# Discussion on whether fieldwork is beneficial to furthering children's understand...



An in-depth, critical discussion on whether fieldwork is beneficial to furthering children's understanding of Geography, drawing on policy, practice and current research.

This essay will be used to critically discuss whether fieldwork is a necessary key component in a child's education, specifically in relation to understanding Geography. It will draw on policy practice and current research to look at what is meant by fieldwork; what the government's national policy is on using fieldwork in Geography and how that is applied at the local level in schools; plus an analysis of the benefits and dis-benefits.

Defining fieldwork

Fieldwork has been defined by the UK Quality Assurance Agency as a form of " active engagement with the external world" (QAA, 2002).

This definition is broad and encompasses many forms of fieldwork, such as:

- fieldtrips, where a group of students may go to a different location to undertake study;
- field research, where research into a specific area of interest i. e. field, is undertaken; and/or
- field teaching, where a group of students may be taken to a different location for a lesson i. e. outside, which may or may not draw on things in that environment.

The Oxford English Dictionary (2019) provides another definition of fieldwork:

practical work conducted by a researcher in the natural environment, rather

#### than in a laboratory or office.

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Both definitions emphasise how fieldwork is thought to provide an alternative or additional mode of learning, relating what is learnt in the classroom to an outdoor and real-life perspective.

Gold et al., (1991), considers fieldwork to be at the heart of Geography. This is because geographers, teachers and researchers believe that fieldwork provides a deepening understanding of human and physical geography, and an opportunity to conduct research either individually or as a group, resulting in several skills being developed. This therefore has an influence on how Geography is taught in schools, whereby children are provided the opportunity to learn outside the classroom and connect with the natural world. However, the action of stepping outside the classroom to enhance learning is controversial and questions have been raised by several educational researchers (e. g. Nairn, 2005; Trevor et al, 2008) as to whether it is a necessary component in Geography teaching to further enhance knowledge and understanding for students, particularly in a primary school setting.

#### Fieldwork's increasing role in teaching Geography

Historically, geographers in the UK (Gold et al, 1991; Cook et al, 2006 etc.) and further afield (Fuller et al, 2006, Sauer, 1956) have consistently published literature supporting the use of fieldwork as a distinctive and important mode of learning. Sauer's presidential address to the American Association of Geographers in 1956 stated that:

the principal training of geographers should come, wherever possible, by doing fieldwork (Sauer, 1956, p. 296).

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## **National Policy**

In 2006, the Government placed an increased emphasis on fieldwork through the publication of the ' Learning outside the classroom manifesto' (DFES, 2006) which intended to make the case for learning outside the classroom and to support schools, colleges and other educational providers in improving such provision.

Specifically, the current National Curriculum (Department for Education, 2013), and earlier versions, for Geography in KS1 and 2 emphasises the use of fieldwork, and how it can contribute towards a high-quality geography education. For example, KS1 requires children to:

use simple fieldwork and observational skills to study the geography of their school and its grounds and the key human and physical features of its surrounding environment (DfE 2013),

and KS2 requires children to:

use fieldwork to observe, measure record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies (DfE, 2013).

The National Curriculum also states that:

pupils should be competent in the geographical skills needed to collect, analyse and communicate with a range of data gathered through experiences of fieldwork that deepen their understanding of geographical processes'. (DfE, 2013).

Page 5

This statutory policy requires that fieldwork is an essential part of teaching Geography in order to develop skills that cannot be taught purely in the classroom environment.

## **Local Policy**

However, despite the national policy, not all schools have used fieldwork as a learning tool over the last 10 years. This is illustrated in two key reports into how geography is taught, published by Ofsted in 2008 and 2011, in this time period. The first report ' Geography in schools; changing practice', found:

the majority of the primary and secondary schools in the survey did not recognise the value of fieldwork sufficiently and did not fulfil the requirement to provide it (Ofsted, 2008).

And, in its follow-up review ' Geography; learning to make a world of difference' which looked at geography in a sample of 91 primary and 90 secondary schools (including one special school) from 2007 to 2010, highlighted:

how good and regular fieldwork motivated pupils and enhanced their learning in geography, although just over half the primary and secondary schools visited did not use it enough (Ofsted 2011).

