciences*, 5.
- Wilson, H., Leydon, J., & Wincentak, J. (2016). Fieldwork in geography education: Defining or declining? The state of fieldwork in Canadian undergraduate geography programs. *Journal of Geography in Higher Education*, 41(1), 94-105



The end.



Thank you!

Kea leboha!!



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