

ANGUS COUNCIL
EDUCATION COMMITTEE

6 JUNE 2000

S1/S2 RESEARCH REPORT: "DEVELOPING A FRAMEWORK FOR EFFECTIVE LEARNING AND TEACHING
IN ANGUS SECONDARY SCHOOLS"

REPORT BY THE DIRECTOR OF EDUCATION

ABSTRACT

This report draws the Committee's attention to the publication of "Developing a Framework for Effective Learning and Teaching in Angus Secondary Schools" following a research investigation of S1/S2 provision.

1 RECOMMENDATIONS

It is recommended that the Education Committee:

- a) notes the terms of this report;
- b) notes the terms of the executive summary of the research report (see Appendix);
- c) notes the very strong basis provided by the report for future curriculum and staff development activities in relation to Learning and Teaching in S1/S2;
- d) notes that a copy of the full research report is available for perusal in the Members' Lounge (a copy of the full report can readily be made available to any individual member of the Education Committee).

2 BACKGROUND

- 2.1 At its meeting of 8 June 1999 the Education Committee approved report number 564/99 (Article 20 refers) in which I sought authorisation to negotiate a contract with the University of Strathclyde and Northern College to carry out a research and evaluation exercise in respect of S1/S2 provision in Angus secondary schools.
- 2.2 The decision to undertake such an evaluation exercise related in part to a commitment to review aspects of Learning and Teaching in secondary schools within the overall Best Value Review of Secondary Education. That review is now almost complete and the associated Best Value report and improvement plan will be submitted to the Education Committee for consideration at its meeting in August 2000.
- 2.3 The evaluation of Learning and Teaching in S1 and S2 in Angus Secondary Schools was undertaken by Dr Brian Boyd of the University of Strathclyde and Professor Mary Simpson of the University of Edinburgh (formerly of Northern College).
- 2.4 The major activities undertaken by Dr Boyd and Professor Simpson included:
 - interviews with secondary school senior managers and with teachers of S1/S2 classes
 - shadowing S1 and S2 pupils
 - interviews with primary head teachers and P7 teachers in relation to P7/S1 continuity issues
 - observations of P7 pupils at work
 - contacts with parents, individually and in groups, to find out their views, and their expectations and aspirations for their children at the start of S1.

3 PURPOSE AND SCOPE OF THE PROJECT REPORT

- 3.1 As its title implies, "Developing a Framework for Effective Learning and Teaching in Angus Secondary Schools" seeks to provide Angus secondary schools with a manageable framework for the development of practical policies which will promote effective Learning and Teaching in S1 and S2 and beyond. The report also seeks to offer teaching staff strategies to support staff development which will be likely to enhance the quality of learning and teaching within the S1/S2 curriculum.
- 3.2 Given the significant range of activities undertaken by the researchers the report is impressively comprehensive in scope. It provides a rich critique of the learning and teaching situation in S1/S2 and it provides detailed insights into the characteristics of what makes for effective learning and indeed effective teaching in the early years of secondary school.
- 3.3 The report recognises the considerable commitment and sheer hard work of teachers seeking to deliver the 5-14 Programme to S1/S2 pupils. It is acknowledged that schools are hugely complex and diverse organisations, and that teaching is an increasingly difficult and demanding job. Helpfully, the researchers highlight the commitment of the vast majority of teachers in managing daily classroom activities and believe that such commitment should be more widely recognised and commended than is often the case.
- 3.4 The key issues covered by the report are as follows:
- primary/secondary transition arrangements
 - the processes and effects of timetabling S1/S2 classes
 - the organisation of classes
 - the characteristics of learning and teaching in S1/S2
 - the design of a framework for the production of a learning and teaching policy, which takes due account of the needs of teachers, of pupils and of parents
 - the rationale for the place of Information and Communications Technology in secondary schools
 - direct pupil experiences of the school curriculum presented through detailed and insightful descriptions of "One School Day in the Life of an S1 and an S2 Pupil"
 - the application at whole school level or within subject departments of a framework to support Effective Learning and Teaching
 - the use and application of a framework to analyse and to describe the characteristics of the "learning classroom" so that teachers of all subjects begin to look at the generic factors associated with successful learning.

