5:EXTENSION

What do we mean by extension?

When thinking of introducing extension in your school, first ensure that colleagues are agreed on a definition.

INTRODUCTION

Extension is the term for a wide variety of methods of providing stimulation, more challenge, and/or greater pace for able pupils. As such, it can be said to include the process of **acceleration**. It is not the same as 'follow-up work', which is often a requirement to do 'more of the same', to continue using the same resources, for example the next textbook in a scheme, or to show more of the same evidence of knowledge, skills or concepts.

'More of the same' is likely to demotivate pupils, who may come to dread being given more work of the same kind as their only likely reward for working hard. Progression should be in the forefront, with the extension pitched at an appropriately 'higher' level than existing understanding, skill or knowledge. So, too, must continuity, in terms of how extension relates to provision for the general class or the cohort. Masterclasses, clubs, and other out-of-school opportunities may also become 'extensions', if they are well designed and keep these aspects in mind,

'Extension' is in many ways a term preferable to 'differentiation'. This is because, in the minds of many teachers, 'differentiation' has come to mean an approach that compensates for pupils' perceived deficiencies. In other words, it has taken on negative connotations, and seems to be about narrowing educational opportunities rather than increasing entitlement. It may also may have become associated with the time-consuming business of identifying individual differences, and the labour-intensive work of planning and teaching to those differences. To many, the word 'differentiation' suggests the design of different tasks, course materials, or individual worksheets for different pupils in a classroom or cohort, and thus a term particularly applied to classroom work. It is therefore important that any planning for extension should not overlook opportunities that lie outside the classroom or the school.

WHY IS EXTENSION AN IMPORTANT FOCUS IN THE EDUCATION OF GIFTED AND TALENTED PUPILS?

- Able children need as much challenge, stimulus and 'stretching' as other pupils. Unless their needs are addressed, there can be a tendency for able pupils to be confined to the core National Curriculum. Moreover, teachers may assume, especially in mixed ability classrooms, that able children will 'find their own level'. Such a belief is not supported by research evidence.

- Some able children, despite their ability, are not used to encountering risk, or they are not happy with it. They may fear failure, or grow too used to always succeeding. It is important that all highly able children are given opportunities to meet difficulty and failure; only thus can they make steps forward in their learning.

- The DfEE White Paper *Excellence in Schools* (1997) does not mention enrichment or extension in its suggestions for improving provision for the more able, but the Education and Employment Committee (1999) did consider differentiation. Witnesses to the committee were agreed on the value of good differentiation in class teaching.
- There is an ongoing debate about the comparative merits of the various types of differentiation. This will have an inevitable impact on schools considering their provision for the highly able. Such schools would do well to become actively involved in this debate.

WHAT ARE THE KEY ISSUES TO CONSIDER

When a school is considering the use of extension it obviously has to decide which pupils are to receive it. This implies consistent, flexible and effective methods of acting on the results of assessment in all contexts, at the levels of the classroom and of the whole cohort. Eyre (1997) discusses methods of ascertaining which pupils could be challenged further:

- Pre-test or other formal assessment.
- Classroom questioning.
- Brainstorming.
- Setting an open task.
- Concept mapping.
- Using a quiz.
- Building on existing evidence.

Some of these are practicable at the 'macro' level. They can be used before a cohort or year group moves on to new units of work, as long as schemes of work are appropriately modular so that shifts between groups or sets are possible. Some methods may be more suited to use at 'micro' classroom level. For example, they can establish future groupings or 'levels' of work within individual classes when a new project, block of work, or topic is broached.

It is also important to encourage seemingly 'average' pupils to show unexpected ability. Since hidden abilities cannot always be established by assessment, teachers should offer more challenge where possible, at least in the classroom context:

- Sometimes to a whole group
- Sometimes to a targeted group
- Sometimes to those who work at speed
- Sometimes to those who want the challenge.

