IS THE CURRICULUM WORKING?

Summary of the Key Stage 3 Phase of the Northern Ireland Curriculum Cohort Study
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FOREWORD

It has been said of educational research that there is "too much of it – and most of it low quality". Recently the 'Goodison Group' – (a think tank which recommends priorities to the government in the field of lifelong learning) made a plea for educational research to be more like research carried out by commercial companies when launching a new product, asking questions like:

- What is most likely to attract the consumer?
- Should the market place be segmented?
- How can the product best be aligned with customer’s needs?

The crux of the group’s argument is that the voice of the learner has largely been absent from research and, therefore, the educational product is not properly aligned to the needs of the consumer. As a result, education is described as being more like 'the command structure of the old Eastern bloc economies, where goods continued to be manufactured without any proven demand for them'. The Group went on to argue that the effectiveness or otherwise of educational research was dependent on a series of relationships – between researchers, practitioners and policy makers.

The longitudinal research summarised in this leaflet measures up extremely well to the Goodison Group’s requirements. Perhaps uniquely, the study captures the all-important voice of the learner during an important period in their education that often determines how, and what, they will do for the rest of their time at school. In fact it taps into the voice of approximately 2,700 learners and their teachers over the crucial three year period of Key Stage 3. It analyses the perceived appropriateness of the product (the curriculum) in terms of its alignment with the changing needs of the customers (11–14 year olds).

The research, and the review of the Northern Ireland Curriculum which it informs, has come about as a result of an effective alliance between:

- researchers (in this case the National Foundation for Educational Research (NFER);
- practitioners (the management, staff and pupils of 51 schools in Northern Ireland); and
- policy makers (the Council for Curriculum, Examinations and Assessment which commissioned the study; and the Department of Education for Northern Ireland, which funded the study along with the Esmée Fairbairn Foundation).

CCEA wishes to thank the Department of Education Northern for Ireland and the Esmée Fairbairn Foundation for funding this important study. We are grateful to NFER, (and to Dr. John Harland, in particular, who has been the director of the study throughout), for the commitment shown by the research team over the years; for the quality of the research and for the clear messages which it has given to us as policy-advisers about how we must try to better align the product with the views of the customer.

Last, but not least, CCEA extends sincere thanks to the pupils, teachers and managers of the 51 schools who participated in this longitudinal research, which has required considerable commitment.
over the years. In particular we wish to thank the management, staff and pupils of the five case-study schools (and especially the 60 young people who were the main focus of the case studies) for their great patience and endurance. We hope that the outcomes of the research, and the policies and actions that result from it, will prove worthwhile in the longer term to schools, policy makers and the broader educational community both in Northern Ireland and beyond.

The full report, *Is the Curriculum Working? The Key Stage 3 Phase of the Northern Ireland Curriculum Cohort Study* by John Harland, Helen Moor, Kay Kinder and Mary Ashworth is available from The Publications Unit, The Library, NFER, price £25.50. Please make cheques payable to NFER.

Research enquiries to John Harland (jbh3@york.ac.uk).

Gavin Boyd  
Chief Executive  
CCEA
BACKGROUND AND METHODOLOGY

This paper provides a summary of the detailed findings set out in the report, *Is the Curriculum Working? The Key Stage 3 Phase of the Northern Ireland Curriculum Cohort Study*, which has recently been published by the National Foundation for Educational Research (NFER). Commissioned by the Northern Ireland Council for the Curriculum, Examinations and Assessment (CCEA), the research was funded by the Department of Education in Northern Ireland, the Esmée Fairbairn Foundation and CCEA itself. NFER conducted the study. Details of how copies of the full report may be obtained were given in the Foreword.

Aims

The overall aim of the research was to provide evidence of the impact of the whole curriculum as seen from the perspective of the learner. In particular, the project set out to investigate pupils’ experiences of key curriculum design concepts such as:

1. Breadth and balance;
2. Coherence across the curriculum;
3. Continuity, progression and assessment;
4. Relevance;
5. Manageability;
6. Enjoyment; and
7. Cross-curricular Themes.

This summary will provide an overview of the findings in relation to each of these areas.

Research methods

To meet these aims, the longitudinal study drew on a large set of quantitative and qualitative evidence from a sample of pupils in Northern Ireland schools. This sample was carefully selected to be representative of, and statistically generalisable to, a cohort of Key Stage 3 pupils in Northern Ireland. The evidence was collected through:

- **Annual pupils surveys** administered at the end of Years 8, 9 and 10 to a ten per cent representative sample of all Northern Ireland pupils in the 1996 Year 8 cohort (2,694 pupils);
- **Annual school surveys** of the 51 schools from which the pupil cohort was drawn, along with timetables for the years in question;
- **Case-study research** in ten primary* and five post-primary schools, normally comprising two 3.5 day visits to each school per year, which typically involved in each school;

* For the findings from the Primary Phase of the research, see ‘Real Curriculum at the end of Key Stage 2’ Harland et al, 1997, NFER.
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- **Pupil interviews** with the same 12 pupils in each of the five case-study schools (394 interviews);

- **Pupil pursuit** observations and follow-up pupil interviews (37 observed days and 136 follow-up interviews);

- **Staff interviews** with teachers and senior managers (114 interviews); and

- **Indirect data collection** activities, (such as concept mapping) (with 21 pupils in Year 8 and 18 in Year 10).

