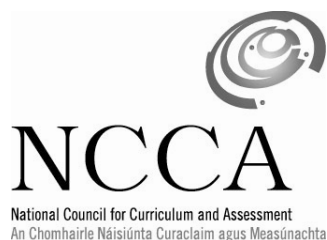


National Council for Curriculum and Assessment



**Proposals for the Future
Development of Senior Cycle
Education in Ireland**

April 2005

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Section 1: Introduction

1.1 Preamble

The *Strategic Plan 2003-2005* of the National Council for Curriculum and Assessment offers a vision of the organisation as playing

a key role in shaping a world-class education system that meets the needs of all learners, supports their participation in communities and in society, and contributes to the development of the knowledge society in Ireland.

This advice on the future of senior cycle education in Ireland is presented with that vision in mind, and with the aim of contributing to the development of the Irish education system and the continual improvement of the educational experiences and lives of learners.

The developments proposed for senior cycle education are designed to maintain the clear strengths of the existing senior cycle educational experience and to improve on them. They do not involve change for change's sake. They are aimed at improving the rate and the quality of participation in senior cycle education for all and at sustaining excellence in learning at this stage of education.

The proposals represent a response to the challenge of inclusion and equity and to the challenge faced by many education systems in the developed world—how to ensure that an education system originally designed to serve the needs of an elite few can be re-shaped to meet the needs of a broader, more diverse group of learners. At the beginning of the 21st century, one fifth of young people in Ireland do not participate in senior cycle education. A further group, another fifth, does not appear to derive adequate benefit from their experience of senior cycle, performing badly in examinations. In both of these groups, the concentration of students from lower socio-economic backgrounds is striking. The proposals are designed to encourage more of these students to stay in school, and to ensure a more rewarding experience and improved outcomes for those who do.

A more inclusive senior cycle will offer new possibilities for students with special educational needs who need flexible pathways, and more personalised learning programmes to ensure that they have a meaningful senior cycle educational experience that prepares them for the transition to further training, to the workplace, and to adult life.

Equally, the proposals will provide greater opportunities for exceptionally able students to choose curriculum components that will allow them to demonstrate their abilities and enhance their performance. Furthermore, the review of subjects will provide opportunities to engage higher-achieving students in more in-depth application of knowledge and skills. The Summary of Key Findings for Ireland of the OECD Pisa Research 2003 pointed to the relatively low performance of higher-achieving students in mathematics in Ireland as noteworthy and meriting further exploration in any forthcoming review. These proposals offer opportunities for addressing these concerns.

The proposals involve restructuring the senior cycle curriculum to include more diverse programmes of study, involving a wider range of curriculum components—transition units, short courses and subjects. This wider range of curriculum components will allow for a better balance between knowledge and skills in the educational experience of senior cycle students, and will promote the kinds of learning strategies associated with participation in the knowledge society. They provide for improved access to a greater variety of assessment methods and for the introduction of a new inclusive certificate of senior cycle education.

These developments are linked inextricably to a changing culture of schooling, where learners will take greater responsibility for their learning choices, activities and achievements and where schools will facilitate a wider range of learning experiences, opportunities and environments.

The proposals have been developed over two years of extensive consultations involving the publication of two reports and a benchmarking study of international developments in upper secondary education. The study, conducted for the NCCA by the National Foundation for Education Research (UK) looked at trends and

developments in upper secondary education across 17 countries including Australia, Canada, England, France, Germany, Japan, New Zealand, Singapore and Sweden. It confirmed the concern across all countries with meeting the challenge of greater and more equitable participation in this stage of education while simultaneously responding to a range of economic and social needs. It revealed that in many countries these challenges are being met through the introduction of more flexible curricula, through revisiting within curricula the balance between knowledge and skills, and by adjustments to the form and structure of assessment and the use of more inclusive forms of certification. The study noted the common ground among countries in identifying independent study, improved guidance and the use of more diverse learning activities and environments as key elements of change, in the interest of contributing to the development of more economically prepared, socially integrated, critically aware and responsible lifelong learners. The study has helped NCCA to ensure that the proposals for the future of senior cycle education have kept pace with international trends in upper secondary education.

More locally, the proposals take account of government thinking in the areas of equality and inclusion and of significant policy documents such as the *Enterprise Strategy* and the *Report of the National Competitiveness Council*. They represent the outcome of engagement with expert research in upper secondary education, with stakeholders in education and more directly with students, parents, teachers and school management.

In particular, the proposals reflect the committed and considered deliberations of the education partners represented on the NCCA. More broadly, they also reflect an emerging and deeply felt desire among teachers and schools for a commitment to joined-up systemic change, where a clear and purposeful sense of the direction of change and the milestones to be achieved is established and agreed. The kind of change that has as its basis a clear commitment to well-resourced implementation that takes place in a realistic timeframe.