At the primary schools where I was on teaching practice, both schools at KS1 and KS2 embraced fieldwork as an important tool in the education and learning of the children, for geography and the wider curriculum. For example, at KS1 I facilitated a geography field day where I took the children outside, on school grounds, to apply learning from the classroom on compass direction to create their own map. I found the children were more engaged in learning and those who were struggling with their understanding in the classroom were able to produce a map, and were more confident in using a compass at the end of the day.

As fieldwork is, and has been, demonstrated as a prominent feature in the effective teaching of Geography (Ofsted, 2011), it is important to understand what the actual benefits are.

#### **Evaluating the benefits of fieldwork**

#### **Connecting theory with real experience**

There are thought to be several pedagogical benefits of using fieldwork in the study of Geography. The first of which is that fieldwork can create opportunities to " connect theory with real experience" (Kent *et al.*, 1997). Kent hypothesises that fieldwork strengthened the initial classroom-based learning by putting what is learnt from the teachers and textbooks and applying it to ' real world' situations. His research highlighted how the connection between theory and practise contributes to the progression of learning (Hope, 2009).

Foskett's (2010) research further supports that fieldwork can provide between a link between theory and practise, and comments that:

a true understanding of the environment requires field investigation, and making sense of the world around us demands first-hand experience for primary school children as much as it does to academic researchers. Here he identifies that fieldwork can not only be accessible to any age group, but is best applied in early years of education to encourage greater development of geographical skills (Foskett, 2010). This has been demonstrated in practice; the Ofsted review in 2011 identified that in the primary schools visited:

fieldwork happened more often in Reception classes and Key Stage 1....' and '.... was used to good effect to teach route-finding, the language of position and direction, and to encourage pupils to express preferences and make decisions (Ofsted, 2011).

One final theorist who supports this pedagogical benefit of connecting theory with real life experience is Bonnett (2008), who states that:

Geography wants to take children outside the school and into the streets and fields; it wants to take keyboard tappers out of their gloomy offices and into the rain or the sunshine (Bonnett, 2008).

This shows that for the researchers cited, fieldwork remains a defining feature of the subject and they support the use of fieldwork in teaching geographical skills. Research that contradicts this is hard to find and the review of geography teaching in practise (Ofsted 2011) also supported this, stating that when:

fieldwork was well planned, experienced regularly and an integral part of schemes of work, pupils gradually built up their skills in geography and fieldwork (Ofsted, 2011).

## **Direct learning**

It could be argued that fieldwork can be a form of direct learning, and there is not necessarily a need for the initial class-based learning. This is supported by Kolb's experimental learning theory, which focuses on the idea of active rather than passive modes of learning (Heasley and Jenkins, 2000). Kolb's cycle of learning outlines how learners use experience, observation and reflection to generate new ideas (Harrison et al, 2003). The theory uses the simple idea that pupils learn by doing, suggesting that students are able to learn directly from the environment through fieldwork (Hope, 2009). This can be in the form of the four key steps in Kolb's cycle:

- active experimentation,
- concrete experience,
- observation, and
- critical reflection.

Kolb's research, in my view, claims that fieldwork is the foundation of learning in Geography, and it is an effective way of supporting active and experiential learning. It not only inspires the engagement of children, but links theory with practise, with positive outcomes observed in regard to the knowledge retained by children.

# **Reflective learning**

Reflective learning is a key technique used to identify what has been learnt by pupils, and whether they are able to acquire deeper learning (Harrison et al, 2003). Harrison found schools that adopted the idea of a ' learner journal' or ' reflective field diaries' as an assessment tool to get children to critically analyse and reflect what they have learnt in a constructive way. Moon (2005), advocates the use of journal/diaries as he believes it to be a useful writing mechanism to allow students to identify any observations they have made regarding the fieldwork and critically analyse their findings.

In my view, whether ' reflective field diaries' are suitable for primary school children is debateable, as in my experience they are more commonly used in higher education. However, I do believe the concept in itself could be effectively applied in KS2 to promote critical thinking for research and field experience. Although, I recognise that not all students are reflective learners, and therefore, it is not possible to conclude that reflective learning is achievable by all students.