In addition, the researchers collected the survey pupils’ Key Stage 3 test scores in English, maths and science (according to which pupils were assigned to one of three attainment groupings for purposes of analysis).

To assist the analysis of this data, a typology of different levels of curricular action was used to distinguish between the curriculum as:

- **Specified** by government – (in Programmes of Study);

- **Planned** by schools and their departments – (in timetables and Schemes of Work);

- **Mediated** by teachers – (in lesson plans and classroom teaching);

- **Experienced** by pupils – (their immediate classroom experiences and responses);

- **Internalised** by pupils – (what pupils learn and take away from these experiences).
1 BREADTH AND BALANCE

A broad, balanced and common curricular entitlement was widely accepted to be one of the prime justifications for the introduction of national curricula in Northern Ireland, as in England and Wales.

Time allocation and types of curricula

Evidence of the time allocated by the 51 Northern Ireland schools to different subject areas, however, established that whilst schools may work to a common framework (curriculum as specified), at the level of implementation (curriculum as planned) the Northern Ireland Curriculum (NIC) did not exist as a single entity. In reality, schools offered pupils a variety of Northern Ireland curricula rather than a common curricular entitlement. Overall, in the light of this evidence, arguably few schools could be said to be providing a broad and balanced curriculum. Only four per cent of schools were meeting the minimum percentage time allocations suggested by NICC (1991) in all subjects. The greatest variations were:

- Music, art, PE/games and technology which were the subjects most likely to receive less than the recommended times.

- Languages were prone to the greatest variation, but music, technology, RE, PE and art were each allocated widely varying amounts of time depending on the school.

Further analyses of the Year 10 data revealed six main types of curricula, which were closely allied to particular types of school and were principally characterised by the time allocation to two areas of the curriculum in particular: languages and RE. The types of curricula were classified according to the following characteristics and management category:

- **Languages light**
  - Practical – active curriculum
  - Protestant-managed secondary

- **Languages and RE light**
  - Practical – active curriculum with reduced RE
  - Protestant-managed secondary

- **Languages light/RE heavy**
  - The humanities curriculum
  - Catholic-managed secondary

- **Languages heavy/RE light**
  - The linguistic-scientific curriculum
  - Protestant-managed grammar

- **Languages heavy**
  - The academic-oriented curriculum
  - Catholic-managed secondary or grammar

- **Languages heavy/RE heavy**
  - The academic curriculum with RE emphasis
  - Catholic-managed grammar
For the most part, pupils attend schools largely because of their religious orientation and performance in the Transfer Test (for English, maths and science) rather than on the basis of their needs, interests and aptitudes for the particular type of curriculum these schools offer.

**Teachers’ perceptions of breadth and balance**

Most teachers generally approved of the overall breadth and balance in the NIC and their school’s time allocations to different subject areas. However, a sizeable group of teachers, including several Year 7 teachers expressed concerns about the heavy concentration on the academic areas of English, maths and science at the end of Key Stage 2, and the limited time available for the ‘minority’ subjects.

**Pupils’ perceptions on the lack of balance**

Pupils’ views on the balance of the curricula were fairly consistent across all three years of Key Stage 3.

- Pupils in general – but grammar school pupils in particular – felt that too much time was spent on languages, maths and English.

- Too little time was devoted to practical subjects, particularly PE, IT, the expressive arts, home economics, health education, technology and, in Year 10, careers education.

- Interestingly, it was low-engaged pupils, again especially those from grammar schools, who were most likely to consider that academic subjects were over-weighted and induced boredom.

- Pupils’ reasons for thinking that subjects were over-represented in the curriculum often focused on the allocation of too many periods, topics lasting for too long and lack of relevance.

- Alternatively, the three reasons given for believing that several subjects received too little time were because of:
  - pupils’ enjoyment of the subject – they liked it and therefore wanted more (offered particularly in the early years of Key Stage 3);
  - the relevance of the subject was not reflected in its timetable allocation; and
  - the manageability and quality of learning were impaired because of the time demands.

**Pupils’ views on the need for greater breadth**

To explore perceptions of breadth in the curriculum as experienced, pupils were asked whether there were areas that had not been covered sufficiently. In Year 8, half the pupils thought there were areas that were not covered sufficiently, but in Years 9 and 10, this figure rose to over two-thirds (73 and 69 per cent respectively).