As long as a real mix of these methods is used, with sensitivity, it should oblige lazy and unmotivated pupils to experience challenge from time to time, while also ensuring that slow workers are not disadvantaged on every occasion. At classroom level, Eyre (1997) advises teachers to plan more challenging activities and tasks first. Only then should they decide which pupils should tackle them, selecting from the list of methods above.

- Planning for the most able as part of general planning is far more manageable than if it takes place in isolation. It is also more likely to address progression and continuity effectively. Planned outcomes for able pupils should be connected clearly to the 'standard' learning outcomes that have been decided upon.

- Planning for extension can easily be included in existing planning methods. There are several ways of doing this, explained in more depth in Eyre (1997) and Teare (1983). In the planning documents, the method used may be the 'All must, most should, some could' model. This outlines the core concepts, skills, or knowledge to be achieved by all, with extensions that should or could be attempted by all who succeed. Alternatively, documents can set out a matrix of columns with headings which indicate concepts, skills, attitudes, knowledge and resources. Extensions for the more able would be included in each column or in a further column.

  There are two factors, however, that have to be borne in mind. The first is that in the case of the highly able there should be particular attention to concepts, skills, attitudes and resources. Teachers responsible for an area of the curriculum should ensure that they are aware of what constitutes the essential ingredients of ability, as opposed to knowledge, in their subject. If they develop lists of the pivotal skills, concepts, attitudes, etc, they should emphasise process rather than content. Teare (1983) presses this point, and recommends that some kind of 'skills-base' or agreed 'hierarchy of thinking skills' be used to ensure that more able pupils are indeed challenged. A taxonomy such as Bloom's, for example, promotes such higher order skills as speculation, inference, judging, prediction, hypothesising, and synthesis. Eyre (1997) similarly argues that well-designed extension tasks promote such abilities as independence, critical thinking, creative thinking, problem-solving skills, reflection, motivation and self-knowledge.

  The second factor is that not all types of extension can be planned for, at least not in longer-term documentation such as schemes of work. It is right that should they not be, because effective teachers notice opportunities to extend pupils in the course of lessons and tasks. The following methods, however, may be planned in some detail:

- **Extension by resource**
  Teachers should assess, in advance, in what ways some resources may be 'more challenging' than others. An obvious example is the readability or complexity of a text, but there are many others. One such is a tool or piece of equipment that requires more dexterity or technical expertise than another, to complete a task successfully. Another is a book which might take more able pupils along a 'different', and/or faster, route in their learning. Teachers should beware of being too conservative in their view of what constitute suitable resources for more able pupils. There are still relatively few producers of materials and published resources aimed specifically at the highly able; the most effective materials and resources are of a high quality, and are often those designed, written or provided by thoughtful teachers.

Extension by work rate or pace
One form of this, of course, is **acceleration**. Gifted and talented students often work and think faster than their peers, and tasks and extensions need to be designed ahead of time to take account of this fact. Teare (1997) argues that 'For at least a reasonable proportion of the week… the able pupil should be working with urgency, completing the large volume of work (in quality terms rather than just quantity) of which he or she is capable.'

Those who are capable of working fast should be encouraged to do so, and this will entail thoughtful forward planning on the part of the teacher. Above all, they should not become demoralised by repetitive tasks or a seemingly never-ending stream of 'further work' ahead of them. For example, tasks or work units can be designed to be 'telescoped' if and when desirable. Freeman (1998) suggests 'own-time reward' systems i.e. opportunities to develop existing work into an independently undertaken project or further research. This should not, however, be equated with 'letting pupils get on by themselves' for long periods of time. Intervention and support are likely still to be required. The danger of this method is fragmentation. Work and learning can get 'out of synch' between individuals or groups, and/or the highly able can experience long periods of activity with no discussion with the rest of the class or the teacher.

Extension by task or input
You can design tasks, lessons or even blocks of work that are in essence more challenging or difficult than those allocated to other groups, and/or in which the starting point is 'higher'. The danger, again, may be fragmentation of teaching and learning within a group or class.

