Challenging Able, Interested and Motivated (AIM) children within and beyond core subjects

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Able, Interested and Motivated (AIM) is a term used by a small number of schools in the South West of England, to refer to pupils who have the motivation to pursue an area of learning, as well as the talent or prowess to support their determination. The term includes the intellectual, social, emotional, cognitive and physical aspects of children's talents, rather than solely focusing on attainment (Freeman, 2010). Therefore, the defining feature of the term AIM is that these children are not necessarily the most talented but are motivated to improve their skills or knowledge. Rather than view children's potential as fixed, the term AIM can be applied to any child with access to either encouragement to pursue a subject or scaffolds to their learning, therefore every child has the potential to be within this remit.

Although advantages and disadvantages of how to challenge AIM children are evidenced across the literature, these are usually discussed within the context of core subjects, though there are exceptions (Taber, 2007). This research investigated how AIM children are challenged beyond core subjects in Key Stage 2. Specifically, the study analysed how these children are challenged through the use of acceleration, enrichment and differentiation strategies, as these areas were the most referenced areas of *challenge* within the literature. The term *challenge* is used in the context of Shabani et al's definition (2010) in terms of bridging the gap between what an individual knows, and can know with guidance.

The majority of ways in which AIM children can be challenged can be grouped under three main umbrella terms: differentiation, acceleration and enrichment through motivation. There are challenges involved in putting these into practice, ranging from teachers' lack of subject knowledge to insincere feedback from adults resulting in children becoming less motivated (Freeman, 2010). In addition, accelerating learning through ability grouping can result in a decline in attainment for some G&T children who have low self-esteem as they feel they are not good enough when compared to their more successful peers.

Differentiation

Differentiation is a broad term that generally refers to tasks, content, or teacher terminology that is appropriately pitched to help challenge students' thinking. Many different characterisations exist within the literature (Taber, 2007); for this study, the term is defined as '…the process by which curriculum objectives, teaching methods, assessment methods, resources and learning activities plan to cater to the needs of individual pupils' (George, 2003:76).

Acceleration

George (1995:59) defines acceleration as '…any teaching strategy that results in advanced placement beyond a child's chronological age.' White et al. (2006:26) expand on this by suggesting that acceleration extends to '…individualised provisions, vertical grouping, classes with a wide age range, out-of-school courses, compacting studies, self-organised study and mentoring.'

Acceleration strategies are also visible in heterogeneously grouped classrooms, as teachers can modify lessons by giving pupils more challenging activities. Modifying the curriculum should be done with caution, as simply giving G&T pupils more or harder work that is not appropriately tailored or incentivised, can be perceived as punishment by children (CCEA, 2006:47).

Enrichment Through Motivation

The definition of enrichment varies slightly throughout the literature; however, this study takes the view of it being '…any type of learning, or activity, which is outside the core of learning which most pupils undertake…' (Freeman, 2010:23).

George (2003) stated that in order to enrich subjects that are rarely taught, teachers must be willing to offer opportunities that maintain or increase children's motivation for the subject. These opportunities can include school competitions, afterschool clubs and out-of-school activities. However, merely delivering and providing these opportunities will not guarantee that AIM children will challenge themselves, as they might find certain subjects boring, too easy or not worth the effort (CCEA, 2006).

This action research was designed to understand how AIM children are being challenged but also to increase awareness of the types and frequency of challenges being offered to AIM children in foundation subjects, including physical education (P.E), history, geography, art and Design and technology (DT). The study adheres to ethical research guidelines (BERA, 2011).