4 RECOMMENDATIONS

- 4.1 Key recommendations have been made by the researchers on the basis of the detailed range of evaluation activities described in 2.4 above. A clear conclusion from their observations of learning and teaching in S1/S2 in Angus secondary schools is that, notwithstanding the commitment of teachers and indeed the high quality of many individual lessons, the traditional subject-based curriculum structures which currently exist in secondary schools make it very difficult to deliver a coherent curriculum to S1/S2 pupils. These structures also make it very difficult for secondary teachers to collaborate with each other and with primary colleagues in order to build appropriately on pupils' prior learning in primary school; the net result of this is that there is less progression in the S1 curriculum as pupils move between primary and secondary school.
- 4.2 These findings corroborate the outcomes of other research projects and evaluation exercises including a recent Angus Council exercise about the effectiveness of school clusters in supporting the implementation of the national 5-14 Programme.
- 4.3 In making their recommendations, the researchers are conscious of the significant pressures with which secondary teachers are having to contend as the result of:
- concomitant curriculum developments occurring at different stages of the secondary school
 - the expectations of the Scottish Executive in relation to pupil attainment targets
 - the expectations of parents for improved levels of pupil attainment
 - the apparently unrelenting change agenda which the education service is required to address
- 4.4 Underpinning the major recommendations of the report is a fundamental encouragement to secondary teachers to accept the need to find ways and time to develop more collaborative practices within schools in order to recognise and to share each others expertise. There is also a related encouragement that, at least in the lower stages of the secondary school, teachers should increasingly see themselves more as teachers of pupils rather than as specialist teachers within an individual academic discipline, charged above all to "transmit knowledge."

4.5 The main recommendations detailed in the executive summary and analysed in much greater depth within the report are summarised below:

- **secondary schools need to develop a more common understanding among teachers of how progression and continuity can be managed** and thereafter to devise learning and teaching contexts which enable the 5-14 curriculum to be “covered” without relying upon a curriculum model which is predominantly concerned with “knowledge transmission.”
- while teachers are confident in the use of diagnostic and summative assessment, there needs to be greater use made of formative assessment in order to support and inform effective learning and teaching strategies; **it is recommended that examples of effective practice are considered and introduced in all schools.**
- notwithstanding the existence of robust strategies in all Angus secondary schools for auditing and reporting on key areas of the curriculum, there was little evidence that the outcomes of such audits were used systematically to change teaching practices in order to improve learning outcomes; **it is recommended that arrangements are made to allow teachers to collaborate more closely about learning and teaching strategies and, where appropriate, to try out interesting innovations in cross-curricular or departmental groups.**
- while significant amendments to the S1/S2 curriculum structure in secondary schools are being made in light of Angus Council advice and guidelines (not least in reducing the number of teacher contacts), it will still be important to consider possibly more fundamental amendments to lower school timetabling approaches; **it is recommended that priority be given to the consideration of new approaches to the timetabling of S1 and S2, in line with SCCC guidelines in order to embed the principles of progression, continuity and coherence in pupil learning.**
- given the importance of ensuring that all pupils acquire core or key skills through the development of more coherent learning experiences in S1/S2, **it is recommended that in each school systems are developed for taking an overview of pupil learning across the curriculum so that core skills are promoted and consolidated.**
- the researchers have explored in considerable depth class organisation arrangements in Angus secondary schools; their conclusion with respect to broad banding setting arrangements is that while these had solved - in those schools where they operated - some problems, they undoubtedly had created others; **it is recommended that schools considering a move towards setting should debate the educational effects and implications across a broad forum within the school - including pupils and parents - and ensure that the debate is informed by research findings and the advice of specialist colleagues in learning support.**
- the research exercise has given proper attention to the potential of ICT for enhancing pupils’ learning and attainment; the researchers have fundamental concerns about separating out ICT as a separate subject within the curriculum in S1 and S2 and believe that this is **“not only not a quick fix, but quite simply the wrong fix”**; **it is recommended that schools think through their policy on ICT over a long timescale with a view to setting in place arrangements which allow the power and versatility of ICT to enhance and to complement activities which pupils experience across the curriculum.**
- the researchers underscore the desirability and value of schools seeking to tap into the diverse skills and talents of staff and pupils; **it is recommended that each school develops arrangements to promote the sharing of expertise and responsibilities between teacher and teacher, between teachers and other professionals (eg the school librarian), between teacher and pupil, and between pupil and pupil.**
- **a commitment to share expertise should be supported through the creation in each school of a learning and teaching policy designed to be manageable and designed to address the needs of all within the school particularly the needs of teachers and learners.** Appendix 3 of the full report offers Angus secondary schools a framework for the production of such a policy; **it is recommended that development of a workable and working policy should take place over at least two sessions.** It is recognised that the approach being addressed within the proposed framework will in many instances consolidate much existing good practice observed in Angus secondary schools.
- in taking forward into classroom practice such a policy, **it is recommended that Angus secondary teachers draw upon a framework for analysing their classroom practice entitled “Towards a Learning Classroom” provided in Appendix 4 to the full report.**