- In each year, PE, IT, languages, drama and PSE-related topics (sex, drugs and health education, first aid, life skills, child care) dominated the list of topics deemed insufficiently covered. The inclusion of languages in this list may appear surprising given that it was stated above that pupils
felt they spent too much time on their language subjects. However, when pupils nominated languages for increased provision here, they were not calling for more of the language they were already studying, but for the opportunity to learn a new language not currently offered to them by their school (e.g., Irish and Spanish were popular nominations).

- Careers education and business studies were also highlighted in Year 10.

- Notably, more grammar school pupils than their secondary school peers indicated that there were areas that they felt had been insufficiently covered in their learning.

The findings indicate that, overall, pupils sought greater breadth and better balance in the Key Stage 3 curricula.
2 COHERENCE ACROSS THE CURRICULUM

This section considers lateral coherence, i.e., pupils’ experiences of linkages across and between the subjects that comprise the curriculum.

Benefit of linkages

In each year, a solid majority of pupils affirmed that the links they perceived between subjects had helped their learning. The most frequently cited reason for valuing cross-curricular links was that they helped pupils learn in more depth or more detail, developed a better understanding and aided their progress. Although mere duplication was seen as tedious and de-motivating, many pupils saw value in learning about things from slightly different perspectives. In short, most pupils sought greater coherence across the curriculum and valued the benefits of this for their learning.

Areas of Study

Although some attempt was made in Northern Ireland to address the issue of coherence through the concept of ‘Areas of Study’, the research found that schools rarely used these categories in curriculum planning. They were not part of teachers’ frames of reference and they had virtually no experiential impact on pupils.

Pupil awareness of linkages

Pupils were generally not aware of any planned coherence in the courses offered by schools. Nevertheless, about half of the schools in the Year 10 Survey had at least one policy for teaching some skills across the curriculum. Cross-curricular policies for IT, PSE skills and study skills were cited more frequently than those for literacy and numeracy. There was some evidence that the existence of such policies was related to the frequency of pupils’ perceptions of cross-curricular learning, at least as far as IT and PSE were concerned.

Teachers awareness of linkages

Teachers reported that they let cross-curricular links occur through serendipity rather than deliberately build them in. However, evidence from the pupil pursuit observations suggested that relying on serendipity could be a highly inefficient strategy that fails to maximise the potential for learning.

Compartmentalised learning

Not surprisingly, given the bounded nature of the curriculum as experienced, pupils tended to internalise the whole curriculum and their learning within it predominantly in subject categories. The observations showed that:

- Pupils’ days were strongly compartmentalised into a series of episodic and subject-based experiences, typically with high profile internal narratives but minimal references to learning in other areas;

- However limited and partial their perspectives may be, pupils had a greater experiential awareness of the actual continuities across subjects than their teachers;
Many valuable opportunities to construct creative connections and extend learning between the skills, knowledge and intelligences offered by different subjects passed by unnoticed and untapped for both teachers and learners;

Signs of any development over the Key Stage 3 phase towards more overarching and less subject-based constructions of the whole curriculum were negligible – even for high academic attainers.

Pupils' curriculum constructs

Through techniques such as concept mapping (when pupils were asked to draw a diagrammatic representation of 'All I can learn at school'), three main constructions of the whole curriculum emerged, as pupils mapped their learning according to:

- common content knowledge across subjects;
- perceptions of different subject’s relative usefulness and/or importance; and
- two broad dichotomous categories: 'practical' versus 'academic' subjects.

Far from helping learners to find coherence in the curriculum, in the sense of assisting them to pull together its different elements, the latter two may encourage them to do the opposite – to push it apart. Thus, they may lead to curricular fission rather than fusion.

Content linkages

From the pupil perspective, the most frequently perceived link between subjects was that between geography and science. Science frequently appeared in nominated links, while IT and the expressive arts were rarely cited. There was evidence to suggest that low academic attainers had greater difficulties in perceiving continuities or links in their learning across the curriculum.

Skills linkages

Commonalities in content knowledge represented the dominant mode through which learners perceived continuities between subjects. In contrast, there were appreciably fewer references to skills-based perceptions of cross-subject links – a finding that could pose challenges to any move towards a skills-based curriculum as specified.

Lost linkages – lost learning opportunities

The evidence suggested that numerous valuable learning opportunities for exploring links across the curriculum were lost to both pupils and teachers. Additionally, in the absence of any significant guidance to the contrary, the concept maps indicated that some pupils internalise images of the whole curriculum that may have deleterious effects on their learning and motivation.
3 CONTINUITY, PROGRESSION AND ASSESSMENT

As well as coherence across the curriculum, the study also examined coherence over time, namely continuity and progression within subjects.

Teachers’ views of continuity between Key Stages 2 and 3

A majority of Year 8 teachers maintained that continuity between Key Stages 2 and 3 was still problematic due to:

- variation in the knowledge and skills of pupils transferring from different schools;
- some pupils transferring without the skills or knowledge to tackle Key Stage 3 work;
- unhelpful coverage in Key Stage 2 of Key Stage 3 material; and
- disruptions to continuity in subjects caused by the Transfer Procedure.