#### **Development of subject related skills**

An additional benefit of fieldwork in Geography that is thought to be of most significance, is that it allows students to develop a range of subject related skills; including mapping, orientation, data collection and analysis/reflection (DfE, 2013). I have observed fieldwork enabling students to work independently and gain problem-solving skills, which can be transferred to other subjects such as Science and Mathematics. For example, my class learnt how to read four-figure and six-figure grid references which applies the sample principles to plotting a graph as used in Mathematics i. e. ' along the corridor, up the stairs' approach. This transference of skills is supported by Andrews et al, 2003.

#### **Development of inter-personal skills**

Development of inter-personal skills for use later in life can also be a positive outcome from the use of fieldwork practises, as fieldwork often requires the collection of data in small groups or interacting with people using questionnaires and interviews, particularly in human geography.

These skills are brought out in the Ofsted review, where,

in the primary schools visited, there was more evidence of speaking and listening in geography than in the secondary schools. Primary pupils were more used to working in groups and with ' talk partners'... (Ofsted, 2011).

Practicing these skills at an early stage of education can only be beneficial. In my experience, it is the interpersonal skills that are often a defining feature when applying for work experience or jobs, in terms of whether a candidate would fit in well as part of a team or working with customers. Therefore I believe that more group work and social interaction through fieldwork to study geography should be used equally as much in secondary school as in primary.

#### **Retention of knowledge**

Studies conducted in primary schools provide evidence to support the idea that an outdoor learning experience can result in a higher retention of knowledge and therefore understanding. For example, a paper by Scott and Boyd stated there was a " positive impact of learning through fieldwork upon children's ability to write about science" (Scott and Boyd, 2014). Scott and Boyd's study showed that children who carried out fieldwork had significantly higher literacy scores than non-fieldwork classes. As well as this, children who experienced fieldwork achieved higher scores in science assessments than the non-fieldwork class. The study concluded that:

an outdoor learning experience focused around fieldwork can result in learning benefits across the wider curriculum, suggesting fieldwork in Geography can have a cross-curricular benefit to similar subjects (Scott and Boyd, 2014).

Another example is from Nundy (1999), who conducted a similar study prior to Scott and Boyd, and found that the fieldwork group achieved significantly greater improvement in geographical knowledge when compared to the control group.

In my view, these studies provide evidence that fieldwork pedagogy is likely to lead to significant positive learning outcomes. And, as discussed earlier, I experienced this in action as part of my KS1 teaching placement.

Experiencing different environments

Visiting and working in a different environment can enhance learning. In order for children to understand other environments, it is important they first understand their own environment as this enables them to benchmark, compare and question.

In my view, fieldwork experiences should be built up from say a single lesson in the school playing field for a child's first experience, developing into longer experiences that may be off site. This form of learning can be very https://assignbuster.com/discussion-on-whether-fieldwork-is-beneficial-tofurthering-childrens-understanding-of-geography/ exciting and inspiring for children. For example, many museums/ heritage sites (GEM) now provide off site learning / experimental days, and researchers have seen that the use of offsite learning is more common (Christie et al, 2014). Also, outdoor initiatives are supported for all ages by the UK government, for example, Nature Friendly Schoolsrun by The WildLife Trust, a £6. 4m funded project to improve children's wellbeing, learning and care for the environment (Wildlife Trust).

#### **Evidence to support fieldwork**

Despite there being several benefits of fieldwork as set out above, some researchers (Foskett, 2010) have disputed the benefits as unsupported by evidence, and Hope et al commented " simply taking students into the field does not necessarily result in effective learning for students" (Hope et al, 2009). Additionally, Rickinson et al (2004) argues that:

if fieldwork is to be effectively promoted then it is vital that the practice is underpinned by an evidence base that clearly demonstrates its value (as referenced in Scott and Boyd, 2014).

Attitudes towards learning are a significant contributing factor to a pupil's ability to progress. Higgitt states how " there is a connection between a person's emotions, feelings and attitudes and their ability to deepen their knowledge and understanding" (Higgitt, 1996).

More recent research has found that healthier and happier children do better in school (DfE, 2012), and that education is an important determinant of

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future health (Hahn and Trueman, 2015). The general consensus is that if an individual has a positive approach towards what is taught, they are more likely to retain information. Fieldwork has characteristics that can be considered enjoyable and an active mode of learning, providing an alternative method of teaching that's suited to more practical learners. It has also been found that it can influence a student's study choices in later years:

Fieldwork encouraged a higher than average take-up of examination courses at a time when examination entries for geography were falling nationally (Ofsted, 2011).

