



## 5 : EXTENSION

What do we mean by extension?

When embarking on any consideration of 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 more 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’, continue using the same resources, e.g. 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 homogeneous work as their only likely reward for working hard. Rather, progression must be addressed, i.e. how extension is pitched at an appropriately ‘higher’ level than existing understanding, skill or knowledge. So, too, must continuity, i.e. how extension relates to general class or cohort provision. If well designed bearing these aspects in mind, masterclasses, clubs and other out-of-school opportunities – often described as **enrichment** opportunities – may also become ‘extensions’.

In the context of educating the highly able, if not that of educating all pupils, ‘extension’ is in many ways a preferable term to ‘differentiation’. This is because, in many teachers’ minds, ‘differentiation’ may have come to mean an approach that compensates for some or all pupils’ perceived deficiencies, i.e. has taken on negative connotations, and seems to be about narrowing educational opportunities rather than increasing entitlement; or it may have become associated with the time-consuming business of identifying pupils’ individual differences and the labour-intensive work of planning and teaching to those differences. Also, ‘differentiation’ suggests to many the design of different tasks, course materials or individual worksheets for different pupils in a classroom or cohort, even though there are many other ways of providing extension opportunities than these (see below).

Some will regard 'extension' as a term particularly applied to classroom work; however, aspects such as planning for extension, in teams or departments, and opportunities for extension outside the classroom or school, should not be forgotten.

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

- Able children need as much challenge, stimulus and 'stretching' as other pupils. There can be a tendency, unless their needs are addressed, for able pupils to languish in the core National Curriculum. Also in classrooms, especially mixed ability classrooms, teachers may assume that able children will 'find their own level'. This belief is not borne out by the research.
- Some able children, despite their ability, are not used to, or happy with, encountering risk. 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.
- Although the DfEE White Paper *Excellence in Schools* (1997) does not mention extension in its suggestions for improving provision for the more able, the Education and Employment Committee (1999) did consider **differentiation**, of which extension is one extremely common and important manifestation. Most evidence given to the Committee supported the use of enrichment and extension to improve provision for the more able.
- 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 get actively involved in this debate.

### **WHAT ARE THE KEY ISSUES TO CONSIDER?**

- Consideration of extension should not be undertaken without first pondering how you decide who should do extension work. This partly means establishing consistent, flexible and effective methods of using and acting on assessment in all contexts, at classroom and whole cohort level. Some methods used to ascertain who could be challenged further in future work, discussed in greater detail in Eyre (1997), are:
  - 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, e.g. 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, e.g. to establish future groupings or ‘levels’ of work within individuals’ classes as a new project, block of work or topic is broached.

A consideration of who should do extension work should also take into account the importance of encouraging seemingly ‘average’ pupils to show unexpected ability. Since hidden abilities cannot always be established by assessment, teachers, where possible at least in the classroom context, should offer extension opportunities:

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

A real mix of these methods, used with sensitivity in class 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 extension tasks first. Only then should they decide which pupils should tackle them, selecting from the list of methods above.

- Planning extension tasks, modules of work and course materials as part of more general lesson planning or the general planning of schemes of work is far more manageable than planning for extension in isolation. In addition, it is more likely to lead to planning that addresses progression and continuity effectively. Planned outcomes from extension work should be connected clearly to the ‘standard’ learning outcomes that have been planned for a cohort or class.

Extension planning 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). Planning documents may be written following the ‘All must, most should, some could’ model, i.e. showing 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 be written using a matrix of columns with headings indicating concepts, skills, attitudes, knowledge and resources, with extensions for the more able included in each column or in a further column.

Two things should be borne in mind, however. First, particular attention should be paid – as far as the highly able are concerned – to concepts, skills, attitudes and resources. Subject teachers should ensure that they are aware of what constitute the essential ingredients of ability (as opposed to knowledge) in their curriculum area. If they develop lists of the pivotal skills, concepts, attitudes etc., then, Teare (1983)

urges, 'process rather than content can be stressed and the needs of all children, but particularly the most able, ... met' when planning. He thus recommends that some kind of 'skills-base' or agreed 'hierarchy of thinking skills' is used when planning to ensure that more able pupils are indeed challenged. A taxonomy such as Bloom's, for example, promotes, beyond knowledge and comprehension, such higher order skills as speculation, inference, judging, prediction, hypothesising, synthesis, etc. 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.