1.2 Background

The NCCA's review of senior cycle post-primary education commenced with the publication of *Developing Senior Cycle Education: Consultative Paper on Issues and Options*, in 2002, and has been progressed since then through a range of consultative fora and publications. *Developing Senior Cycle Education: Directions for Development*, published in 2003, gathered together, through an exercise in futures planning using the OECD scenario planning tools, some key ideas and directions for the development of senior cycle up to and beyond 2010. The directions document was not an agreed Council position on the future of senior cycle; rather it was a consultative tool to focus attention on potential medium to long-term developments.

In 2004, it was decided that the advice on the future development of senior cycle education would be presented in two parts. The first part, *Proposals for the Future of Senior Cycle Education in Ireland: Overview Advice* issued to the Minister in June 2004.

The *Overview Advice* set out proposals for the development of senior cycle education and described the strategies necessary for their implementation. It outlined the nature of the steps that would need to be taken during the period 2005 to 2007 to progress these proposals. It offered a rationale for the proposals presented, based in the various elements of the senior cycle review process and also took account of the comparative research on upper secondary education commissioned by the NCCA, to ensure that the proposals reflected good practice and current research.

The second part of the advice is set out in this document. It presents a fuller account of the proposals, setting out more detailed recommendations that aim to take account of the practical implications and issues involved in implementing change on this scale for students, parents, teachers, schools and the wider education system. This advice offers more detailed specifications of proposals concerning

- the choice, nature and composition of programmes of study
- the requirements associated with programmes of study

- the specifications and parameters surrounding the curriculum components— transition units, short courses and subjects
- the identification, description and embedding of key skills in the curriculum
- assessment change and the introduction of a new certificate of senior cycle education
- the implications of these changes for school culture
- the management of educational change through rethinking the process of implementation
- the development of a communication strategy, aimed at the general public and at those working in the education system.

The advice also identifies aspects of the senior cycle proposals where considerable investment will be needed and offers an indicative costing of that investment in some cases. Finally, an appendix to the advice clarifies aspects of the proposals that will be the subject of detailed, developmental work by the NCCA, during the period 2005-2007.

The *Overview Advice* set out an agenda and a general rationale for that agenda that is significantly advanced in this more detailed advice. Both parts of the advice are rooted in the premise that curriculum review and development are best addressed on a rolling basis with the full support of those directly involved. This second set of advice focuses on work to be undertaken over a developmental period of several years. It is premised on the principle that agreement will be needed on all sides, at each stage of the work, before progress can be made to the next stage of development. However, But it is premised on a shared vision of the future shape of senior cycle, and of the change process that will deliver on that vision.

In advancing change on this basis, the advice itself must be subject to continuous review and modification in the light of developments and consensus building in the education system and beyond. The advice must also be subject to review on the basis of the experience and findings of developing the various proposals to a fine level of detail. It may be that some aspects of the proposals, upon detailed examination, will prove less appropriate or workable than envisaged and as a result may need to be

revised. In other words, the principle that the proposals will be subject to rolling review and the scrutiny of ongoing monitoring and robust evaluation will be applied.

During the period between the issuing of the *Overview Advice* and this more detailed advice, the proposals were the subject of considered engagement and discussion within the relevant NCCA committees and beyond, especially in relation to their practical implications and consequences. Similarly, the issuing of this advice signals the advancing of more developed proposals rather than their definitive presentation for adoption. This approach is in keeping with the principle that the proposals will continue to be subject to change on the basis of rolling review, but also represents recognition that there are several aspects of the proposals that will require further explication, more detailed consideration and practical exemplification before final decisions are made. These include discussion of recognition of curriculum components; the approach to differentiating learning achievement through curriculum and assessment provision; how the option of a two-year or three-year programme will be handled by schools; the question of repeating programmes of study and their assessment; how the Leaving Certificate Applied will be accommodated in and relate to a reformed senior cycle.

The proposals are presented with the confidence that emerges from extensive consultation, benchmarking against good practice in other countries, and a careful assessment of the role that senior cycle education should play in meeting educational, social and economic needs in Ireland at a time of marked social and economic change.

That confidence is reflected in the overarching proposal that the NCCA now embark on a two-year period from 2005 – 2007 where those elements of the proposals related to curriculum and assessment are developed to a fine level of detail that will facilitate decision-making on implementation. It is further reflected in the proposal that a Senior Cycle Strategy Group be established to prepare the ground for the implementation of the proposals through a new model of educational change that builds on successful change processes of the past, but also breaks new ground for the future.

Section 2: Programmes of Study

2.1 Programmes of study: selection and requirements

The particular combination of transition units, short courses and subjects taken by a senior cycle student will be called a **programme of study**. Programmes of study will derive from and subscribe to the general aims of senior cycle education to

- ensure coherent and meaningful continuity from the junior cycle of post-primary education and to allow progression to further education, the world of work and higher education
- provide a curriculum characterised by breadth and balance, while allowing for some degree of specialisation
- ensure improved access to, and equality in senior cycle education for all, within a context of lifelong learning
- contribute to the emergence of Ireland as a knowledge society
- educate for participative citizenship at local, national, European and global levels
- contribute to the development of each individual's moral, social, cultural and economic life and enhance their quality of life
- ensure that the highest standards of achievement are obtained by every person, appropriate to their ability
- ensure that the educational experience at senior cycle is in line with good practice and developments internationally.

