Quick Information Guides for Educators



SNAPshot No 1 How do I increase challenge in the curriculum for highly able pupils?





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How do I increase challenge in the curriculum for highly able pupils?

Increasing challenge for highly able pupils in your class can sometimes seem like a daunting task, but do not be deterred! This leaflet very briefly outlines some ideas for schools and teachers that emerged from a project that SNAP completed in partnership with schools and teachers in a local Scottish education authority (See SNAP publication "Increasing challenge in the curriculum: Examples from practice in Nursery, Primary and Secondary Schools." www.ablepupils.com). These examples demonstrate that there are simple ways to help all children in your class, no matter what their educational needs are, to get the most out of the lessons you teach and the activities they complete. This leaflet contains worked examples developed by teachers across all three levels of the curriculum; Pre-Five, Primary and Secondary to help you implement these ideas in your own school or class.

WHERE DO I START?

Find your pupils!

Part of the challenge of starting a new activity or project may well be deciding who participates. Some schools may choose to select students they feel would particularly benefit from additional challenge but sometimes there are practical limitations on what can be offered. For example, one secondary school in this project could only conduct the activities they wanted to offer out of school hours so they chose pupils who could commit to this additional time. Other schools decided to use the project as a whole class project and delegate subgroups of similar ability pupils to work on different aspects of the topic. This provides the whole class with a shared collaborative learning experience but in parallel allows differing levels of challenge as appropriate and the opportunity for pupils to work with like-minded peers.

Find your topic!

Starting need not be as intimidating as it seems. Many groups in the project started by finding a new topic of shared interest to the pupils and other classes developed projects from existing areas of the curriculum. In one nursery staff observed the types of toys the children were playing with and they then based their topic selection on these observations, leading to a project on transport.

Sometimes teachers helped guide the topic of interest. For instance, one primary group chose to study microorganisms, which was an extension from their curriculum topic on bacteria, and a secondary group chose to focus on employability and career skills as these were areas of increasing importance to them as they selected subjects for further study and considered their futures.

How do I develop the topic?

It is important to acknowledge and build on existing good practice in your classroom and school and the years of experience you will already have as an educator. In addition to this there are a variety of resources that may be useful or provide helpful frameworks for developing your activities. For example, some of the groups involved in the project decided to use the 'Thinking Actively in a Social Context Wheel' (TASC wheel http://tascwheel.com) framework in order to support the pupil's learning and project development. The schools that used this approach felt that the TASC wheel provided a good visual representation of the steps involved in developing a project.

These are:

- 📌 Gather and Organise What do I know about this?
- ridentify What is the task?
- Renerate How many ideas can I think of?
- Pecide Which is the best idea?
- Timplement Let's do it!
- 🔭 Evaluate How well did I do?
- Communicate Let's tell someone!
- Learn from Experience What have I learned?

How do I increase the level of challenge?

Narrowing and Widening

Increasing the challenge for your pupils can involve narrowing or widening the topic area depending on the level and number of pupils involved. For example, two nurseries started with transport as their main topic and narrowed this to airplanes and construction vehicles respectively as the children showed the most interest and knowledge in this area. This narrowing allowed more detailed questions and research to take place, therefore increasing the challenge.

Likewise widening the topic can provide an alternative way for challenge to be introduced. In some of the primary classes using a whole class approach in this project, the teacher identified a higher ability group to work together and selected a more challenging sub topic of the project for them to research together. Working with likeminded peers on the topic allowed for a higher level of discussion, engagement and learning to take place. At the end all the subgroups in the whole class came together and shared their learning. This gave an opportunity for everyone to share their knowledge and understanding and to benefit from the differing levels of learning.

Dealing with difficulties

Like all learning activities, the likelihood is that your pupils will come across difficulties during the research and development of a group project like those discussed in the report. Some common problems seen in the project included children having difficulty working in teams; this was particularly true when the pupils were allowed to work with their friends as then the pupils were not necessarily working at the same ability level and challenging each other. Another common difficulty that was encountered related to how the pupils decided to divide up the work, both in terms of dividing the work between the members of the groups and also in dividing the work within the topic itself. These types of problems need careful scaffolding to help the pupils negotiate the difficulties and successfully complete their activities. Providing challenge for highly able pupils can be both on an academic and interpersonal level! One group of pupils found they were duplicating tasks or tasks were not being successfully completed. With the support of the teacher they successfully solved this problem by agreeing to create a task list and when each task was completed, they signed their names next to the task.

Teachers reported that lack of time was the biggest difficulty they experienced during the project. Considering how this approach may fit within your own curriculum and whole school planning rather than necessarily as an additional activity may help ease the challenges in terms of time limitations.

How do I solidify the learning and concepts?

It is very important for the pupils to have the opportunity to reflect on and communicate with others what they have learned. Not only does this also help to solidify the knowledge and concepts in their minds, it also offers the pupils the opportunity to have a greater level of ownership over the knowledge collected.

There are various ways of presenting knowledge and concepts. All of the groups involved in the SNAP project were invited to the University of Glasgow in order to present their topics to their peers and other teachers, the SNAP team and University staff. Some students presented their projects using a power point presentation; another made a video to illustrate their work whilst another created a pin board detailing what the group had achieved. Having the opportunity to disseminate the findings of their learning to others allows for a range of skills to be developed and highlights the importance of "team working" – some highly able pupils deepened their cognitive learning about the topic, some honed their technical knowledge and skills by creating the presentation using various forms of media while others enhanced their public speaking ability through delivering the presentation.

Some groups were able to take their learning further by inviting experts to visit them in their school while they were conducting their projects. One group who were researching microorganisms invited scientists from the Wellcome Trust to visit their school and conduct workshops with the children. This offered a great opportunity for pupils to work with "experts" who were willing to share knowledge and information. Another group had a contact within Prestwick Airport and they utilized this relationship to arrange for the children conducting the project on transport to visit the airport. This brought the learning activities that had been happening in the nursery to life for the pupils. The group who were exploring enterprise skills took their engagement with others in a completely different way and made cards to sell at a local bake sale, thus engaging with the community through the development of a product while raising money for charity at the same time. These activities allowed the pupils to see a purpose to their learning and it is important to note that the majority of pupils involved highlighted that the reflection and dissemination activities were their favourite part of the process.

But wait! I'm still stuck for ideas for open ended topics...

It can sometimes be tricky finding topics for highly able pupils that are age appropriate. To help you out, here are some ideas from previous projects:

Pre-Five Transport Construction Seaside Mapping where we live

Primary Microorganisms Enterprise Food Journeys What is in our food? Secondary

Employability Enterprise Charity

So in Summary...

Here is a checklist of the points covered above. If you would like to know more about the school activities involved in this SNAP project please see the full report "Increasing challenge in the curriculum: Examples from practice in Nursery, Primary and Secondary Schools". This report is available to download free at **www.ablepupils.com** where you will also find a number of other reports/guidance documents relating to high ability.



Identify which students would benefit from increased challenge

Choose who should participate in the project; would this be the whole class or a selected group of high ability pupils for this task?



Find a topic of interest, linked to the existing curriculum or of the pupil's own choosing



Explore pupils existing knowledge of topic i.e. through discussion or through pre-activities



Narrow or widen the focus appropriately



Support any learning needs that are identified and scaffold any difficulties that arise



Draw on any opportunities to illustrate the learning with a trip, or visit from experts in the chosen area



Give an opportunity for students to reflect on, and share with others, their learning through presentation to a wider audience

Quick Flowchart for Challenge





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