Improving student engagement | literature review

Warwick, P., Hennessy, S. & Mercer, N. (2011) Promoting teacher and school development through co-enquiry: developing interactive whiteboard use in a ' dialogic classroom.'

The author's reason for conducting the study was to show that an interactive whiteboard (IWB) can be a key classroom tool and that it can be used as a vital instrument in dialogic manor. The authors, Paul Warwick, Sara Hennessy and Neil Mercer, report on the works of three classroom teachers, who confidently use an interactive whiteboard (IWB) in their classrooms. The authors clearly state that they wanted to conduct their study because " Given the pervasiveness of IWB's in the UK, we wished to explore the development of its uses in the classroom where there was a dialogic pedagogy." (Warwick, Hennessy and Mercer, 2011, p. 303).

It is obvious from the start that the authors firmly believe that IWBs play a major part in a children's learning and that an IWB is a crucial resource when it comes to teaching practices today. Their argument is reinforced by their suggestions in the hypothesis. The authors also state that an IWB plays a key part in maintaining a child's engagement during their learning. However this is the first point of the research where the authors can be criticised for not recognising that there are a number of different factors and methods that can influence a child's commitment and engagement to learning. Some different examples of other factors that can have an influence on a child's engagement with their learning can be seen in the ' Four aces of effective teaching – Ace 3: Engagement' (Walls, 1999). One method mentioned is that a class teacher should ' limit a discussion to no more than 30 minutes before

introducing a learning activity' (Walls & Cather, 1987). This learning activity doesn't need to be one using an IWB; it can be done on paper etc.

All the way through this research paper Warwick, Hennessy and Mercer make numerous claims about IWB and the way teachers use them. However, there are studies that have shown that teachers have only been considered ' capable ' when they have grasped specific technological skills, such as using an IWB. An example of an article that states this is one conducted by the Cognition and Technology Group at Vanderbilt (1992), they state that ' technology is a teacher's liberator to help re-establish the role and value of the classroom teacher. Teachers must enter into collaboration or partnership with technology in order to create a " community" that nurtures, encourages, and engages the learning processes'. Nevertheless, Warwick, Hennessy and Mercer (2011) dispute this by stating that it is in fact the classroom teacher that is vital in stimulating dialogic approach not the IWB. However they do state that the IWB does have an important role in the classroom, but this is only correct when it is used in an engaging and suitable manner in the classroom.

To conclude, the information gathered from the research shows that IWB play a key role in the classroom, but they shouldn't be seen as being a replacement for teaching or the classroom teacher. This study highlights the need of a teacher and that they need to develop relationships with children in their class so that they can conduct solid lessons that will engage their pupils, which will then lead onto developing dialogical pedagogy. I believe that additional studies are needed when it comes to the outcomes of the use of IWBs in the classroom.

Simon et al. (2008) Puppets promoting engagement and talk in science.

The impacts of using puppets in classrooms has become a popular research point for writers. During the same time period of Simon et al. (2008) writing about the impacts of puppet use in the classroom, there was also a similar research going on with the impact of puppets in Maths lessons. However, the main focus of the authors writing this article was to conclude whether or not the use of puppets in science lessons, stimulated the pupils to be more actively involved in their science lessons and also to see if the puppets could encourage children's talk in science lessons. The research was designed to conclude weather the ' use of large puppets would help teachers to change their whole class discourse' (Simon et al., (2008), p. 1229) in their science lessons. A key strength of the research for the article was that it focuses on a vast amount of different ideas. The research was carried out by a mixture of teachers, across two different regions, interviewing two different age groups; 7-9 and 10-11, and the teachers had the option of using one or two puppets.

From the research of Neil Mercer and Lyn Dawes (2008) about ' exploratory talk', the authors of this article discuss the importance of communication with other children, so that the children have the skill to critically participate with their peers and their peers ideas. Simon et al. (2008) claims that the use of puppets assists in this area. When children start to enter a more in depth conversation with the puppet, the puppet can provide encouragement or interest in the child's responses, which then generates talk which involves the whole class, or talk on a peer to peer level. Therefore, from using the puppet can promote reasoning, problem solving and explanations, which are all key factors in science lessons.