Programmes of study will be characterised by choice and flexibility. The requirements associated with the composition of programmes of study will be limited in number and not restrictive. This is reflective of the need to retain flexibility for schools in how they design and construct their senior cycle learning experience. It also reflects a closer alignment of senior cycle, structurally, with the principle of lifelong learning and developments in further education and higher education.

The flexibility of the proposals builds on the strengths and best features of existing senior cycle programmes. For example, it would be possible, if a school so wished, to design a three-year programme that featured a first year comprised largely of transition units, thus offering the equivalent of a ‘transition year’. In addition, it is envisaged that the most beneficial aspects of the Leaving Certificate Vocational Programme (LCVP) will be accessed by more students than at present. The LCVP Link Modules will be available to all students as short courses and transition units. It will be feasible for students taking either a two or three-year programme of study to combine, for example, a short course in Enterprise Education with one or more transition units in Preparation for the World of Work. Furthermore, the flexibility inherent in programmes of study will remove the barrier that designated subject groupings currently present to participation in the LCVP for many students.

Across all schools, a diverse range of programmes of study will be available. This results from the fact that students can take either a three-year or two-year programme, and that the programme can include a variety of combinations of curriculum components (transition units, short courses and subjects). In choosing the particular programme of study to be taken, the student should take account of the following factors

- the areas of learning in which she/he is most interested
- the areas of learning in which she/he has particular talents
- the areas she/he needs to study in order to fulfil her/his ambitions in further education, higher education or the world of work
- the range of curriculum components offered by the school
- the duration of the programme (two or three years).

All these factors are of central importance to the choice made. The programme of study taken should meet the interests, needs and aptitudes of the individual student. It must also meet the ambitions of the student to proceed to further study, to working life or to a combination of these. While a reformed senior cycle will present very flexible learning possibilities for all learners—full-time students, part-time learners and returning learners—the ambition to proceed to further or higher education will require that particular areas and amounts of learning are undertaken.

The choice of a programme of study must also take account of the realities of provision of senior cycle in schools. The programmes of study available to a student in a particular school will be influenced by the range of curriculum components the school is in a position to offer in the years of study. In addition, schools may have particular examination or non-examination curriculum components that are viewed as essential for all their students. Teachers and guidance counsellors may also have views to offer the student about curriculum components they feel it would be advisable to take.

All of these factors will be influential in the major choice to be made on a programme of study—whether to take a three-year or a two-year programme. Senior cycle will offer students considerable flexibility in terms of the programme that can be constructed with a wide range of transition units, short courses and subjects available. In this context, the three-year programme offers greater flexibility. The student taking, for example, a two-year programme for the purpose of entry to higher education will find her/his real choices limited considerably.

In choosing a programme of study, its **nature or composition** must also be considered. There will be no requirements related to the *nature* of the programme of study. But advice and guidance to be borne in mind when selecting the range of curriculum components to be included will be offered to students and schools. This advice will be based on the following ideas or principles among others.

- The programme of study should be coherent. The combinations of curriculum components taken should make sense. The final programme should not be too fragmented with a range of very different, unconnected components.
- On the other hand, the programme should not be too specialised. The long-held principle that senior cycle should offer a broad educational experience with limited scope for specialisation should be adhered to. While it is possible, for example, to take a programme of study that includes a large volume of science and technology components, it is advisable that transition units, short courses and subjects from other curriculum areas would also be included. In this sense, a reasonable degree of balance should be achieved in the

programme of study. In particular, the inclusion of transition units and short courses in areas that might open up new learning possibilities and enable the student to develop new skills and discover new talents should be encouraged.

- The purpose of senior cycle education is not solely related to meeting needs and ambitions associated with further study and work. Curriculum components that cater for the personal and social development of students, that contribute to their personal well-being and prepare them for life as citizens should be included. It was recognised during the consultations that some areas of learning, such as social, personal and health education, form a very important part of senior cycle education and that schools should therefore have a particular responsibility for their provision.
- The senior cycle curriculum has traditionally been thought of in terms of subjects. But there are aspects of a reformed senior cycle that will involve looking into the detail of curriculum components carefully, before making choices about their inclusion in a programme of study.
 - Key skills will be embedded in each curriculum component. How do they add up in an overall programme of study? Does the programme cover the full range of key skills available? Have curriculum components been selected that emphasise the key skills prioritised by students and schools as most important for them?
 - A further consideration is the range of learning experiences and activities offered by a particular curriculum component. Where particular combinations of curriculum components are selected, how much of the associated study will be confined to the classroom? How much will be based outside the school? What opportunities will there be for independent study and for working on project assignments? What opportunities will the components chosen offer students for practical work and working in teams?

- Finally, consideration should be given to how the curriculum components will be assessed. In a reformed senior cycle that includes transition units, short courses and subjects, the range of assessment methods will be broader and the timing different. Consequently, students will have greater opportunity to be assessed in ways that they are most comfortable with, and that suit their strengths as learners. Schools and students will need to consider the amount of assessment and the schedule of assessment that goes with the particular programme of study chosen.