Teachers’ views of continuity within Key Stage 3

According to many teachers, the NIC had been largely successful in providing a ‘framework’ that had led to greater continuity in their subjects within Key Stage 3 than had existed prior to its inception. The evidence demonstrated that teachers saw themselves as developing the internal coherence of their subject over the duration of a particular topic or through the Key Stage.

Pupils’ perceptions of continuity

Analyses of the pupil pursuit observations established that continuity and progression tended to be implicit in lessons rather than explicitly explained to pupils. Although most children could detect some form of ‘follow-on’ in their learning, it emerged that:

- The vast majority of pupils lacked awareness of teachers’ ‘master plan’ for progression, and therefore had only a partial view of the internal coherence within their subjects.
- Pupils generally felt that their lessons had followed on from the previous one, though least follow-on was perceived in several practical subjects, especially PE and music, but also art and home economics.
- History attracted the greatest degree of perceived continuity, followed by maths, geography and technology.
- As they progressed through Key Stage 3, pupils usually observed more continuity in their lessons.

The link between perceived continuity and progression and attainment

Only high academic attainers were discerning continuity in the way in which their teachers said they intended it, for example:
• It was only the highest attaining pupils who recognised that over the course of a topic in maths and science, the level of work would increase in difficulty, and who showed awareness that in languages they needed to apply all that they had covered previously to understand their current work;

• Low attainers discerned the least continuity in their subjects and made the least advance over the Key Stage in the amount detected. In Year 10, low attainers were not seeing the levels of continuity which high attainers had observed in Year 8.

Attainment affected not only how much continuity was recognised, but also how continuity was perceived. From interviewees’ comments, a continuum of perceived follow-on emerged:

• ‘extraneous procession’ (typically, proceeding through a textbook);

• ‘clustering’ (the continuance of the same subject matter for a period of time); and

• ‘incremental acquisition’ (the progressive build-up of new knowledge and skills).

The research found that there were greater concentrations of low and high attainers at the opposite ends of the continuum, with more low attainers restricted to ‘extraneous procession’ and more high attainers describing ‘incremental acquisition’.

• The type of follow-on pupils perceived was seen to mirror their evaluation of continuity. Thus, high attaining pupils who identified ‘incremental acquisition’ were most likely to volunteer that this aided their understanding of the subject matter under study.

Pupil perceptions of transferring learning from one year to the next

Throughout the study, the vast majority, around 70 per cent, of pupils felt that their previous year of schooling had prepared them well for the current year. Similarly, most agreed they had learnt more in their current year of schooling than in the previous year. Some issues regarding transfer from Key Stage 2 to 3 were raised, however:

• confirming teachers’ concerns about the lack of continuity between Key Stages 2 and 3, Year 8 emerged as the year that involved the most repetition of the previous year’s studies;

• pupils’ transfer to certain types of post-primary school proved particularly stressful. In Year 8, those children attending grammar schools, single sex, especially all girls’, schools and large schools were all markedly less likely than their comparative groups to have enjoyed their first year at post-primary school more than their last year at primary school.

Pupil perceptions of making progress

Pupils rated their progress in all subjects positively, but especially so in PE. In Year 9, there was a fall in pupils’ opinion of the amount of progress made in their subjects. This corresponds to the general downturn in pupils’ opinions of the curriculum in Year 9, when their estimation of its breadth and balance, relevance and – crucially in terms of progress – its manageability and their enjoyment of it – all declined, to recover slightly in Year 10. Pupils’ level of attainment made no conspicuous difference to the degree of progress they felt they had made.
Pupils’ perceptions of assessment

The Year 8 and 9 survey results showed that the majority of pupils considered examinations and reports to be the most effective means of gaining feedback on their progress and attainment. In the main, pupils valued examinations and tests particularly because they provided a clear-cut indication of how an individual was performing.

Pupils’ perceptions of Key Stage 3 Tests

In Year 10, pupils gave their views on the impact of the Key Stage 3 tests. From the survey data, it emerged that most pupils believed that the Key Stage 3 tests had made a difference to their lives and work at school, as well as their lives outside school, with grammar school pupils feeling this most keenly, particularly the pressure of taking the assessments. Additionally, the case-study data revealed that the tests had a significant impact on the learner’s experience of the Year 10 curriculum. The findings suggested that the tests distorted progression and learning within English, maths and science, and jeopardised the manageability and the breadth and balance of the whole curriculum. Furthermore, pupils’ perceptions of the relevance of their subjects were influenced in questionable ways.

That said, we speculated that the tests (along with the options process) were a key factor in ameliorating in Year 10, the disengagement from the curriculum that beset many pupils in Year 9. Indeed, this hypothesis was verified by interviewees’ comments: a grammar school boy confessed that whilst Year 9 had been a ‘joke’, in Year 10, ‘...you have to be more focused with the Key Stage 3 exams coming up’. Moreover, in the survey, a substantial proportion of pupils felt that the tests had made them learn more, and additionally, albeit in smaller numbers, respondents indicated that because of the tests, they had worked harder, felt prepared for taking GCSE examinations, were now more committed to learning and were more aware of the importance of school.

