



## ACCELERATION

**What do we mean by acceleration?**

**When considering the place of acceleration in your school, first ensure that colleagues are agreed on a definition.**

### **Acceleration:**

Acceleration is a system of allowing students an express route through the usual pace of schooling. In the USA it can entail 'grade skipping', but in the UK it is rare for an individual student to jump a whole year of schooling. Acceleration can take two forms:

- Allowing students to take one or more GCSEs early and thus to move on, in advance of their peers, to A-level work and university modules. When qualifications are taken early this is known as fast tracking.
- Acceleration of individuals, for example allowing them to work with older students for some sections of the timetable or in some subjects.

Acceleration, as we are using it here, should not be confused with a similar term, *accelerated learning*, which refers to approaches to education supposedly founded on 'brain-based' learning. These approaches may have some empirical usefulness, but they are increasingly subjected to scrutiny and criticism for their over-simplified understanding of neurological functioning.

Instead, acceleration may be defined in terms of rate of progress through the prescribed curriculum, or considered as a way of providing flexibility.

Feldhusen (1989) suggested that 'Acceleration is a misnomer; the process is really one of bringing gifted and talented youth up to a suitable level of instruction commensurate with their achievement levels and readiness so that they are properly challenged to learn the new material.' (p.8).

## Enrichment and extension

The process of acceleration, depending on its design, can be a form of enrichment.

**Enrichment**, as Teare (1997) points out, has been variously described as

- 'A higher quality of work than the norm for the age group
- Work covered in more depth
- A broadening of the learning experience
- Promoting a higher level of thinking
- The inclusion of additional subject areas and/or activities
- The use of supplementary materials beyond the normal range of resources.'

**Extension** was defined by the Education and Employment Committee (1999) as 'the pursuit of greater depth, either within each subject or *through faster than average progression through a subject to reach a higher level*'.

Two or three of these descriptions, for example 'A higher quality of work...'; 'promoting a higher level of thinking'; and 'faster than average progression' may be said to overlap with the concept of acceleration.

According to the DfeS Key Stage 3 Science site, ([http://www.standards.dfes.gov.uk/keystage3/downloads/agt40\\_mod4\\_sci.pdf](http://www.standards.dfes.gov.uk/keystage3/downloads/agt40_mod4_sci.pdf))

'Able pupils need opportunities for:

- enrichment – applying skills and understanding to a wider range of problems, including unfamiliar contexts, and bringing together different strands of the subject;
- extension – working in greater depth, with increasing complexity, subtlety or abstraction;
- acceleration – provided by extending the 'pitch' of learning objectives to those expected of older pupils, or introducing objectives from later years.'

## WHY IS ACCELERATION AN IMPORTANT FOCUS IN THE EDUCATION OF GIFTED AND TALENTED STUDENTS?

By definition, gifted and talented students, or at least many of them, are characterised by a tendency to develop and learn at a faster rate than their peers, which makes acceleration well suited to their needs. It is also argued that at least some highly able students become bored, impatient and even disaffected if they are obliged to engage in lessons at the same rate or level as their peers. The White Paper *'Higher Standards, Better Schools for All'* (2005) made explicit mention of the need to stretch the gifted and talented in this way.

The Employment and Education Committee (1999) accepted that acceleration, properly managed, could work, and that, indeed, it could be 'the best solution for particular individuals'. Some witnesses to the Committee strongly advocated acceleration as a general policy in schools, as long as it was administered flexibly. Some schools,

including several in the independent sector, argued to the Committee that fast tracking, in the sense of allowing students to take GCSEs (and A levels) early, provided more challenge for able students. They felt that the GCSE, at that time, was not challenging enough. The Committee reported that there was a preference among the majority for such initiatives as allowing individuals to work with older students in certain subjects, or for part of the school week. Many witnesses felt that extension and enrichment were in most cases more appropriate.