The senior cycle will be characterised by flexibility in the *choice* of programmes of study and in their *nature and composition*. However, there will also be some *requirements* associated with both a three-year and a two-year programme of study.

The envisaged requirements for study at senior cycle can be loosely divided into programme requirements and requirements associated with the wish of a learner to proceed to higher and further education. As with the parameters surrounding the choice of programmes of study and the nature and composition of programmes, the requirements are minimal, allowing learners and schools considerable flexibility in the development and provision of programmes of study.

Requirements for a three-year programme of study

The general requirements associated with a three-year programme of study will be

1. Study of the Irish language as part of the programme of study taken.
2. The inclusion in the programme of study of at least 11 transition units and two short courses.

Further requirements at senior cycle will relate to meeting the matriculation requirements for entry to universities, colleges and institutes of technology. It is envisaged that students will continue to apply to be selected for a higher education course through the Central Applications Office (CAO). These further requirements include

3. Any particular matriculation requirements set by the authorities in higher education.
4. The generation of a points score, based on the student's achievement in the assessment of the subjects and short courses taken. It is proposed that it should be possible to use a maximum of six short courses towards the points score but the score could also be based on taking four short courses and four subjects or two short courses and five subjects or other combinations.
5. It is proposed that the completion of one transition unit will also become part of the matriculation requirement.

All requirements will also apply to part-time and returning learners wishing to enter higher education through the CAO system.

Overall, the requirements are minimal. Some relate to the Irish language and the composition of a three-year programme of study. As at present, it is proposed that students will be required to study the Irish language. However, it is suggested that some consideration should be given to whether, by exploiting the range of curriculum components in use, that requirement could be met in a number of ways that offered new possibilities for the teaching and learning of the Irish language.

A further requirement is that a three-year programme of study will include at least eleven transition units and two short courses. These are minimum requirements put in place to ensure that students enjoy a varied educational experience given the different types of learning experiences that the transition units and short courses offer.

Other requirements relate to particular matriculation requirements and to the operation of the points system. In the context of the latter, the proposal to allow the use of a maximum of six short courses in the generation of a points score is reflective of the desire to offer schools reasonable scope for the development of programmes of study that will cater for the full range of learning needs into the future.

The flexibility in the choice of programmes of study and in their nature and composition allows schools to create a 'transition year' based on the current model at

the beginning of a three-year senior cycle. The requirements for a three-year programme of study above indicate a minimum number of transition units that must be completed. However, schools that wish to retain their transition year as the first year of a three-year programme of study can design a programme that includes a greater number of transition units, offering a broad range of educational experiences that best meet the social, personal and learning needs of their students in that year. Such a programme can also include other areas of learning characteristic of current Transition Year programmes, such as work experience, student exchange programmes and some foundational study that prepares students for subjects to be taken later in their senior cycle.

Requirements for a two -year programme of study

The general requirements of a two-year programme of study will be

1. Study of the Irish language as part of the programme of study taken.
2. The inclusion in the programme of study of at least one transition unit.

Further requirements related to meeting matriculation requirements will include

3. Any particular matriculation requirements set by the authorities in higher education.
4. The generation of a points score, based on the student's achievement in the assessment of the subjects and short courses taken. It is proposed that it should be possible to use a maximum of six short courses towards the points score but the score could also be based on taking four short courses and four subjects or two short courses and five subjects or six subjects or other combinations.
5. It is proposed that the completion of one transition unit will also become part of the matriculation requirement.

These requirements will also apply to part-time and returning learners wishing to enter higher education through the CAO system.

Again, the requirements are minimal. The requirement related to study of the Irish language is identical to that for a three-year programme. The minimalism in requirement extends to the composition of the programme. Students are required to complete one transition unit and it is proposed that this completion will also serve to meet a matriculation requirement. But, unlike the three-year programme, the inclusion of other transition units and of short courses, while it will be recommended, will not be a requirement.

2.2 Examples of programmes of study

The number and range of potential programmes of study is extensive. For illustrative purposes, two examples are provided below, the focus of the examples being students who intend proceeding to further study in higher education. Future material on programmes of study in a reformed senior cycle, developed during the 2005-2007 period, will include further examples that will focus on a greater diversity of student interests and needs. It will also be essential to present and discuss examples of programmes of study reflective of different types and sizes of schools with different ranges of expertise among the staff. Furthermore, programmes of study will also need to be considered in greater detail, from the perspective of teachers and the range of curriculum components and assessment activity they will be in a position to support in a school where a given range of programmes of study pertain.

Further examples of programmes of study, developed during the period 2005-2007, will explore programmes of study to cater for part-time learners who may wish to combine a given number of days schooling with part-time working life. These examples will also provide the opportunity to explore the potential for work-based learning (for example the undertaking of transition units at work) as part of a senior cycle programme of study.

The following examples simply provide us with an initial insight into how the full range of curriculum components can combine to offer interesting three-year and two-year programmes of study. In this context, they also serve to illustrate the substantial difference in the potential offered by the two options.