5 CONCLUSIONS

- 5.1 This research report is a substantial and comprehensive resource which complements very significantly work carried out by Angus Council in relation to the Secondary Best Value Review and in relation to implementing local guidelines for the management of the 5-14 Programme in secondary schools.
- 5.2 The report is rich in advice, observation and insight and will provide a strong basis for the delivery of an appropriate range of staff development activities whether centre-based or school-based with a view to improving the quality of learning and teaching in S1/S2.
- 5.3 The challenges of implementing a coherent 5-14 curriculum in secondary schools is a matter of national concern. Evidence of this can be seen from the high number of general and subject-specific 5-14 reports produced by Her Majesty's Inspectors over the last two years. I believe that "Developing a Framework for Effective Learning and Teaching in Angus Secondary Schools" will have a resonance and interest beyond Angus and I am confident that the report will make a major contribution to the national debate about what makes for effective learning and teaching in S1/S2. Professor Simpson and Dr Boyd are to be congratulated for this comprehensive, challenging and yet supportive report.

6 FINANCIAL IMPLICATIONS

There are no financial implications arising from the contents of this report.

7 CONSULTATION

In accordance with the Standing Orders of the Council this report has been the subject of consultation with the Chief Executive, the Director of Finance and the Director of Law and Administration.

JIM ANDERSON
DIRECTOR OF EDUCATION

BACKGROUND PAPERS

No background papers, as defined by Section 50D of the Local Government (Scotland) Act 1973 (other than any containing confidential or exempt information), were relied on to any material extent in preparing the above report.

APPENDIX

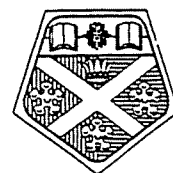
**DEVELOPING A FRAMEWORK
FOR EFFECTIVE LEARNING
AND TEACHING
IN ANGUS
SECONDARY SCHOOLS**

EXECUTIVE SUMMARY

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MAY 2000

2. EXECUTIVE SUMMARY

1. The Remit of the project

The aim of the project was to provide a framework for the development of a teaching and learning policy within Angus secondary schools. It examined the following features of learning and teaching in S1/S2:

- the structure, balance and organisation of timetables in S1/S2;
- the rationale for current curriculum structures;
- the extent to which current and proposed timetabling arrangements facilitate continuity, coherence and progression in pupils' learning;
- the impact of the timetable on learning and teaching approaches;
- approaches to class organisation in S1/S2 (e.g. mixed ability or broad band setting) and the impact of these on pupil attitudes and attainment;
- the degree of consistency in learning and teaching strategies across subject departments;
- the use and effectiveness of "direct interactive teaching" as promoted by HM Inspectors in 'Achieving Success in S1/S2'.

These are all covered within the topics summarised below.

2. Primary - secondary transition arrangements

The Cluster Groups have initiated a variety of liaison activities (3.1) and the procedures for familiarisation of pupils with the secondary school work well. But there has been less success with the development of curricular continuity, with respect to content, style of delivery, and procedures to ensure progression and continuity in the attainment of individual pupils (3.2.3). Effective systems for the transfer of reports have been devised by most schools. Strategies for the circulation of information are also in place and working well (3.2.5). The major difficulty is the effective use of this information and creating time for individual class teachers in primaries and associated secondary to talk together, share their skills and interpretations of the 5-14 requirements. **There is a need for staff to develop a more common understanding of how progression and continuity can be managed particularly with respect to the ways in which a variety of teaching and learning contexts can be created and the 5-14 curriculum can be 'covered' without resorting to a model which is predominantly knowledge transmission (3.2.4). A mechanism needs to be found to enable this to happen, e.g. primary staff asked to talk and illustrate their approaches during a school inservice, or to departments at a DM.**