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

- The wishes of students and parents should be sought and taken into account in any decision to introduce or revise systems of acceleration. Some may choose, for legitimate reasons, not to be involved.
- Highly able students are a disparate group, and it is unlikely that one solution will suit the needs of all. Their aptitude for an accelerated learning programme should be carefully considered, and part of this process will be to judge whether or not they are actively engaged and motivated in their current settings. If they are, acceleration may not be necessary; careful differentiation in other ways, including the use of **enrichment** or **extension** activities in age-peer groupings may be more appropriate.
- The development of children's ability in many subjects is not totally or largely linear. There are other ways of promoting students' potential than through accelerated pace or 'vertical' challenge in these subjects, for example through enhanced depth or breadth, or the use of additional resources, as in Teare's list quoted above.
- The majority of 'able' students are able only in one subject or a small number of subjects, or even only in some aspects of one subject, for example dance within P.E. Planning and timetabling for models of acceleration that are still flexible enough for individual students can thus be complex.
- Students may develop late, their abilities may 'plateau', or they may progress at variable rates throughout their school lives. Any system of acceleration must thus be 'modular' if possible, and must be regularly reviewed and its suitability and effectiveness evaluated, so that students might join or leave the programme as appropriate.
- Unless acceleration programmes are expertly designed, there is a danger that accelerated students may 'miss out' on some key concepts, knowledge or skills specified within the National Curriculum. On the other hand, the 'access statement' in the National Curriculum Orders allows students the chance to work in a Key Stage beyond that expected for their peers. In the case of individuals, a detailed programme will be needed for each student.
- If individuals work with older students some of the time, they may miss class lessons in other subjects, which will need to be made up elsewhere. Timetabling constraints are likely to make it hard to accommodate large numbers of individuals in this way.
- It is vital to give due consideration to students' personal, physical, social and emotional development. Children's learning needs may be satisfied by moving them to work with older students, but it will be important to monitor carefully the effect of what might be for them a challenging social setting, with its majority of

more physically or emotionally mature students. Their need for support in other ways may increase, particularly at points of transition from one institution to another. Of interest here is the work of Colangelo and colleagues (2004), who argued that negative effects can be overstated. Indeed, they found that many adults who had been 'accelerated' at school wished that the process had been taken further, and did not feel that the acceleration had been detrimental to their social or emotional development. It must be remembered, though, that this was in an American context, where the acceleration had mostly taken the form of 'grade-skipping'. The best position to take, when decisions are to be made, is to achieve a balance between the value placed on personal factors and the value placed on academic ones.

- The introduction or revision of acceleration procedures will inevitably have repercussions for other students and for teachers. For example, if a number of 'fast track' students in a particular year group are identified and placed in one class, the numbers in the other classes may have to increase. If an accelerated group stays within an existing class, the rest of the class may struggle, finding the pace too swift. Teachers who feel expert in teaching to their usual syllabus may none the less feel ill equipped to teach it in a telescoped form or to teach 'beyond the syllabus'.
- Evaluations of the effectiveness of acceleration programmes are very difficult, and few, if any, have been accomplished with a claim to comprehensiveness and rigour. This is because there are so many variables and aspects to take into account. Obviously, programmes should be evaluated for their impact on accelerated students, but this itself is no simple matter. Comparisons with their 'non-accelerated' peers should include the progress of their learning, their response to acceleration, and their personal development. The programmes should also be evaluated for their effects on every other aspect of school provision, for example their effects on students who are not accelerated. A key issue is whether the design of the programmes is working as intended, in terms of fulfilling short-term targets for students and long-term goals for the school, and cost-effectiveness.
- No acceleration programme should be carried out without a clear whole-school understanding of its targets and goals and the establishment of a regular cycle of review and evaluation.
- Freeman (1998) quotes a useful cautionary checklist of the essential criteria for acceleration: 'Only accelerate when:
  - There is no pressure to accelerate.
  - The student is in the top 2 per cent of intelligence.
  - The receiving teacher feels positive about it.
  - The parents feel positive about it.
  - The student is advanced in the subject area.
  - The student is emotionally stable.
  - The student understands what is involved.
  - The student wants to be accelerated.'