Differentiation

Munro (2012) highlights the importance of differentiating tasks so that all children, not just G&T pupils, are appropriately challenged, advocating the use of 'curriculum compacting' as a way of differentiating the curriculum by teaching less introductory and repetitive tasks to them. Teachers who frequently grouped children by ability used 'curriculum compacting', encouraging children to begin tasks with less introductory elements and frequently using 'short, little sharp tasks…' that minimised teacher talk for pupils who did not require it. A number of teachers believed that by compacting their teaching, AIM children were less likely to become bored during lessons. However, a number of children regularly found these short tasks too easy, which at times resulted in them becoming bored as they had to wait for their peers to catch-up; this finding was present even amongst classes that comprised of mainly AIM children. Tomlinson (2001) expands upon the idea of AIM children having varying levels of understanding, as he suggested that even though all G&T children are grouped under one term, they all bring varying sets of knowledge with them. When considered in light of Freeman's (2010) findings mentioned previously, this would indicate that the practice of ability grouping was not effective in challenging learning particularly as it did not allow for these differing sets of knowledge within groups.

Teachers used fewer extension activities within foundation subjects, and a number of teachers stated that their lack of subject knowledge affects their ability to offer challenging activities to AIM children, as some of these teachers had limited experience and skills:

'I think personally it might be down to maybe subject knowledge… lack of confidence…I know that in Teacher A's group… I'm very aware that his art lessons probably challenge those AIM children; challenge their learning a lot better than perhaps mine would.'

Teachers used additional resources, devices and models to challenge AIM children's understanding, for example, using models and diagrams of the human anatomy for children to use as a guide to refer to during science lessons. Teachers stated that '…resources would be available to everyone… I would expect [AIM children] to be highly independent and quite skilled in using those facilities.' Hence, the main aim for teachers was to facilitate an autonomous environment whereby children were free to control the speed of their learning, however these additional resources were infrequently used, as the children perceived them as being for the 'low ability' children.

Enrichment Through Motivation

Participants involved in this research project found that AIM events and competitions encouraged and motivated children to pursue particular subjects. The main impediments to their effectiveness included the small number of children who attended them and the irregularity of the events. In addition, teachers found great difficulty in selecting children to attend foundation subject events as these were subjects taught less often:

'…say I need three children who are interested in DT… because we do so little DT, I think that sometimes teachers really struggle to choose the children…'

The idea of allowing children to pursue subjects with greater depth of their own accord, as they are more likely to be motivated by that subject, was echoed by participants as teachers often encouraged children to exercise independence by allowing them to begin tasks early. Accounts from teachers and pupils suggested that AIM children were regularly expected to complete tasks without adult help, which most of them frequently did.

In addition to supporting an autonomy-friendly environment, teachers also encouraged children to collaborate with their peers. Teachers encouraged pupil-pupil dialogue, especially amongst AIM children, as they believed that they could help support one another by sharing and reviewing ideas through discussions. Nevertheless, observations highlighted impediments that hindered the effectiveness of peer collaboration, for example some AIM children preferred not to collaborate with their peers and would become disinterested when talking with a partner or would actively distract one another.

Teachers also advocated that children who engaged in meaningful discussions to share their interests or accolades (trophies, ribbons or experiences) with their classmates were far more likely to 'have a go' at certain tasks. Receiving rewards may lead some AIM children to challenge themselves and participants' responses mirrored this, as teachers noted that AIM children who discussed their accolades with peers were very motivated to do well in certain subjects. Nevertheless, an assertion can be made that children who do not receive accolades or are unable to share their interests, may feel inadequate when comparing themselves against their peers. It is therefore important to ensure this opportunity is open to all with all.

Acceleration

Teachers and TAs were proactive in creating environments whereby children felt confident sharing their ideas:

… [To encourage children] to explain their reasoning a lot more and justify their answers a lot more… I encourage them to… agree with or disagree… to create more of a discussion atmosphere...

Teacher questioning can help develop AIM children's evaluative and critical thinking skills forward, as long as these questions incorporate a wide range of vocabulary, and are not too simple (Munro, 2012). Most teachers questioned AIM children in this way, and follow-up questions required children to justify their answers, rather than merely state the answer. As a result, AIM children were better able to internalise preconceived ideas. Nevertheless, not all teachers used questioning that could challenge AIM children, as some practitioners used questions that focused on arriving at one idea and politely disregarded all other responses.