Second, not all types of extension can be planned for, at least not in longer-term documentation such as schemes of work. (Nor should they be: effective teachers will notice opportunities to extend pupils as lessons and tasks progress.) 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, e.g. a tool or piece of equipment that requires more dexterity or technical expertise than another to be used successfully; or a different book 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. 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.' It needs thoughtful forward planning to ensure that those who are capable of working fast are motivated and enabled to do so by what they are subsequently given to do, not simply 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; or 'own-time reward' systems can be designed (Freeman, 1998), i.e. opportunities to develop existing work into an independently undertaken project or further research. (Note however that this should not be equated with 'letting pupils get on by themselves' for long periods of time: effective interventions and support at classroom level are likely still to be required.) The danger of this method is fragmentation, i.e. 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, students may be set the extension work they should undertake, 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; but plenty of 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 undertaking individual blocks of work. These might include:

### **Extension by individual negotiation**

i.e. pupils might negotiate the nature of work undertaken, or the ways in which they might present its outcomes. Some subjects, e.g. technology and other process-based subjects, where pupils have to demonstrate competencies rather than knowledge, in any case promote a need for pupils to develop individual work. However, this approach is especially effective with many able pupils in a wide range of subjects, especially if those pupils not only have good ideas but good organisational skills. Although secondary school teachers may be sceptical about this form of extension, studies in primary schools have shown that pupils can be competent at an early age in practically managing their daily activity schedules; some were shown competently tutoring other children, or willingly accepting help from classroom peers who were 'experts'. Some initiatives have successfully taught older pupils to manage work units for themselves, based on a tutorial plus research format (Weston, Taylor, Lewis and MacDonald, 1998). Such possibilities could perhaps be more widely exploited, as they encourage independent-mindedness and help teachers with the labour intensiveness of teaching. They can also be a reward offered for high achievement.

### **Extension by level of support**

However, it should not be assumed that extension tasks by definition always, and with all more able pupils, require less guidance, structure or personal support when they are administered in class – features often, wrongly, confused with such ideas as 'open-endedness'. As Teare (1997) says, '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 does not displace challenge, or demands that they should take risks. Research shows that many feel they need guidance on what their short-term learning targets and their longer-term goals should be. Explaining the criteria for their assessment openly, and even negotiating the criteria, helps provide further structure and guidance. In addition, timely interventions and challenges from an adult will prevent some able pupils’ tendency to ‘coast’, to confuse themselves if they have somewhat ‘butterfly minds’ or to get overwhelmed by meticulous detail in their thinking.

### **Extension by dialogue**

Extension opportunities can be created and cultivated verbally, although this aspect is often overlooked. Teachers can use ‘more difficult’ vocabulary and more complex language to extend the more able. Differentiated and probing questions, effective teacher-pupil discussion, well-constructed opportunities for collaborative discussion between pupils and well-timed, thoughtful teacher interventions can extend the challenge in any learning situation. Eyre (1997) lists four generalised ways in which, during almost any task, teachers might challenge pupils to ‘extend the boundaries’ yet further of what they can achieve. Orally, they could suggest 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 not required to undertake it, who may perceive extension tasks as ‘more exciting’ or ‘more interesting’ than their own. This may simply be because teacher expectations of the ‘less able’ were set too low in the first place. Understandably, teachers can 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. However, perhaps one solution is that more pupils should do what was previously regarded as ‘extension work’ as a matter of course. Alternatively, perhaps attention should be devoted to designing tasks for ‘average’ students 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, stimulating task design.
- There are many models of generic task design that inbuild extension and challenge.
- 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 extension with colleagues, it is probably advisable to consider it 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: all pupils should be offered challenge and opportunities to exhibit their potential from time to time.
- Decide, early on, whether you are considering extension at the level of planning and/or of chalkface, 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, task designs and/or pupil work. Identify what forms of extension were involved in each case. Review how successful these methods were. Share, with colleagues, ideas for any improvements in future similar contexts.

- You might like to propose aspects of forthcoming planning and/or classroom practice that might incorporate at least one kind of extension not usually or often employed by you or colleagues. If these suggestions form part of departmental or team discussions, arrange to meet to evaluate how successful such initiatives were, once they have been tried out.
- 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 school/departmental 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**