Therefore, it appears that pupils’ motivation and learning were enhanced in a year when the progression, balance, manageability and relevance of the curriculum were all disturbed. A similar scenario was also described in Year 7: as well as stressing the most damaging impact of the Transfer procedure on the upper Key Stage 2 curriculum and also on pupils’ well-being, a number of Year 7 teachers held that the Test kept youngsters ‘on their toes’ in the final year.
4 RELEVANCE

The research sought pupils’ opinions on the relevance of the curriculum:

• to their current needs;
• to life in the future (i.e. non-vocational future relevance);
• to careers and jobs (i.e. vocational relevance); and
• in terms of gender appropriateness.

The findings from the first three of the four types of relevance suggest that in general, over the key stage, pupils’ perceptions of relevance become gradually more and more closely associated with the academic and utilitarian currency of subjects for a career, even though the perceived vocational relevance of most subjects – though not all – declined over the key stage.

Pupils’ perceptions of the relevance of the curriculum to their current needs

In Year 8, pupils seemed generally positive about the value of the curriculum for their current needs but over the three years, most subjects declined in terms of perceived current relevance. Only IT increased in perceived relevance to current needs and only maths and PE stayed broadly the same.

Most relevant subjects: Overall, the subjects perceived to be most relevant to current needs were maths, IT, PE, English and, in Year 10, careers.

Least relevant subjects: Overall, the subjects perceived to be least relevant to current needs were music, art, Irish, French, RE, history and technology. Music in Year 10 posted a particularly high score for irrelevance. The lack of relevance associated with languages was noteworthy, given that a third of the schools afforded this area the most teaching time.

In Years 9 and 10, a majority of subjects were seen as conspicuously less useful for current needs, especially by grammar school pupils. In Year 9, grammar school pupils expressed a narrower view of relevance, limited to the academic core (English, maths, and science), along with IT, and attached much less importance to practical and arts areas. By Year 10, there was less disparity between the two types of school, because relevance for secondary pupils declined in Year 10, while the perceptions of their grammar school peers remained similar to those expressed in Year 9.

Pupils’ perceptions of the relevance of the curriculum to life in the future (non-vocational future relevance)

The broad pattern of perceived relevance for future needs (important – or not – for adult life) was similar to that for current needs, in that the same clusters of subjects appeared at the top and the bottom of the rank ordering for each year. Pupils in Years 8 and 9 appeared to find the curriculum less useful for the future than for their current needs. In Year 10, pupils’ perceptions appeared to be slightly the reverse.
Least relevant subjects: Modern languages and the creative arts were consistently seen as the subjects least useful for the future, just as they were perceived as the least important for pupils' current needs.

High attainers’ narrowing conception of relevance to their future (non-vocational) needs

Although most pupils believed the majority of their subjects would be relevant to them for adult life, grammar school pupils were less positive about the value of certain subjects (eg the arts, languages and maths) than their secondary counterparts. A parallel between the scores of high attainers and grammar school pupils emerged in the increasing importance they attached to IT and in the narrowing range of subjects deemed to be important. Taken together, and bearing in mind a similar emphasis on utilitarian values from these groups in the scores for relevance to current needs, it seems that these two groups may already be disposed to value a relatively limited range of subjects in Year 8. By Year 10, their curricular experiences (and perhaps other influences outside school) may have encouraged them to see their future exclusively in terms of academic and career success, and to this end to become predominantly focused on what they believe will most effectively help to achieve these goals.

Pupils' perceptions of the relevance of the curriculum to careers and jobs (vocational relevance)

- English, maths and IT, with the addition of careers in Year 10, were believed to be the most vocationally relevant subjects by all three year groups.

- Apart from the notable instances of IT, science and maths, vocational relevance declined for most subjects over the Key Stage.

- Music, RE, Irish, drama and art were found to be the least vocationally relevant subjects, becoming gradually less important over the three years.

The results from grammar school pupils presented a polarisation between the few subjects (ie English, maths and IT) they perceived as having great vocational relevance and the majority of subjects, which were viewed as almost vocationally irrelevant. While secondary school pupils' perceptions of their subjects' relative degrees of vocational importance were similar to those of their grammar school peers, their perceptions of vocational irrelevance overall were considerably less extreme. Again, the evidence reinforces the interpretation that the majority of high attainers and grammar school pupils appear to be rigidly focused on a very narrow range of subjects, which they perceive in terms of strictly utilitarian vocational priorities.

Gender relevance

In all three years, gender stereotyping was slightly more pronounced in grammar schools than in secondary schools. Grammar school pupils were more forceful about the appropriateness of PE for boys and home economics for girls. Moreover, in Year 10, grammar school pupils regarded science and IT as slightly more appropriate for boys, and French and art as more appropriate for girls.