The examples provided effectively include four types of curriculum components. The purpose, nature and scope of three of these—subjects, short courses and transition units are outlined in detail elsewhere in this advice. A category named ‘*courses offered by the school*’ has also been included. The inclusion of this component is reflective of the principle of allowing schools maximum flexibility in the composition of programmes of study. The thinking here is that schools may have particular curriculum components that they wish students to undertake, but that they do not wish to offer as examination components (subjects and short courses) or as components that will feature in the certification process (transition units). The inclusion, in the examples, of particular areas of study such as Religious Education as ‘courses offered by the school’ does not imply that these are viewed only as areas that would be compatible with the idea and purpose of ‘courses offered by the school’. For example, in some schools Religious Education would be offered as a full subject, and aspects of religious education are likely to feature in the provision of transition units and short courses in the future. While Social, Personal and Health Education (SPHE) is presented in the examples as a course offered by the school, work currently underway by the NCCA on this area of the curriculum may lead to the development of SPHE as a subject or short course.

In initial discussions of these examples, concern about the possible status that might accrue to ‘courses offered by the school’ has been raised. Those supportive of this view have suggested that all areas of the curriculum could and should be conceived as either transition units, short courses and subjects, and that transition units, in particular, have the potential to encompass the category of ‘courses offered by the school’.

The examples are based on the calculation of a programme of study as comprising 55 curriculum units in the case of a three-year programme of study and 36 curriculum units in a two-year programme of study. This ‘notional’ curriculum unit comprises 45 hours of study. It follows that a transition unit (45 hours) represents one curriculum unit, a short course (90 hours)—two curriculum units and a subject (180 hours)—four curriculum units. The idea of a curriculum unit is useful in understanding the composition of the examples provided. The hours of study include time related to the

preparation of students for assessment and for the completion of assessment components such as projects.

Sample Three-Year Programme of Study

This is a three-year programme of study where the student involved intends to proceed to study in higher education. She/he is particularly interested in science and technology and likes being involved in practical learning experiences and activity. The programme of study is followed by a year-by-year curriculum plan that exemplifies the way in which the school could offer the programme over the three years of senior cycle.

Transition Units (for certification)	Short Courses (for examination)	Subjects (for examination)	School Courses
Drama Project		Irish	Guidance
Creative Writing		English	Social, Personal and Health Education
Art Appreciation	European Studies	French	Religious Education
ICT: Data Handling	Mathematical Applications	Mathematics	
Irish Language	Science and Society	Physics	
Learning Management	Sports Studies	Chemistry	
Outdoor Pursuits		Physical Education	
Career Investigation			
Mini Company			
Projects A-Z			
First Aid			

Curriculum plan (3 year)	Year 1	Year 2	Year 3
Transition Units	Career Investigation	Creative Writing	First Aid
	ICT: Data Handling	Art Appreciation	Drama Project
	Mini Company	Learning Management	Irish
	Irish language	Irish	French
	Projects A - Z	French	Chemistry
	Outdoor Pursuits	Chemistry	Physics
Subjects	Mathematics	Mathematics	Physical Education
	Physical Education	Physical Education	English
	English	English	Mathematical Applications
Short Courses	Sports studies	Physics	Science and Society
	European studies	Guidance	Guidance
School Courses	Guidance	Social, Personal and Health Education (Taken over 2 yrs)	
	Social, Personal and Health Education (Taken over 2 yrs)		
	Religious Education		

Sample Two-Year Programme of Study

This is a two-year programme of study where the student intends to proceed to study in higher education. She/he is interested in languages and has particular strengths in reading and writing. The programme of study is followed by a year-by-year curriculum plan that exemplifies the way in which the school could offer the programme over the two years of senior cycle.

Transition Units (for certification)	Short Courses (for examination)	Subjects (for examination)	School Courses
Health Education and Promotion	Psychology	Art	Guidance
Learning Management	Italian Language	English	Social, Personal and Health Education
		Irish	Physical Education
		Mathematics	
		Spanish	
		Religious Education	

Curriculum Plan (2 year)	Year 1	Year 2
Transition Units	Learning Management	Health Education and Promotion
Subjects	English	English
	Mathematics	Mathematics
	Irish	Irish
	Spanish	Spanish
	Art	Art
	Religious Education	Religious Education
Short Courses	Psychology	Italian Language
School Courses	Social, Personal and Health Education	Social, Personal and Health Education
	Physical Education	Physical Education
	Guidance	Guidance

Section 3: Curriculum Components

3.1 Introduction

In order to meet the challenge of providing improved access to, and equality in, senior cycle education for all and to ensure the relevance of the senior cycle educational experience to the needs of the Irish people, society and economy, the *balance* of elements within the curriculum, particularly knowledge and skills, was examined. Gaps in curriculum provision were also identified in the course of the review of senior cycle education.

This section is concerned with the content of the senior cycle curriculum and the various ways that students can access their chosen learning through the different curriculum components. It outlines the actions required to address the rebalancing of the curriculum.

