

# [Effects of learning through enquiry](https://assignbuster.com/effects-of-learning-through-enquiry/)

Learning through enquiry is engaging and motivating for children. It helps them to learn and remember more than other activities” (Susan Pike, 2016). To what extent do you agree with this statement?

Learning through enquiry has been viewed as a fundamental part of the National Curriculum (NC) for almost 30 years, not only is ‘ geographical enquiry’ a statuary component of the geography curriculum within England, it is also included in examinations up to advanced level (Roberts, 2006). Enquiry is also important within other subjects such as Science and History. In addition to this, Ofsted inspect this area of education (Roberts, 2006). The definition of enquiry or ‘ inquiry’, which it is sometimes spelt, can be different depending on what the context is. It can be defined as the process of asking, to gain a greater understanding of a topic, or the process of discovering facts about something (Cambridge Advanced Learner’s Dictionary, 2009, p. 745). However, for the purpose of this essay, the ‘ process of asking’ is the most appropriate definition, as it links to part 1, standard 4 of the teacher’s standards (Department for education (DFE), 2013), where it is the responsibility of the teacher to ‘ promote a love for learning, encourage, nurture and lead children’s intellectual curiosity’ (DFE, 2013, p. 11). ‘ The first key to wisdom is constant questioning…By doubting we are led to enquiry, and by enquiry we discern the truth’ (Peter Abelard, AD 1079-1142; cited in Mehta & Pandya, 2016, p. 183). It is the teacher’s responsibility to instil within their students the want to question and be curious about what they are learning (Mehta & Pandya, 2016). Imagine if Sir Isaac Newton had not questioned why the apple fell from the tree, his laws of gravity may have not been discovered until many years later. Enquiry should first start with questioning, and the questioning should be carried out critically and analytically. This type of thinking leads to enquiry, which then can lead to the discovery of the truth (Mehta & Pandya, 2016). This essay intends to investigate the literature surrounding ‘ learning through enquiry’, explore enquiry base learning (EBL) and formulate an opinion to attempt to answer the question, whether learning through enquiry is an effective approach when teaching children Geography in primary schools.

Enquiry is a fundamental part of teaching, learning and integral within subjects such as Science, Geography and History (Roberts, 2006). Enquiry based learning (EBL), is broad and covers several approaches to learning, which are centred around the pupil, driven by the process of enquiry and active for the participant (Spronken-Smith et al, 2008). One of the main requirements for EBL to be successful is that the pupils participating in the enquiry should be initiated into it. Here, the pupils should be provided with some scaffolding or guidance and feedback of the task (Spronken-Smith et al, 2008). It is then down to the professional judgement of the education practitioner to find a balance between allowing pupils the freedom to explore a topic or task and the amount of scaffolding which, the facilitator has put in place for the participants. To be able to get this balance correct, the classroom teacher must have experience and confidence within the subject area, as well as having a good understanding of the attainment of their students in the classroom (Crabtree, 2004). This raises questions to whether EBL is a suitable approach for teachers new to the profession and only effective within experienced teachers. In EBL, the understanding of a concept is created by what the learner actually does, which is a constructivist approach to learning (e. g. Vygotsky, 1978; Bruner, 1990).

Learning through enquiry or EBL, has strong foundations within constructivist education theory, Roberts (2003), discusses how many opinions within education are coherent with Vygotsky’s theory that knowledge is simply not just transmitted from the teacher to the pupil directly, but that pupils learn and discover the world actively and make sense of it in their own way (Roberts, 2003). Thus, it is engaging and motivates learning. However, what children can achieve independently and what they can achieve with support of others differs greatly, this is known as the zone of proximal development (ZPD) (Vygotsky, 1978). Vygotsky’s theories and the idea of ZPD have implications for ‘ learning through enquiry’ as it contests what a child can achieve independently. Hence reminding practitioners, that pupils will require support when introduced to new ideas and concepts (Vygotsky, 1978). For this practising teacher, this means that pupils will need guidance when they are planning their enquiries, as well as when they conduct their investigation and analyse their findings.

The benefits of an EBL experience are supported within research. Bransford, Brown, & Cocking (2000), discuss how in EBL, children become more engaged in their activities and processes of thinking. The research also suggests, that practising teachers should move away from traditional more teacher centred methods such as the use of text books and lectures in favour of a more enquiry orientated approach (Bransford, Brown & Cocking, 2000). EBL helps engage pupils in the subject area, enables pupils to collect evidence to back up their opinions and uses problem solving to get the child thinking more logically (Secker, 2002). These pieces of research support that of Kember (1997), who views EBL as a method which allows the learning to revolve around the pupil.