Implications of perceived relevance for learning and motivation

Learning was considered to be relevant by most pupils but the research identified several characteristics of pupils' constructions of relevance:
• In Year 8 a view of relevance as enhancing knowledge and skills for their own sakes or for sheer satisfaction was widespread.

• This type of view of relevance declined dramatically over Key Stage 3.

• By Year 10, relevance as academic attainment and examinations had replaced it as a dominant mode of discerning what was important and what was not.

• Many pupils' accounts highlighted the role of individual aptitude in determining pupils' perceptions of relevance and effective learning.

• For most pupils, 'learning' was narrowly construed as 'learning something 'new', which, when it happened, bestowed a sense of progress and heightened self-esteem for many pupils – thus, suggesting that broadening pupils' definitions of learning could be highly beneficial.

• The arts were widely enjoyed, yet were not seen as having any lasting worth by the majority of pupils.

Which is most important for pupils – enjoyment or relevance?

• While some teachers argued that enjoyment was more important for effective learning than perceived relevance, for many pupils, relevance – and vocational relevance in particular – was more significant than enjoyment.

• According to teachers, while a minority of 'more clued-in' pupils questioned the validity and relevance of their learning, a more mechanical compliance prevailed among the majority.

Where do messages about relevance come from?

Implicit messages (for example, the amount of time allocated to a subject or its status in the assessment system) appeared to be more influential than explicit messages (for example, teachers explaining why learning certain skills is important) in shaping pupils' perceptions of relevance. This has crucial ramifications for pupils' motivation.
5 MANAGEABILITY

Both in terms of the amount and level of the work required by the Key Stage 3 curriculum, the evidence indicated an appreciable decrease in manageability in Year 9 and 10 compared with Year 8.

Workload and challenge

- Generally, pupils felt over-worked in modern languages and maths (also English as far as homework was concerned), but under-worked in the arts and practical subjects.

- The practical and arts subjects were regarded as the easiest.

- In a substantial majority of cases where subjects were said to be ‘hard’, pupils associated their experience of difficulty with a rapid pace of teaching, which curtailed opportunities for extended or repeated explanation.

- Pupils perceived modern languages to be the most difficult area of the curriculum and its level of difficulty increased year-on-year throughout the key stage, especially in grammar schools. Indeed, grammar pupils tended to rate their subjects as more difficult than their secondary peers.

- Notwithstanding this, there was evidence that at times pupils of all attainment levels, in any subject, were not challenged enough. Boredom and frustration were often the by-products of occasions when pupils found the work easy or were given too little to do.

Manageability

- Generally, teachers seemed keen to retain what had been prescribed for their subject, rather than to leave anything out, but many would have liked more flexibility.

- Where the curriculum was seen to be unduly cumbersome, manageability for teachers became as pressing as manageability for pupils.

- In subjects where the workload was most frequently perceived to be difficult to manage (for example, science, history, geography and technology), teachers’ wish for more time was a recurring theme.

- Although teachers registered that the revised orders had led to some improvement in terms of planning and mediation, many, nevertheless, expressed serious concern in relation to differentiation.

- Perceived discrepancies between the curriculum as specified and the needs of individual pupils surfaced repeatedly throughout the teacher interviews.
6 ENJOYMENT

Qualitative data from pupils suggested that, in general, pupils of all levels of engagement and attainment appreciated active learning, through practical and creative activities. Variety, co-operative learning, opportunities to experience responsibility, autonomy and choice in learning also surfaced, as well as classroom ambience and differentiation (though this was notably absent from low engaged pupils’ accounts).

Factors influencing enjoyment

The study corroborates many of the findings from previous research into pupil enjoyment of the curriculum. Key ingredients of an enjoyable curriculum are:

- relevance, fun and interest;
- perceived ability in a subject;
- active and practical learning approaches;
- a ‘relaxed’ classroom ambience; and
- teacher qualities, like explaining clearly, listening, and fairness.

Similarly, the high popularity of active and practical subjects like PE and art confirm other research.

Factors influencing non-enjoyment

Pupils of all degrees of engagement and attainment shared a discourse of non-enjoyment, focussing on:

- monotony;
- isolation;
- passivity; and
- sedentariness in learning.

The way teachers ‘explained things’ was often referred to by pupils, as was presentation style (being ‘boring’ or ‘talking too much’). By Year 10, low attaining and low engaged pupils were more likely to starkly renounce lessons and subjects where the teacher was not liked. Resignation and a capacity to cope with non-enjoyment were only evident in the responses of the higher engaged and attaining pupils.