The formal senior cycle curriculum will comprise four types of curriculum component:

Subjects

Subjects are the most familiar of all the curriculum components presented. They are the traditional units of study that have comprised the Leaving Certificate to date. Subjects are discrete units of study of 180 hours duration that present a relatively broad selection of knowledge and experiences. Subjects combine some theoretical concepts and abstract thinking with a range of cognitive and practical skills. They are also underpinned by a number of key skills. Subjects are examined and certificated by the State Examinations Commission.

Short courses

Short courses are new curriculum components. They are discrete units of study of 90 hours duration that present a more specific selection of knowledge and experiences that are sometimes, but not always based in subject disciplines. Short courses also combine some theoretical concepts and abstract thinking with a range of cognitive and

practical skills and are underpinned by a range of key skills. In some cases the knowledge and skills will be an extension of those already gained through the study of a particular subject, for example Mathematical Applications, whereas in others the focus will be on the presentation of a broader range of theoretical concepts of a discipline that is new to senior cycle, for example Psychology. Short courses are examined and certificated by the State Examinations Commission.

Transition units

Transition units are 45 hour units of study that build on the philosophy and methodology of successful modules already developed by schools as part of the current Transition Year programme. Transition units will provide schools with the opportunity to offer a broad range of educational experiences that best meet the social, personal and cognitive needs of their students. Assessment will be undertaken as part of the teaching and learning of each transition unit and the State Examinations Commission will certificate transition units on the basis of completion.

Courses offered by the school

The inclusion of these courses is reflective of the principle of allowing schools maximum flexibility in the composition of programmes of study, the thinking being that schools may have particular courses that they wish students to undertake but that they do not wish to offer as examination components (subjects and short courses) or as components that will feature in the certification process (transition units). Examples may include Religious Education, Social, Personal and Health Education, Guidance and Learning Management. The State Examinations Commission will not assess these components for the purposes of certification.

3.2 Differentiation

Differentiation in teaching and learning and differentiation of the curriculum and its related assessment is necessary in order to recognise and value the standard and quality of learning achieved by a learner and to challenge learners to achieve to the highest level. It is important in facilitating the inclusion of learners with special educational needs, including those who are exceptionally able. Differentiation can be undertaken in a variety of ways. Teachers differentiate learning approaches and

methods to cater for the different abilities and talents of learners. Curriculum components, such as subjects, can be differentiated by level. Assessment is also a critical field where differentiation can be applied by using multi-level examinations and by the use of finely tuned grading scales. The overall certificate awarded with educational programmes can also be differentiated. The application of the principle of 'fitness for purpose' is essential in deciding upon the way to differentiate.

The approach to differentiation that will inform senior cycle developments will aim to challenge learners to achieve to their potential and to provide a basis for recognising different standards and quality of achievement. It will aim to facilitate greater access to subjects and short courses for a wider range of students and will also serve as the basis for a review of the role of Foundation Level in the reformed senior cycle.

Throughout the senior cycle consultations the view was frequently expressed that learners taking a predominantly 'Ordinary level Leaving Certificate' have not been served well by the fact that syllabuses at that level are often subsets of Higher level courses, rather than courses specifically designed for study at that level. It is envisaged that the greater choice of curriculum components and programmes of study available to schools and learners in the reformed senior cycle, in addition to shifting the focus of differentiation from curriculum content towards teaching, learning and assessment, will contribute to improving the quality of the educational experience enjoyed by those taking subjects at Ordinary level.

Within the review of senior cycle education to date, discussion of differentiation has been limited. As a result, the ideas outlined here are indicative and tentative only.

It is envisaged that differentiation, as at present, of subjects into Ordinary and Higher levels will provide the starting point for movement over time towards a greater focus on differentiation in teaching and learning and at the point of assessment. In initial discussions it has been suggested that short courses should be offered as common level curriculum components. However, if subjects continue to be differentiated by level in the long-term, and the recognition of short courses on a pro-rata basis with subjects is seen as desirable, the differentiation of short courses by level may be necessary in the future.

In the period September 2005 – June 2007, this initial thinking will be more fully developed with consideration of matters such as

- ensuring, within the curriculum component, that the aims and learning outcomes identified facilitate the development of assessment instruments which cater for the differentiation envisaged
- differentiation through assessment instruments, in particular the advantages and disadvantages of multi-level examinations, and of providing extensive choice within examination papers/components
- the grading scales currently used in senior cycle and their appropriateness to the curriculum component
- implications that any preferred approach towards differentiation would have for the adjustment of the current ratings on the points system.

3.3 Subjects

The review of senior cycle has at its core a commitment to the introduction and maintenance of programmes that build on the strengths of the current system, while also placing greater emphasis on learners taking more responsibility for their own learning, on an improved relationship between the acquisition of skills and knowledge, and enhancing the focus on the learning and the learner.

In order to offer balance in the range of subjects available to students for examination at senior cycle, the subject list will be reviewed to establish what new subjects should be added to the list as either subjects or short courses, which subjects would be complemented by the development of short courses, either as extensions or alternatives to the existing subjects, and whether some subjects should be removed from the list. New subjects likely to be considered in the first phase of the review include Civic and Political Education, Physical Education, Drama, and languages proposed on the basis of the NCCA's review of languages in post-primary education.