Pandey et al (2011), concludes within their research that an enquiry approach has a substantial benefit on the academic achievement of pupils in comparison to conventional more direct teaching methods. Therefore, education practitioners should think carefully about how they are planning their lessons and preparing their classrooms, to ensure their pupils can be active participants in their own learning (Pandey et al, 2011). Additionally, literature by Prince & Felder (2006), support these views, that allowing children to be active learners and have the freedom to make enquiries about the topics they are learning can enable children to develop important skills such as analysing, thinking critically and being able to follow a process as well as contributing to an improvement in their academic performance (Prince & Felder, 2006).

Although there are many benefits to EBL, there are some challenges to this approach which raise concerns for both pupils and teachers. One challenge of EBL is that it is difficult to encourage and convince pupils that this more cognitively demanding and time-consuming approach is more beneficial and worthwhile (Pawson et al, 2006). If a child cannot understand the relevance of the process which they are attempting, then they could become demotivated and disengaged in their learning (Pawson et al, 2006). This suggests that if EBL is not carried out in the appropriate environment and delivered in an effective manner, then this type of approach could have a negative effect on the child’s learning a potentially their self-esteem regarding the subject area.

Another type of teaching and learning approach that is comparable with EBL is direct instruction (DI). DI is seen most commonly in lectures or demonstrations, where the lesson is teacher centred due to them being in control of delivering the knowledge to the students; here it is up to the students to ‘ absorb’ the knowledge being delivered to them (Killen, 2007). In this type of approach, pupils are passive within the learning process, rather than being active in comparison to EBL. In order for DI to be effective, the teacher must use learning objectives/outcomes, ensuring that they are clear to all pupils before moving forward with the rest of the session (Killen, 2007). The teacher must also manage their time appropriately to ensure that the pupils are able to complete the tasks, which have been planned for them, it is then up to the teacher to monitor and assess the pupils and give reflective feedback. This approach puts an emphasis on academic achievement (Killen, 2007). However, it could be argued that the structure and rigidity of DI is narrowing the learning experience of pupils and preventing them from developing important academic skills, whereas EBL can provide pupils with opportunities to explore and discover different processes and skills within their learning such as how they learn and the best way for that individual to learn. This is done with the hope that the pupil can then be an active and engaged learner throughout their life (Walker & Bass, 2011). Cohen (2008), states that DI still has its place within teaching and learning as it allows pupils to accelerate through their learning because DI helps eliminate misconceptions which can occur during learning processes (Cohen, 2008). This shows that although DI has limitations when it comes to benefitting the learner, it still has its place with teaching and learning as an effective tool, if used in the correct way.

Geographical enquiry is a well-established teaching and learning approach within the geography curriculum of all Key Stages, however there have been some reports that evidence of EBL within Geography not being implemented correctly (Davidson, 2009). Ofsted (2008), reported that the learning focus was heavily orientated round the content in geography and very minimal focus on the development of important skills such as gathering and interpreting information/evidence and observational skills as well as experiencing lesson which were limiting creativity (Ofsted, 2008). Although this study is over ten years old, it still holds relevance today as it shows how a curriculum can be interpreted in different ways by practising teachers and unless given appropriate guidance, it can be difficult to implement new concepts within teaching and learning.

Roberts (2003), highlights that due to ‘ enquiry’ being a broad concept, there are spaces which are left open to interpretation for school leaders and classroom teachers. This may cause a divide in opinions among education practitioners, with some viewing ‘ enquiry’ as a set of skills to use in investigations, in comparison to those who consider ‘ enquiry’ as a philosophy and as a whole approach to learning about the subject of Geography (Roberts, 2003). This view of geographical enquiry being a set of skills which we equip children with is relevant in the most recent NC, where there are several references to geographical ‘ skills’ in the Key Stage 1 & 2 in the Geography programmes of study, putting a real emphasis on developing these ‘ skills’ so that we can arm the future generations with essential skills and qualities for learning, life and future employment (Department for Education, 2013).

Within the subject of Geography, there have been many opinions surrounding the value of enquiry as well as what it means to the practising teacher and how it is implemented within teaching (Davidson and Catling, 2000; Rawling, 2001). There are various educational documents which state a varying emphasis on EBL and how important it is within education (Davidson, 2009). This potentially could be problematic for practising teachers as it leaves EBL open to interpretation and gives them no clear answer to the importance of EBL and how it can be used effectively within the classroom.