The research that was carried out for this article was strong in various ways. Firstly, the focus wasn't just in a single school, it was in two different areas of England; Manchester and London. Secondly, there were two different age groups that were examined, and both of these groups had pupils who had a different response to the puppets. Thirdly, the teachers had the option to introducing a single puppet to the class, or they could introduce two puppets to the class. ' Some teachers used two puppets in a lesson whilst others used only one. Though using two puppets enabled teachers to set up discussion by getting the puppets to put forward opposing views, teachers found that one puppet was much simpler to use whilst still making it possible to present problems and to set up cognitive conflict.' (Simon at al., (2008) p. 1243) Finally, the use of the pilot study to find out more information and gain more of an understanding into the use of puppets helped finalise the main study for the article. Therefore, because of the strong research strategy, the final research produces remarkable but rigorous results.

One of the main disadvantages of this study was that training the teachers to correctly and effectively use the puppets acquired a lot of time. Even though this was good for the research side, the amount of time spent of training the teachers wouldn't be practical for every teacher, especially teachers in larger schools. This then brings up an issue; if teachers don't have experience with puppets and haven't had training would the puppets be as effective as they were during the research stage.

Overall, this article has proven that using a puppet during science lessons has been effective when trying to create talk. This has been backed up from the interviews, with pupils and teachers. The interviews also revealed that

pupils who are often more ' shy' and don't contribute as much in lessons, were more confident during lessons where a puppet was used as they felt at ease talking to a puppet. In my own practice, I will be using a puppet throughout the curriculum as I feel that the use of a puppet will engage the children and improve class and pupil discussions. However, before I feel fully confident in using a puppet, I will practice with a smaller group and build up to using the puppet in front of the whole class.

Brown K & Kennedy H (2011) Learning through conversation: exploring and extending teacher and children's involvement in classroom talk *School Psychology International* 32 (4) pp377-396

This article discusses the professional development progression over a twelve week period, that six teachers in the UK, who work at a school with children who have been recognised has having social, emotional and behavioural difficulties. The main research area for the article is focused on how teachers use conversation in their class to help integrate children's ideas and link these to the learning progression. ' Through reflective and exploratory discussion, enhanced by videos of interactive sequences within classes, teachers explored and developed aspects of their interactional styles'. Brown K & Kennedy H (2011) One of the key strengths of the research is that two educational phycologists (EPs) were also heavily involved with the researched and they worked alongside the six teachers.

With reference to Schoá[1]...'s *model of reflective teaching* (1983), the class teachers and the EPs intended to reflect on the teachers' interactional methods that happened within the teaching. They also wanted to be able to

work together to discover and extend classroom conversations. Therefore, through reflective and exploratory conversation with the EPs and with the help of recordings of interactive sessions that happened within the class, teachers watched back their lessons and were then able to explore and develop aspects of their interactional methods of teaching that they used with their class. At the end of the twelve weeks, the videos and recordings taken were compared. The main focus was to see the changes between the beginning sessions to the sessions at the end of the project. Brown K & Kennedy H (2011) stated that from the teachers looking back at their lessons, and working alongside the EPs they were able to adapt a change in their lessons to promote talk. ' Changes included the teachers using conversation to build more on children's ideas and actively support the cooperation between children. Changes in the nature of talk amongst children showed evidence of building more on ideas within conversations and making less new initiatives. The changes in conversations are considered with reference to children's participation and learning.' Brown K & Kennedy H (2011)

' Given the importance of children's metacognitive awareness of interactive processes within the class' (Mercer, 2000), I feel that one of the main weaknesses of this article and its research was that it would have been useful to have a greater insight into the changes that occurred throughout the lessons, from the points of view of the children that were involved with the study involved. All the children who participated did so voluntarily, however, they were not included in the ongoing preparation, development, and evaluation. The children involved might have provided valuable insights

into how the learning procedure seemed from their point of view, and how they felt that changes the teachers made worked for them, especially when the teachers developed their interactional styles. I would be interesting to see what extent the children felt the changes had on their incentive, contribution and learning.

Overall, this research has shown that looking back and watching how you have interacted with the children and what interaction styles you use can have an impact on children's learning. The article has also proven Schoá[1]…'s *model of reflective teaching* (1983) to be effective, as the if the teachers hadn't looked back and reflected on their interactional styles, there wouldn't have been any progression in talk. I will now use different interactional styles during my lessons, and I also feel that it would be beneficial for me to record myself teaching and watch this back to help me improved on my own teaching skills.