3. National testing

The schools are responding to the Authority requirements, but reluctantly and with no great enthusiasm or conviction that the National Tests are a secure enough basis to give

characteristics have certain consequences, not least that S1 and S2 are rarely the main priority in timetabling terms. In most schools, two key issues emerged:

i) Flexibility

SCCC Guidelines on the curriculum, both in the original and in the revised versions, built in some 20% time to the S1 and S2 curriculum. Clearly, this 20% has to be timetabled, but the intention of SCCC was clearly not that it was simply 'carved up' among existing subjects. The implication of having flexibility is that it is used to support pupils' learning, and that such support will vary to some extent among the pupils. Few schools have considered building in pupil choice to S1 (because of the uneconomical timetable structures which would inevitably follow), but it may be that the flexibility element should not be applied in the same way to all pupils.

ii) "New" subjects in S1/S2: e.g. the case of ICT

ICT is the most recent 'subject' to make a bid for inclusion in the S1/S2 curriculum. Some schools have made it a key plank in their raising attainment strategy and have invested time and energy in devising courses (9 above). However, in the context of the Authority's desire to reduce the number of subjects and, by definition, the number of teachers experienced by pupils in S1 and S2, this clearly presents a clash of priorities.

In summary, it appears that there is a limit to the extent to which timetabling solutions to the issue of pupil underachievement are possible. The key points arising out of interviews with teachers and curriculum managers seem to be:

i) S1/S2 need to be given greater priority, nationally, in school terms and departmentally since the fresh start approach in S1 is alive and is still prevalent

ii) the timetable should ensure that the number of teachers met by pupils in a week is reduced by having no split classes, However:

- rotation of subjects is not generally liked
- discussion about more radical changes need to take place from the starting point of promoting pupil learning.

iii) the timetabling of primary-secondary contact must go beyond the pastoral and should enable teacher from both sectors to share insights and practice in teaching strategies and concepts of effective learning contexts

iv) progression in pupil learning is not being achieved by present forms of information transfer. Indeed, no brief paper format may be able to do this satisfactorily

We would recommend that priority be given by the Council to the consideration of new approaches to the timetabling of S1 and S2, in line

needed in Standard grade and Higher Still courses - as well as in 'real life' - may not be being developed fully in the crucial years of S1 and S2.

ii) Reading

Reading is a constant activity in secondary education. In every subject, at some point, pupils need to read - from books, worksheets, the board, the OHP. The demands vary from subject to subject, and from context to context, e.g. reading for pleasure, reading for information. The skills demanded may be implicit, so that skimming, scanning, predicting, finding key ideas, reading critically, etc. are all part of the skills which teachers know will be needed in the examination system. But are these skills of reading understood by teachers and by pupils? Are pupils helped to match reading skill to reading task? More fundamentally, are all children capable of independent reading of the kinds routinely required in S1? In every school, learning support was well developed, often working as part of an extended support system involving Guidance, behaviour support, etc. Pupils with serious or specific reading difficulties received a lot of support, in classes, through extraction, in paired reading schemes, etc. But the group of pupils whose reading difficulties did not normally require the input of learning support but who, nevertheless, were not yet operating at their chronological age as readers, often went unsupported.

We recommend that in each school systems are developed for taking an overview of pupil learning across the curriculum so that core skills are promoted and consolidated.

8. The organisation of classes: setting and broad banding

There is wide variation in terms of organisation of classes across and within the secondary schools (5.1). A wide range of practices, from mixed ability right through to the end of second year, to setting of pupils on entry into S1 obtains. The education department has issued advice to schools on this issue but decisions continue to be made at an individual school or even at an individual department level. The question is whether such decisions are based on sound educational or objective criteria, research evidence or whole school discussion. The nature of the data on which decisions to set or broad-band classes varied - teachers who expressed reservations about the soundness of the tests were nevertheless using test outcomes to allocate pupils to different classes. The evaluations of the efficacy of the forms of organisation presented a fairly superficial picture. While HMI have advocated setting in S1 and S2, there should be strong professional and educational reasons for schools and departments to opt for one form of organisation or another.