Overall, after reading the literature, I conclude that there is a wide recognition that pupils who actively engage with their learning, tend to get the most out of their learning experience, in comparison to those pupils who receive their information in a more passive manner, with the teacher passing information directly to the pupil (Race, 1993). I see more benefit with the use of active learning, rather than passive learning and I intend to apply this approach to teaching and learning within my own teaching practice accordingly for the best educational outcome for my students. After considering the research surrounding this topic, I feel that EBL is a very effective approach if done correctly, allowing pupils to develop skills and engage with their learning and provide them with interesting opportunities to explore topics within Geography (Walker & Bass, 2011). However, I also agree with Prince & Felder (2006), who suggest that more research is required to understand the real benefits and limitations of EBL and whether it is a more effective method than traditional approaches. On the contrary, I do agree with the statement made by Pike (2016), considering EBL to be a superior teaching and learning approach, if it can be implemented correctly. However, this does not fully rule out the use of traditional techniques within the classroom as the still have a value for certain aspects of learning (Cohen, 2008).

References:

1. Bransford, J. D., A. L. Brown, and R. R. Cocking, eds. (2000). How People Learn. Washington, D. C.: National Academy Press.
2. Bruner, J. (1990). Acts of Meaning (Cambridge, MA: Harvard University Press).
3. Cambridge Advanced Learner’s Dictionary. (2009). Cambridge University Press. The Edinburgh Building: Cambridge, UK, p. 745.
4. Cohen, M. T. (2008). The effect of direct instruction versus discovery learning on the understanding of science lessons by second grade students.
5. Crabtree, H. (2004). Improving student learning using an enquiry based approach, Learning Based on the Process of Enquiry, Conference Proceedings, September 2003, Curriculum Innovation, University of Manchester, pp. 77–84. Available at: http://www. intranet. man. ac. uk/rsd/ci/ebl/cproceed. pdf (accessed April 2019).
6. Davidson G. & Catling, C. (2000). ‘ Towards the Question-Led Curriculum’, in Fisher, C. & Binns, T. (Eds) Issues in Geography Teaching, London: Routledge Falmer.
7. Davidson, G. (2009). GTIP Think Piece. Geographical Enquiry. Geographical Association.
8. Department for Education. (2013). Geography programmes of study: Key Stages 1 and 2. National Curriculum in England.
9. Department for Education. (2013). Teachers standards. Guidance for school leaders, school staff and governing bodies, p. 11.
10. Kember, D. (1997). A reconceptualization of the research into university academics’ conceptions of teaching, Learning and Instruction, 7(3), pp. 255–275.
11. Killen, R. (2007). Effective Teaching Strategies: Lessons from Research and Practise. (4th ed.). South Melbourne: Thomson Social Science Press.
12. Mehta, U. and Pandya, S. (2016). Paulo Freire: Relevance to Indian Teacher Education; p. 183. Laxmi Book Publication, Solapur.
13. Ofsted. (2008). Geography in Schools: Changing Practice Ref No 070044, London: Ofsted.
14. Pandey. A, Nanda. G. K. and Ranjan. V (2011). “ Effectiveness of Inquiry Training Model Over Conventional Teaching Method on Academic Achievement of Science Students in India,” Journal of Innovative Research in Education, vol. 1(1), pp. 7-20, 2011.
15. Pawson, E., Fournier, E., Haigh, M., Muniz, O., Trafford, J. & Vajoczki, S. (2006). Problem-based learning in geography: towards a critical assessment of its purposes, benefits and risks, Journal of Geography in Higher Education, 30(1), pp. 103–116.
16. Prince, M. J. & Felder, R. M. (2006). Inductive teaching and learning methods: definitions, comparisons, and research bases, Journal of Engineering Education, 95(2), pp. 123–138.
17. Race, P. (1993). Never Mind the Teaching, Feel the Learning, Paper 80 (London: SEDA).
18. Rawling, E. (2001). Changing the Subject: The impact of national policy on school geography 1980 – 2000, Sheffield: The Geographical Association.
19. Roberts, M. (2003). Learning through Enquiry. Sheffield: Geographical Association.
20. Roberts, M. (2006). Learning Through Enquiry. Making sense of geography in the key stage 3 classroom. The Geographical Association: Sheffield.
21. Secker, V., C. (2002). Effects of Inquiry-Based Teacher Practices on Science Excellence and Equity. The Journal of Educational Research January/February 2002 [Vol. 95(No. 3)]
22. Spronken-Smith, R., Bullard, J., O., Waverly, R., Roberts, C., & Keiffer, A. (2008). Where Might Sand Dunes be on Mars? Engaging Students through Inquiry- based Learning in Geography, Journal of Geography in Higher Education, 32: 1, 71-86.
23. Vygotsky, L. (1978). Mind in society: The development of higher psychological processes, Cambridge MA: Harvard University Press.
24. Walker, K. & Bass, S. (2011). Engagement Matters: Personalised Learning in Grades 3 to 6. ACER Press: Camberwell, VIC