Most of the teachers’ remarks on pupil enjoyment focussed on the curriculum as mediated, including: teacher performance (differentiation, ensuring new subjects were enjoyed), personality (being enthusiastic, caring, relaxed) and their choice of pedagogical tasks featured strongly in teachers’ accounts.
Teachers' views on the implications of the specified curriculum for enjoyment

References to the curriculum as specified by teachers showed two distinct stances between:

- those who saw enjoyment at this level as a non-issue. (They variously noted either that curriculum specifications were irrelevant, as teacher mediation was the key factor in enjoyment; or that some essential elements of learning were necessary but not necessarily enjoyable; or that it was Key Stage 4 rather than Key Stage 3 specifications that were problematic for enjoyment.); and

- those who felt the NIC had some negative influence on pupil enjoyment because the programmes of study were too full and caused too much pressure on pupils and teachers; or because previously enjoyed elements had been lost or because they had removed teacher choice and flexibility which had facilitated pupil enjoyment.

The significance of enjoyment for achievement or vice versa?

Qualitative data showed alternative versions relating to enjoyment's significance in the curriculum as internalised.

- Some pupils and teachers held the view that learning cannot always be 'fun'. Enjoyment would occur through achievement.

- Others felt that enjoyment not just leavened but crucially underpinned curriculum engagement and attainment: 'We learn/master therefore we enjoy' as opposed to 'we enjoy therefore we learn/master'.

Less engaged and lower attaining pupils, and the teachers who work with this pupil type, more readily proposed the desirability of the latter.

Declining levels of enjoyment

Quantitative data suggested that:

- Virtually all subjects showed a decline in enjoyment over the three years.

- Subjects with the most marked fall-off included French, music, home economics, science and art.

- RE remained the least enjoyed subject throughout the key stage.

- Almost always, grammar school pupils rated subjects throughout the three years as less enjoyable – or at least not more so – than their peers in secondary schools.

- Additionally, pupils from schools with a high ratio of free school meals consistently enjoyed most subjects more than their peers at schools with low ratios of free school meals over the three years.

- Nevertheless, the former sub-sample, as well as low attaining pupils, showed a greater decrease in enjoyment through Key Stage 3, suggesting disengagement could be a more deeply felt experience, particularly in the key areas of numeracy and literacy.
7 CROSS-CURRICULAR THEMES

Considerable variation was apparent in the amount and type of different schools' provision of CCTs. Careers Education, Health Education and Information Technology, for example, were taught as discrete provision in some schools, while in others they were mediated through a range of subjects. Pupils tended to ask for greater coverage of the CCTs and for treatment that reflected their increasing maturation.

Variation in provision was a key factor in accounting for pupils' contrasting experiences of the CCTs, but despite this, some common trends in their perceptions were still detectable.

- Compared with girls, boys were less positive about health education (HE) and careers education (CE) as they progressed through the key stage.

- The importance that pupils attached to IT and HE was not reflected in the quantity and quality of provision in these areas.

Experience of the CCTs could change behaviour – pupils cited how through the CCTs they had learned how to respect others, save money and eat more healthily. Pupils did regard the CCTs as useful; however, particularly with regard to EMU and HE, there was a sense that, as Key Stage 3 progressed, pupils, especially high attainers, were less convinced of their value. By Year 10, these pupils were describing the work they had done on respect for others, for example, as ‘common sense’ and to acknowledge that they already knew about this.
RÉSUMÉ OF FINDINGS, PROPOSED ACTION BY CCEA AND QUESTIONS FOR SCHOOLS

CCEA has produced the following short resume of the research findings as a leaflet to be distributed to all teachers, along with an indication of the action it proposes to take in response to the findings. The final section contains questions for schools.

1 Breadth and Balance

The research found that, in reality, there was no common curricular entitlement. Very few schools (only 4%) were meeting the recommended minimum times for all subjects. The allocation of time to languages and RE had a substantial influence on the balance of the curriculum offered in the various types of schools. The balance and maturation of the curriculum was out of alignment with pupils’ views. Grammar school pupils in particular found their curricula unbalanced.

2 Coherence

Understanding of coherence appears to be a significant factor in pupils’ learning. Pupils were generally not aware of any planned coherence across the courses offered by schools. Where pupils cited links, these were principally in terms of content knowledge. There were appreciably fewer references to skills.

3 Continuity, Progression and Assessment

Year 8 emerged as the year that involved the most repetition. In Year 9, pupils’ enjoyment of the curriculum and their perceptions of its relevance, breadth and manageability all declined. In Year 10, perceptions recovered somewhat as pupils, by their own admission, were motivated by the Key Stage 3 tests. However, these assessments had a deleterious effect on the balance and perceived relevance of the curriculum. High attainers were most likely to perceive progression in terms of ‘incremental acquisition’ (building on what they already knew).

4 Relevance

The findings suggest that pupils’ outlook, in many respects, grew narrower as Key Stage 3 progressed. In general, over the key stage, pupils’ perceptions of relevance become gradually more and more closely associated with the academic and utilitarian currency of subjects for a career, even though the perceived vocational relevance of most subjects – though not all – declined over the key stage. Implicit messages (for example, the amount of time allocated to a subject or its status in the assessment system) appeared to be more influential than explicit messages (for example, teachers explaining why learning certain skills is important) in shaping pupils’ perceptions of relevance, and has crucial ramifications for pupils’ motivation.