Teachers also challenged AIM children through their use of feedback. Verbal feedback was used to encourage children to complete tasks that they perceived as too difficult, as teachers often praised children for producing good-quality work while letting them know that they can complete challenging tasks because they are AIM. Cornell's (1985) research suggested that children who identify themselves as 'gifted' can have a boost in their self-esteem, which could motivate them further. Therefore, giving positive feedback to AIM children could encourage them to challenge themselves, especially in subjects where the praise was administered.

Most participants stated that they expected AIM children to always complete the most difficult tasks, highlighting a relationship between teachers' expectations and children's self-concept and motivation. Furthermore, some teachers also stated that they regularly informed AIM children of their expectations. These teachers observed an increase in lesson participation and resilience from these students, as most AIM children believed that they were gifted and special. Therefore, by voicing teachers' expectations, their motivation to succeed may be positively affected, leading to an increase in academic output and motivation for particular subjects.

Conclusion

The main findings suggested that most teachers expect able pupils to complete difficult tasks with minimal collaboration, and most child participants mirrored this as they needed to continually prove they were the 'best' at certain subjects. Key here is the specification of 'certain subjects' as a number of children stated they do not feel equally confident in all curriculum areas; this indicates that it is important that teachers maintain an awareness that children who are AIM in one subject area may not be AIM in all subjects.

In being allowed more autonomy with how children use resources, children can challenge their learning further. Interestingly, pupils' viewed that additional lesson resources such as manipulatives, Numicon and some religious objects, were not applicable to them, which has implications for practitioners to review their classroom culture to ensure the purposeful use of resources to extend and deepen understanding of learning for all children. The use of additional resources combined with targeted questioning, dialogue and cognitively stimulating activities can ensure that additional resources are viewed as vehicles for challenging as well as supporting learning.

A final key finding is the issue of teacher subject knowledge and confidence in foundation subjects. The data indicated that a secure teacher subject knowledge is essential in enhancing, challenging and supporting children's learning in all foundation subjects to support

children in building a passion for learning and enhancing their knowledge. Therefore, teachers can facilitate this by ensuring a depth of subject knowledge beyond core subjects.

References

BERA, (2011) *Ethical Guidelines for Educational Research.* 1st ed. London: BERA. BERA, 2017. *British Education Research Association.* [Online] Available at: https://www.bera.ac.uk/about [Accessed 18 February 2017]

CCEA, (2006) *Gifted and Talented Children in (and out) of the Classroom,* London: CCEA

Cornell, R., (1985) For Better or Work: The Impact of Upward Social Comparison on Self-Evaluations. *Psychological Bulletin,* 119(1), 51-69

Freeman, J., (2010) *Worldwide Provision to Develop Gifts and Talents,* London: CfBT

George, D., (1995) *Gifted Education: Identification and Provision.* 1st ed. London: David Fulton

George, D., (2003) *Gifted Education, Second Edition: Identification and Provision (Resource Materials for Teachers).* 2nd ed. London: Routledge

Munro, J., (2012) *Effective Strategies for Implementing Differentiated Instruction.* London, ACER Research Conferences

Shabani, K., Khatib, M. & Ebadi, S., (2010) Vygotsky's Zone of Proximal Development: Instructional Implications and Teachers' Professional Development. *English Language Teaching,* 3(4), 237-248

Taber, K., (2007) *Science Education for Gifted Learners.* 2nd ed. London: Routledge

Tomlinson, C., 2001. Differentiation of Instruction in the Elementary Grades. [Online] Available at: https://www.ericdigests.org/2001-2/elementary.html [Accessed 16 September 2017].

White, K., Fletcher-Campbell, F. & Ridley, K., (2006) *What Works for Gifted and Talented Pupils: A Review of Recent Research,* London: National Foundation for Education Research

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