

What Happens When Bloom's Taxonomy is Used in the Classroom?

Aislinn McKenna

Group 4G

Rationale

'Bloom's taxonomy provides an important framework for teachers to use to focus on higher order thinking' (Anon, 2013).

Bloom's Taxonomy was created by Benjamin Bloom in 1956 and is used regularly in classrooms across the world and it's claimed to improve higher order thinking skills across all levels of the primary school and beyond has been the topic of much discussion in the teaching profession since its creation in 1956 (Florida, 2015). There is extensive evidence which suggests that Bloom's Taxonomy can result in many benefits for both the teacher and pupil (Noble, 2004) when it is used regularly. As a result of this, I decided that it was something I wanted to ensure I made use of throughout my time as a Probationer.

Aims

The aim of this study is to investigate the effect of using Bloom's Taxonomy on children's comprehension during literacy time.

Methodology

This study was carried out in a P7 class, with a variety of ability levels across Second Level, focusing on a group of six children from two different ability groups and two individuals. As part of the study a discussion took place with the children about what skills they would be using when answering different types of questions and what each of these skills meant for their learning and progression.

Bloom's Taxonomy was carried out in only one area of the curriculum, with Literacy being chosen as the curricular area which would provide most opportunity for the use of Bloom's Taxonomy in the classroom. Bloom's Taxonomy was included in Literacy lessons twice a week throughout the duration of the study for each child.

Prior to the study commencing, each child was issued a baseline assessment using each level of Bloom's Taxonomy in order to gauge their initial ability level. Following on from this, the study gathered evidence from four different sources of evidence across the four-week implementation period. These included formative assessment (in which exit passes were used), marking of pupil work (where the children had answered a set of Bloom's Taxonomy questions generated by a partner), observation of discussions taking place and direct questioning throughout the lesson.

The implementation of Bloom's questioning techniques in the classroom was not restricted to one particular method. Several methods of implementation were used such as verbal questioning, in which the teacher utilized online randomiser tools and differentiated questions based on the needs of the pupil at that time. Children were also given opportunities to build on their own ability by challenging themselves to successfully answer a question from a higher level than they had been able to in previous sessions. They did this by taking a challenge card from a particular wallet on the interactive display in the class. All children started at the Remembering level and, after having answered three successful questions at that level, they were allowed to move onto the Understanding level. They continued this until they mastered all levels where they were awarded a 'Bloom's Master' certificate.

Prior to writing down the answer to their challenge cards, the children were encouraged to work with a partner to answer a variety of questions from that label orally, and these conversations were observed regularly.

At the end of several of the sessions, the children were given the opportunity to complete exit passes, on which they noted the levels they had attempted that day and how confident they were feeling when doing so.



Appendix 1

Findings

At the conclusion of this enquiry, the majority of the children in my focus group had improved their ability to form and answer questions, both orally and in the written form.

The initial baseline assessment results indicated that the majority of the focus group were able to answer questions using Lower Order Thinking Skills (LOTS) and Mid Order Thinking Skills (MOTS), and only one child was able to answer questions using the Higher Order Thinking Skills (HOTS). However, over the course of this study, the number of children able to confidently use MOTS and willing to practice using HOTS had dramatically increased, which was evident through the written work produced in jotters. Pupils became more engaged with the text they were studying and were able to develop and strengthen their understanding while enhancing their communication skills through collaborative learning as proposed by Lev Vygotsky (Cremin & Arthur, 2014).

The exit passes which were completed on a weekly basis were invaluable in finding out exactly how the children were coping with their individual progress, as it allowed me to see what every child had been working on, especially if I had not been working directly with their group or been able to observe their discussions. The exit passes showed clearly a progression in the confidence of all children in their ability to answer a more challenging question than they had previously been able to.

After looking at the data displayed below, it is clear that despite some children remaining at the same level for a number of weeks, all children made some improvement over the course of the study.

	Week One				Week Two				Week Three				Week 4		
	LOTS	MOTS	HOTS		LOTS	MOTS	HOTS		LOTS	MOTS	HOTS		LOTS	MOTS	HOTS
Child A	Green	Green	Green		Green	Green	Green		Green	Green	Green		Green	Green	Green
Child B	Green	Green	Red		Green	Green	Amber		Green	Green	Green		Green	Green	Green
Child C	Green	Green	Red		Green	Green	Amber		Green	Green	Green		Green	Green	Green
Child D	Green	Green	Red		Green	Amber	Red		Green	Green	Amber		Green	Green	Amber
Child E	Green	Red	Red		Green	Red	Red		Green	Amber	Red		Green	Green	Red
Child F	Red	Red	Red		Red	Red	Red		Red	Red	Red		Amber	Red	Red

Traffic light system used: green – confident in their ability to answer, amber – able to work at this level with support, red – unable to form an answer to a question of this level.

Appendix 2

Conclusion

The findings of this study suggest that the use of Bloom’s Taxonomy within the classroom enables children to improve both verbal and written questioning skills, as well as allow for a more detailed formulation of answers. Pupils who were previously cautious with their answers became increasingly confident in their ability to take part in class discussions and more willing to offer answers without being prompted. The written work of most children also improved – not only in the length of answer given, but the content of each answer has become more concise and relevant to the question asked.

These conclusions are, however, inconclusive, due to the short-term nature of the study and the small number of focus children it is based upon.

Implications for Future Practise

I will continue to use Bloom’s Taxonomy within literacy as a framework for questioning, along with beginning to embed the language used within the strategy throughout all learning experiences within Curriculum for Excellence (CfE) to highlight and demonstrate that higher order thinking skills are transferable to all areas of the curriculum. I will focus on allowing children the opportunity to answer as many LOTS, MOTS and HOTS questions as possible in whole class discussions order to expose all children to the language and process used when answering each of the levels of questions.

Bibliography

Anon, 2013. *Bloom's Taxonomy*. [Online]

Available at: www.bloomstaxonomy.org/Blooms%20Taxonomy%20questions.pdf

[Accessed 11 March 2019].

Cremin, T. & Arthur, J., 2014. *Learning to Teach in the Primary School*. Oxon: Routledge.

Florida, U., 2015. *Bloom's Taxonomy*. [Online]

Available at:

<http://www.fctl.ucf.edu/teachingandlearningresources/coursedesign/bloomstaxonomy/>

[Accessed 10 March 2019].

Noble, T., 2004. Integrating the revised bloom's taxonomy with multiple intelligences: A planning tool for curriculum differentiation. *Teachers College Record*, 106(1), pp. 193 - 211.