5 Manageability

The findings indicate an appreciable decrease in manageability in Year 9 and 10 compared with Year 8, with pupils feeling over-worked in modern languages and maths (also English as far as homework was concerned), but under-worked in the arts and practical subjects, which were regarded as the easiest. Modern languages was perceived to be the most difficult area of the
curriculum, especially by grammar school pupils, who tended to rate subjects as more difficult than their secondary peers. Notwithstanding this, there was evidence that at times pupils of all attainment levels were not challenged enough. When pupils found the work easy or were given too little to do they reported feeling bored and frustrated.

6 Enjoyment

Virtually all subjects showed a decline in enjoyment over the three years with the most marked fall-off in French, music, home economics, science and art. RE remained the least enjoyed subject throughout the key stage. Almost always, grammar school pupils rated subjects throughout the three years as less enjoyable, although low attaining pupils showed a greater decrease in enjoyment through Key Stage 3, suggesting disengagement could be a more deeply felt experience, particularly in the key areas of literacy and numeracy.

7 Cross-curricular Themes

Where schools offered discrete provision for the current Cross-Curricular Themes (for example, Careers Education, Health Education and Information Technology) pupils tended to ask for more of it and wanted this to be treated in ways that reflected their increasing maturation.
PROPOSED RESPONSE TO THE FINDINGS

As part of the Review of the Northern Ireland Curriculum and its assessment arrangements, CCEA intends to respond to the findings of the Cohort Study by:

1. Breadth and Balance
   - proposing specific provision for Personal Development; Citizenship and Employability;
   - slimming the statutory content of other subjects to a minimum core to allow time for this;
   - increasing the flexibility for teachers to devise appropriate curricula while maintaining a common entitlement.

2. Coherence
   - proposing linked or integrated curriculum areas, as opposed to individual subjects at Key Stage 3 as the basis for the statutory curriculum;
   - outlining how each aspect of the areas can respond to the broader aim and objectives of the curriculum;
   - highlighting transferable skills, thereby making strong skills connections across the curriculum;
   - suggesting (within sample teaching plans) a number of common ‘topics’ that can be studied from the perspective of the different areas, thereby making strong content connections across the whole curriculum.

3. Continuity, Progression and Assessment
   - ensuring that curriculum areas build on, but do not repeat, primary provision;
   - illustrating how knowledge, understanding and skills build on prior learning;
   - developing progression in thinking skills across all areas;
   - proposing in-school continuous assessment of all areas.

4. Relevance
   - mapping all areas against the aim and objectives of the curriculum and the transferable skills to emphasise the current and future vocational and life relevance of each area.

5/6/7 Manageability, Enjoyment and Cross-Curricular Themes
   - proposing that Key Stage 3 be reduced to two years, for many but not all pupils to allow schools greater flexibility to plan and manage the curriculum for different groups of pupils;
Proposed Response to the Findings

- proposing within the integrated curriculum areas, specific treatment of themes formerly designated as CCTs (see 1);

- highlighting within all areas the issue of relevance to current and future needs, which pupils consider more important than enjoyment;

- providing greater flexibility for teachers to mediate the curriculum in ways which pupils find enjoyable.
QUESTIONS FOR SCHOOLS

In planning, mediating and assessing the curriculum needs of young people, how might schools:

1  **Breadth and Balance**
   - survey and respond to the views of young people about the breadth and balance of the current curriculum?
   - make greater provision for identified pupil needs?

2  **Coherence**
   - plan explicitly for the development of (a) skills across the curriculum; and (b) content connections across the curriculum to assist pupil learning?

3  **Continuity, Progression and Assessment**
   - build whole staff awareness of:
     - the aim, objectives and purposes of the whole curriculum?
     - the internal coherence of subjects and the nature of progression, ie how new learning builds on previous learning and the incremental development of skills, knowledge and understanding?
     - the lateral coherence of the curriculum (ie the linkages between subjects) in terms of both content and skills? and
     - the potential for reinforcing and deepening understanding of topics by studying them from different subject perspectives?

4/6  **Relevance and Enjoyment**
   - pay closer attention to:
     - parity of esteem between areas of the curriculum?
     - the vocational and life relevance of the various aspects of the curriculum?
     - the application of skills and knowledge to real-life problem-solving?
     - the mediation of the curriculum, including enjoyment and pace and the type of teaching methodology needed for learning how to learn and the development of information literacy and thinking skills?
     - the maturation and challenge of the curriculum for all pupils?
5 Manageability

- improve progression from Key Stage 2 and the manageability of Key Stage 3?

7 Cross-Curricular Themes

- ensure that the ideas, skills and values underpinning the whole curriculum ‘help pupils to make informed and responsible choices and decisions throughout their lives as individuals; contributors to society; and contributors to the economy and environment.’ (See Curriculum Framework).