Subjects will be reviewed to establish how they might be re-orientated and re-configured so as to contribute fully to the new senior cycle. The use of an agreed

syllabus template will bring about a consistency of design that will improve the clarity of the syllabus documents.

Subject reviews will be underpinned by a number of principles, including:

- recognition of the needs of all learners in a context of lifelong learning, preparing students for the world of work, for further education and for higher education
- ensuring greater flexibility and ease of access by the inclusion of more flexible curriculum structures for all types of learners, featuring subjects and short courses that would facilitate greater variety and flexibility
- reduction of the breadth of content, leaving time for reflection on, significant engagement with and enhanced understanding of the topics, processes and concepts involved
- development of key skills through the learning outcomes of subjects
- development of a broader range of assessment methods, providing the student with comprehensive and regular feedback on her/his learning as well as putting in place the basis for an enhanced certification system
- a focus on the learning outcomes to be achieved by studying the subject, placing particular emphasis on the links between knowledge, skills, attitudes and values.

Issues to be addressed in the subject review

The review of the current subject syllabuses will be structured around a number of key issues identified during the review of senior cycle.

Structure of syllabus

The review will

- clarify whether the knowledge content of the syllabus allows for appropriate engagement with the subject matter and the development of skills and the extent to which this content may need to be reduced
- advise on the process of reducing knowledge content in the case of each subject
- establish the changes required to modernise the content of the syllabus, where appropriate, for example the specification of gaps in the content of the syllabus and the identification of obsolete material.

Assessment

The review of each subject will consider the potential for developing the assessment of that subject. The assessment load associated with each subject will be reviewed within clearly defined parameters that will be developed for all subjects. In particular, the review will

- clarify how the range of assessment methods might be developed and the relative weightings to be assigned to different assessment components within a subject
- provide suggested assessment schedules, including non-examination assessment that would provide more regular feedback on learning. The principle of avoiding over-assessment of students and the excessive involvement of teachers in assessment-related tasks will be key considerations.
- advise on the practical implications of any suggested changes for the current examination system
- advise on how assessment changes might impact on what is learned and how it is learned.

Unitisation

Senior cycle subjects will be organised in ways that will facilitate increased levels of access and flexibility. Some subjects may be organised into smaller units, which will fit together, one leading to another. The review will report on

- the scope for unitisation within each subject syllabus with an outline of the units where practicable
- any assessment implications of such unitisation
- any implication for the identification of core and optional areas of subjects
- the potential for facilitating recognition (through certification) of partial completion of the subject by learners who leave school early.

Short courses

The potential for short courses to be developed that would complement the subject syllabuses, either as extension or alternative courses, will be identified and the impact the establishment of such courses might have on the syllabus will be considered.

Key skills

The review will detail the key skills that are currently identifiable in the syllabus and the extent to which the essential elements of each skill are developed through the teaching and learning of the subject. In particular, clarification will be sought on

- the extent to which each of the six key skills is currently developed through the teaching and learning in each subject
- the three key skills that can be most naturally developed through that subject and the degree to which the essential elements of those skills can be developed
- how the essential elements of those three key skills could be signposted in the syllabus
- specification of learning outcomes which would encourage the use of skills-enhancing teaching methodologies.

Differentiation

The review of each subject will consider the potential for an increased focus on differentiation through teaching and learning and at the point of assessment.

3.4 Short courses

The re-balancing of the senior cycle curriculum is underpinned to a large extent by a desire to present students with greater degrees of flexibility in making curriculum choices. The inclusion of short courses in the range of options available to students in senior cycle will add to curriculum flexibility. It will also provide assessment flexibility, as students will be able to study a short course over one year of a two or three-year senior cycle, and be assessed on completion of the course.

Short courses will be of 90 hours duration. It is envisaged that short courses will be recognised for matriculation purposes through the points system.

Short courses will be consistent with the idea of providing broadly-based programmes of study leading to a qualification with a range of purposes, including preparation for working life and progression to further study. In addition to these purposes, the knowledge, skills and abilities gained through taking short courses will contribute significantly to the personal and social development of the learner.

The range of knowledge covered by short courses will be broad and will engage the learner with the theoretical underpinnings of the subject of the short course. The learning associated with short courses will encourage the development of skills, both cognitive and practical, and emphasise their applicability in addressing issues, questions and tasks, in solving problems and in developing strategies. They will aim to provide learners with opportunities to use the knowledge and skills gained in a variety of contexts. In so doing, they will also aim to underpin the ability of learners to take responsibility for managing their learning and for the quality of the outcomes of their learning.

As with subjects, short courses will be outcomes based. The syllabus or course outline will include a rationale outlining the principles on which the course is predicated. It will include aims and objectives and outline the key skills embedded within the course. An overview of the course and an outline of the various units of study contained will be presented, as will the detailed learning outcomes to be achieved by learners. Finally, the syllabus or course outline will contain a description of how the learning outcomes will be assessed. A draft template for the design of short courses is included as Appendix 3.