Extension from a core
This uses the 'All must, most should, some could' planning format. From the 'core', pupils may have the extension work set for them, or may be given a range of options for extension work from which to choose. Difficulties associated with this method are that slow and unmotivated pupils, however able, may not always reach the 'higher-level' work, and/or that the 'core' may be set too low for them in the first place. A common starting-point often works well in a classroom, giving all pupils, whatever their ability, a sense of inclusion. Nevertheless, such tasks should be designed in an open-ended way, allowing for a wide variety of individual responses, if more able pupils are to be suitably engaged and challenged. Beware, however, of the needs of those able pupils who require more structure and guidance.

- Other forms of extension may be more usefully considered lesson by lesson, task by task, or immediately before starting individual blocks of work. Such forms might include:

Extension by individual negotiation

Pupils might negotiate the nature of the work they are to do, or the ways in which they might present its outcomes. In any case, there are some areas of learning, such as technology and other process-based subjects, where pupils have to demonstrate competencies rather than knowledge, By their nature , these promote a need for pupils to develop individual work. This approach is especially for those pupils who not only have good ideas but good organisational skills. Studies in primary schools have shown that pupils can be competent at an early age in practically managing their daily activity schedules. Some pupils have been found to be particularly good at tutoring other children, or willingly accepting help from classroom peers who are 'experts'. Some initiatives, based on a tutorial plus research format, have successfully taught older pupils to manage work units for themselves (Weston, Taylor, Lewis and MacDonald, 1998). Such possibilities could perhaps be more widely exploited, as they encourage pupils to be independent minded and help teachers in the management of their own time. They can also offer pupils a reward for high achievement.

Extension by level of support

It should not be assumed that extension tasks always imply the need for less guidance, structure or personal support when they are administered in class. In short, they are not to be confused with such ideas as 'open-endedness'. As Teare (1997) remarks, 'Overdirection in teaching is to be avoided but the teacher retains the key role of managing the classroom for the benefit of all pupils.' Some more able pupils have problems with organising themselves and/or their tasks. 'Scaffolding' their learning can help tremendously, and it does not displace challenge, or the need for pupils to take risks. Research shows that many pupils feel they need guidance on what their short-term learning targets and their longer-term goals should be. Openly explaining the criteria for their assessment, and even negotiating the criteria, helps provide further structure and guidance. In addition, timely interventions and challenges from an adult will prevent the tendency of some able pupils to 'coast', to confuse themselves, or to get overwhelmed by meticulous detail in their thinking.

Extension by dialogue

Extension opportunities can be created and cultivated orally, although this aspect is often overlooked. Teachers can use 'more difficult' vocabulary and more complex language to extend the more able. The challenge in any learning situation can be extended by probing questions, effective discussion between teacher and pupil, well-constructed opportunities for collaborative discussion between pupils, and well-timed, thoughtful interventions by the teacher. Eyre (1997) lists four generalised ways in which, during almost any task, teachers might challenge pupils to 'extend the boundaries' of what they can achieve. Orally, they could suggest that students:

- 'take the concept further
- explore the idea more broadly
- interpret the same task differently
- learn an additional concept'.

- Some forms of extension may seem to demotivate those who are not given them. They may perceive extension tasks as 'more exciting' or 'more interesting' than their own. This may simply be because teachers' expectations of the 'less able' were set too low in the first place. Understandably, teachers may worry that they are not covering content specified in the National Curriculum if they do not ensure that all or most pupils cover it, whatever their existing 'level' of knowledge or ability. Perhaps one solution is that more pupils should do as a matter of course what was previously regarded as 'extension work'. Alternatively, tasks for 'average' students might be designed in a more stimulating way. In any event, teachers need to examine honestly and debate openly their expectations of all students and their perceptions of pupils' potential as individuals. They may also need to study what constitutes effective and stimulating design of tasks.

- There are many models of generic task design that build extension and challenge into them.