## Potential dis-benefits of fieldwork

#### Impact when used for assessment purposes

Fieldwork is sometimes used as an assessment mechanism to determine a child's understanding. If students are aware that the fieldwork is assessment based this can sometimes counteract the benefits. Therefore, it is possible to conclude fieldwork is not necessarily the best learning style for all students. In my experience, those who get anxious when they know they are being assessed underperform, and this can result in the assessment itself not be reliable or a fair reflection of a child's understanding. It has been commented that:

schools need to ensure that the fieldwork assessment strategies go beyond the attainment of facts and observations, and instead focus on analysis of results using explanation and reasoning, to gain a full insight into the level of understanding (Trevor et al, 2008). Research also suggests that that fieldwork has " become increasingly teacher-led, and primarily focussed on intellectual gain, taking away its other values such as enjoyment, interest and curiosity" (Preston, 2016).

## Impact of the children's environment and upbringing

The 'Direct learning' approach provides direct access to the truth about the world. However, Nairn argues

that pupils have a predetermined view of society, which has already been tainted depending on their social position growing up and the environment around them (Nairn, 2005).

Therefore, unless the fieldwork takes into account a child's preconceptions and understanding of their environment children may not achieve the learning objectives planned.

## **Opportunities for all are not always equal**

The opportunity to engage in out-of-school learning such as fieldwork can be limited depending on location of schools, and the funding and resources available. Research by Taylor et al (2009), has found that the funding for schools to have out-of-school learning opportunities varies widely across the UK.

The education landscape has changed over recent years with the Government's introduction of academy status, where by some schools are now regulated and funded directly by the DfE and have control over their own finances and how they spend their money (DfE, 2015). Therefore, how the schools use this freedom and flexibility can lead to marked differences in the education one school provides compared to another, or what a local authority school can provide in terms of fieldwork experiences.

## Health and safety

Any fieldwork activity brings risk of hazards and injury occurring. Despite the educational benefits of fieldwork outlined earlier in the report, in recent years a number of schools throughout the UK have become increasingly reluctant to conduct fieldtrips and experiments due to the potential risks. A report by theEducation and Skills Committee (2005) found that many schools were discouraged by:

the false perception that a high degree of risk attaches to outdoor education as well as by cumbersome bureaucracy and issues of funding, time and resources' (Cook et al, 2006).

Although there is potential with any fieldwork for hazards and risks to occur, it is important that all risks are identified up front. The Health and Safety Executive (HSE) recognise that although hazards and risks are avoided as much as possible, fieldwork /offsite learning "helps children develop their risk awareness and prepares them for their future working lives" (HSE, 2018), suggesting that it is important for children to experience fieldtrips to gain awareness of potential real-world risks.

# Conclusion

In conclusion, it is evident that there are arguments for and against the use of fieldwork in schools and its effectiveness in the progression of a child's learning experience. Up until the last 10 years there has been limited evidence to prove the value of fieldwork. However, with the background of national policy driving local policy in schools we have seen the amount of research and use of fieldwork increase. The evidence demonstrates that fieldwork, when at the heart of a child's learning experience, can bring what is learnt in the classroom to real life. Fieldwork can also provide enhanced cognitive development, and encourages independent learning, providing transferable skills for cross-curricular activities.

Although Ofsted reports the number of schools using fieldwork is increasing, the opportunity for schools to facilitate this sort of activity is inequitable. Some schools and local authorities struggle to fund such activities, and some are significantly more likely to avoid the risk of undertaking out-of-school learning.

For those schools that do embrace fieldwork, there is a wide range in how it is used and some schools are using it more effectively than others. It has been observed that fieldwork has become increasingly teacher-led which has the potential to take away a child's own learning and development of skills.

Overall, based on my research, my own pupil experience and as a student teacher, I believe fieldwork is beneficial to improving a child's knowledge and understanding of Geography. And, there is no doubt that many teachers and academics support the use of fieldwork as an active, enjoyable and tangible mode of learning.

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