An effective evaluation programme, on the basis of which any necessary changes and improvements can be made, suggests the need for a trial period. Important decisions may have to be made, and they can most confidently be reached where the school knows that the structure is not binding from the outset, and where a well-judged exit strategy is in reserve.

### WHAT MIGHT WE DO IN SCHOOL?

If the role of acceleration is being considered in your school, examine the above issues carefully. Rather than investigate large-scale change at once, take a real or hypothetical case study and use it as a focus for discussion. This will enable you to unpick the potential advantages and disadvantages of opening the way to acceleration. For example:

- Reflect on the circumstances of an individual student, real or imagined, who is either someone of 'all-round' high ability or has high ability in a particular area of the curriculum. Decide upon a form of acceleration which you think would be appropriate for this student, and think through the repercussions on her or him, on similar individuals for whom one might argue a case, and on peers, teachers, parents, and departmental and whole school planning.
- Alternatively, carry out a similar exercise with sample students who are perhaps 'able' in a subject that is often regarded as well suited to acceleration, for example mathematics, art, or a modern language. Again, follow through all the likely consequences of accelerating these students by teaching them with older students. Aspects to consider are the effect on class sizes and composition; the new kinds of planning for teaching that would be needed; the social and personal effects on the students, their peers of the same age, and the older students; and the potential long-term effects of early entry for examinations where relevant.
- Above all, if you wish to trial acceleration, whether with individuals or with small groups, follow Freeman's checklist (1998). In addition, ensure that such an exercise is publicised as a pilot. Allow plenty of flexibility, and build in:
  - regular monitoring and review
  - clear criteria by which to evaluate the programme's success
  - allowances for adapting elements of the programme itself, e.g. speeding up or slowing down the pace, or inserting or omitting units of work, and
  - opportunities for students to leave the programme altogether, or to participate in a modified form.

### REFERENCES AND RECOMMENDED READING

Callahan, C.M. and Hunsaker, S.L. (1991) Evaluation of acceleration programmes. *In: W.T. Southern and E.D. Jones, ed. The Academic Acceleration of Gifted Children.* New York: Teachers College.

Collangelo, N., Assouline, S. and Gross, M. (2004) *A Nation Deceived: How schools hold back America's brightest students.* Iowa City: University of Iowa.

Department for Education and Skills (1997) *Excellence in Schools*. London: The Stationery Office

Department for Education and Skills (2005) *Higher Standards, Better Schools for All* London: The Stationery Office

Education and Employment Committee (1999) *Third Report: Highly Able Children, Volume 1, 1999*. London: The Stationery Office.

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

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

Van Tassel-Baska, J. (1991) Identification of candidates for acceleration. *In: W.T. Southern and E.D. Jones, ed. The Academic Acceleration of Gifted Children*. New York: Teachers College.

## WEBSITES

- DfES Department for Education and Skills: <http://www.standards.dfes.gov.uk/>
- G&TWISE Support for Gifted and Talented Education: <http://www2.teachernet.gov.uk/gat/>
- NACE - National Association for Able Children in Education: <http://www.nace.co.uk>
- The National Academy for Gifted and Talented Youth (NAGTY): <http://www.nagty.ac.uk/>
- NAGC - National Association for Gifted Children: <http://www.nagcbritain.org.uk/>
- Ohio Association for Gifted Children: <http://www.oagc.com/>
- Queensland Association for Gifted and Talented: <http://www.qagtc.org.au/>
- Specialist Schools Trust: <http://www.specialistschools.org.uk/>
- World Council for Gifted and Talented Children: <http://www.worldgifted.ca/>
- World Class arena - information about World Class tests: <http://www.worldclassarena.org/>

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