Eyre (1997) lists:

- planning/doing/reviewing; working from difficult text; using a range of text or information; recording in an unusual way; role play; problem solving and enquiry tasks; choosing how to handle content; decision making, e.g. what should be included and what should be omitted; open-ended tasks that do not have a set answer; setting the question/s to which teachers have provided the answer; using only one text or artefact; doing the task planning; time-restricted activities; developing metacognitive knowledge; using Bloom's higher order thinking skills; employing study skills using DARTs (Directed Activities Relating to Texts); using technical language; working with experts; considering philosophical issues; and using Booktalk.

Teare (1997) lists:

- 'putting it all together', e.g. linking different processes; obeying a time restriction; 3D thinking rather than 2D thinking in mathematics or science; following a task with less structure; carrying out an operation involving higher level vocabulary; employing several senses at once, e.g. watching a video while listening to a commentary; using material with an abstract quality; using information in a confused order; withholding information for later use; tackling a problem that is restated in different ways; undertaking a task unrelated to previous experience; carrying out actions that are technically difficult; using large amounts of dense information; encountering 'disguised' ideas and concepts, e.g. in the form of symbol or metaphor; and being obliged to use unfamiliar methods.

George (1995) lists:

- using multi-sensory approaches; independent work; decision-making tasks; tasks undertaken in a variety of ways; use of higher level cognitive processes; self-designed and negotiated tasks; and varied forms of presentation of outcomes.

Freeman (1998) lists:

- placing new knowledge within a conceptual framework; problem solving; exploring abstract as well as basic concepts; using high quality texts with high reading levels, demanding complex responses; using technical language; exploring play with words; and using questioning.

WHAT MIGHT WE DO IN SCHOOL?

- If you are considering with colleagues how to introduce extension, it is probably advisable to do so in relation to the overlapping topics of differentiation, acceleration, enrichment and pupil grouping. Beware, as indicated above, of considering extension only in relation to highly able pupils: from time to time, all pupils should be offered challenge and opportunities to exhibit their potential.

- Decide, early on, whether you are considering extension at the level of planning and/or of classroom practice. You may then wish to focus on some parts of information and advice in the sections above more than others.

- Audit, honestly, which kinds of extension you and colleagues use most often, perhaps using checklists based on the lists above. Compare your choices with those of colleagues. Examine, honestly, the reasons for these choices: their advantages, disadvantages, and the influence of personal habit or insecurities on the choices made.

- Whatever your main focus – planning or classroom practice – collect and study examples of existing planning, the designs of tasks, and/or work by pupils. Identify what forms of extension were involved in each case. Review how successful these methods were. Share, with colleagues, ideas for any improvements.

- You might like to propose that at least one kind of extension not usually or often employed by you or colleagues be incorporated in aspects of forthcoming planning and/or classroom practice If these *are* tried out, arrange to meet to evaluate how successful they were.

- Decide with colleagues whether some form of checklist of methods of differentiation and/or extension might be useful, as a reminder of all the options open to them when planning and teaching.

- Ensure that the topic of differentiation is considered regularly as part of wider discussions about school provision for the highly able and for children of all abilities.

RECOMMENDED READING

Dickinson, C., 1996. *Effective Learning Strategies*. Stafford: Network Educational Press.

Education and Employment Committee, 1999. *Third Report, Highly Able Children, Volume I.* London: The Stationery Office.

Eyre, D., 1997. *Able Children in Ordinary Schools.* London: David Fulton.

Freeman, J., 1998. *Educating the Very Able: Current International Research.* London: OFSTED.

George, D., 1995. *Gifted Education: Identification and Provision.* London: David Fulton.

McNamara, S., and Moreton, G., 1997. *Understanding Differentiation: A Teachers Guide.* London: David Fulton.

Teare, J.B., 1983. *A School Policy on Provision for Able Pupils.* Oxford: NACE.

Teare, J.B., 1997. *Effective Provision for Able & Talented Children.* Stafford: Network Educational Press.

Weston, P., Taylor, M., Lewis, G. and MacDonald, A., 1998. *Learning from Differentiation: A review of practice in primary and secondary schools.* Slough: NFER.

SEE ALSO LAUNCHPADS ON

Acceleration
Differentiation
Enrichment
Pupil grouping