Our conclusion with respect to broad banding has to be that while it had solved some problems, it undoubtedly had created others (5.4). Individual schools and staff groups differ in what they consider to be important and what procedures they feel provide them with optimal comfort in a complex and demanding

There is a considerable discrepancy between the model of learning which typically appears to inform teaching and curriculum delivery in the secondary classroom and that generated from research (6.2.1). Nevertheless, we were able to identify instances of 'good practice' in teaching in which teachers had overcome many of the constraints normally imposed by the systems attitudes and structures within schools and have selected a few illustrations: flexible, direct interactive teaching in English and history(6.3.1/6.3.2); an authentic learning task in technical education(6.3.3); variety, control and autonomy in Physical Education (6.3.4). The ways in which the primary teacher deals with individual learning problems within her classroom (6.3.5) and with promoting pupil independence (6.3.6) were also selected to illustrate key teaching strategies. Innovative initiatives such as the introduction of CASE into the science curriculum should be supported with in-built evaluation (6.3.8).

For many teachers, however, direct teaching meant delivering the lesson to the whole class through teacher exposition of the subject material; the interactive element comprising only closed questions posed to elicit and expose the correct answer to the questions set in the workbooks. We saw much of this model in action, and variety of presentation did not always mean that pupils were engaged and learning (6.3.7). Strategies which promote learning, such as open or higher order questioning techniques, the promotion of independent learning and thinking skills, and practising differentiated teaching are difficult to undertake in classrooms where desks are laid out in rows, with teachers feeling under pressure to 'get through the curriculum.'

Our interviews and observations with respect to the role of learning support raised a number of questions concerning the most effective use of their specialist skills. We recommend that all senior management teams consider the use of learning support in their school in the light of the potential benefits of the 'remedial teacher' or 'curriculum and learning consultant' models. The feeling of immediate relief from a pressing problem does not always lead to the best longer term benefit and outcomes for either pupils or staff.

We concluded that there is clearly much to be discussed within schools concerning their 'core business' – learning, and teaching for effective learning. We suggest a range of strategies to brainstorm the possibilities, including: using one in four of the departmental meetings to discuss learning and teaching, to browse through the resource pack attached to this report, to plan collaborative developments; to have learning support invited to discuss some issue at some of these meetings; to have colleagues from other departments and pupils, come to discuss some issue or proposal for experiment and change.

11. The use of ICT

In all schools, ICT is seen as a key development although there are differences of opinion in terms of the 'infusion' approach and the 'discrete subject' approach. However, the most enduring memory of the researchers is that in classrooms across the curriculum in most schools there was little evidence of computers being used as an aid to learning.

- Teachers collaborating in cross curricular subject/language units to assist in relieving the 'coverage' burden and making tasks more authentic and less narrowly subject bound.
- Collaboration with Learning Support on how different approaches to the management of learning might reduce disaffection, promote inclusion, and optimise the use of LS expertise.
- Pupils being assisted to take more responsibility for monitoring their attainments and helping plan their next targets for learning.
- Sharing more information with those parents who indicate their willingness to contribute to the support of their child's learning – if only they knew how!

13. Designing a framework for a learning and teaching policy

If a framework for a learning and teaching policy is to be effective and useful, it must help to address the needs of all within the school – but particularly the needs of teachers and learners. As we indicate in section 1.4, teachers want a policy to have the following characteristics:

It has to be optimistic

It has to remind you of why you came into teaching

It has to prompt you to think, help you to get out of the rut

It has to encourage you to experiment and try different things.

Interviews with teachers and observation of classes identified a number of challenges for those charged with the management of staff and the S1 and S2 curriculum. Teachers feel particularly pressurised by three factors which impose a considerable burden on their efforts to teach effectively in their classrooms:

- time demands
- coverage of the curriculum
- discipline and motivation

Throughout the report we have illustrated ways in which some of the solutions to these problems have already been generated or identified within schools.

14. The Framework for a Learning and Teaching Policy

The Framework (Appendix 3) has been set out as a set of principles, with suggested resource materials. Departments should be encouraged to use this as the focus of their learning and teaching departmental meetings, and it can be used as a basis for cross-departmental meetings and staff development. Different departments will find different issues and resources useful in stimulating debate and thought, and may find the framework for analysing classroom practice entitled "Towards the Learning Classroom" (Appendix 4), helps to link the materials and the issues directly to practice.