It is envisaged that, in many cases, existing teachers will teach short courses, as many of the short courses derive from or are related to existing, recognised subjects. In some of these cases, teachers will need to be introduced to the short course through in-career development opportunities. In other cases, provision of a short course in a school may require more extensive retraining on the part of a teacher, or revitalisation of knowledge or skills in areas they may not have studied or taught for some time. In a few cases, additional personnel with particular areas of expertise may be required in order to provide a particular short course.

Course descriptions

It is intended that in the period leading up to the introduction of short courses, the NCCA will produce and publish an initial selection of short courses covering a range of course types. In cases where there are areas of overlapping content, it will not be possible to take a short course in combination with a specific subject. In some cases, because of the nature of the short course, the work of learners will need to be assessed by the teacher for the purpose of certification and this will need to inform a school's decision to offer the course. The short courses initially identified for development are:

Drama and Theatre Studies

This course presents an opportunity for students to develop their stagecraft, acting skills and an understanding of theatrical and other media production. While the course provides a general introduction to the area of drama and theatre for the first time in senior cycle, it has links to the study of drama as literature in the subject of English. It is intended that because of its nature the course will be assessed on an internal basis in conjunction with a comprehensive system of external monitoring.

Enterprise Education

Based on the LCVP link module of the same name, this course fosters in students confidence, creativity and initiative and develops teamwork, communication and computer skills. It will provide them with a more realistic understanding of how and why enterprises operate and a greater awareness of enterprise in action in business, in the community, at home and in the school. The course will particularly focus on the exploration of enterprise concepts in actual business settings through, for example, organising visits to local business and community enterprises, and meeting and interviewing enterprising people on-site and in the classroom.

Irish Language

This short course is aimed at enhancing the language skills (written and oral) and understanding of learners of Irish in Gaeltacht schools and in all-Irish schools. Its focus will be on achieving excellence in attainment of the Irish language. It will be designed as an enhancement of, and may be taken in conjunction with the senior cycle subject Irish. A companion course in Irish Culture may also be developed.

Mathematical Applications

The Leaving Certificate Mathematics syllabus, particularly at Higher level, includes many elements that are covered more at a conceptual level than at the level of application. In order to extend and deepen the learner's understanding of mathematics, this short course contextualises some of these elements and provides for their application to relevant situations. The short course is designed to build upon established mathematical knowledge and skills appropriate to senior cycle, and can be taken in tandem with the subject Mathematics. Participation in this short course is not compatible with the study of Applied Mathematics as a senior cycle subject.

Modern Language

While the study of modern languages is well catered for by the range of subjects available in senior cycle it is not always possible for a student to include a third language in her/his programme of study. In this short course the student engages in a study of the language that provides a concise but comprehensive treatment of the target language, with the emphasis on enhancing the student's ability to communicate

effectively. Participation in this short course is not compatible with a study of the same language as a senior cycle subject.

Health Education and Promotion

Health should be understood as a resource for everyday life, a positive concept emphasising social and personal resources as well as physical and mental capacities. Awareness of health implies an understanding of what it means to be healthy and how individuals can promote health and prevent disease. In this course students will examine how socio-economic, cultural and environmental conditions combine with individual lifestyle factors to determine the health status of the individual and of society. A study of this short course can inform and be informed by a student's involvement in Social, Personal and Health Education.

Psychology

The short course in Psychology offers a general introduction to the area and also provides a worthwhile foundation for further studies in Psychology or related subjects in higher education. As well as developing their understanding of different areas of psychology, students will explore some of the ethical issues in psychology such as those related to psychological research.

Science and Society

Arising from the study of a science subject(s) elsewhere in their programmes of study, students consider in this short course the societal context of the science and the parameters within which scientific activity takes place. The course provides a broad introduction to the philosophy of science and examines the relationship between advances in science and technology and the development of communities, economies and societies. In addition, students explore some of the ethical issues that emerge in areas such as research practice and environmental protection.

Social and Political Education

This course provides, for the first time, a means to build upon the foundation provided by CSPE at junior cycle. It comprises a more focused exploration of the individual's potential contribution to society and its political structures. It enables the student to better evaluate alternative analyses of society and to more clearly understand the role of the individual/group in the process of change at a community and national level.

Sports Studies

This course provides an opportunity to underpin the development of sports-literate young people through a study of the scientific, sociological and economic basis for Irish sport. The course extends significantly the sports focus of some elements of the subject Physical Education and has a strong connection with the student's participation in physical education.

Other areas that may be developed in the first suite of short courses include, Media Communication Technology, Social, Personal and Health Education, Architectural Studies, Irish Culture, and Sustainable Development.

Assessment

A short course will be assessed by means of a single assessment event towards the end of the school year during which it has been studied. The implication of this arrangement is that for many students there will be a component of assessment for certification in each year of their senior cycle schooling. A number of observations can be made at this point.

- One of the imperatives underpinning the development of the curriculum at senior cycle is the need to link more closely the aims of the short courses with the forms of assessment used. The aims of the short courses will require a range of assessment methods, some of which are currently in use (for example examination papers) and some which will be new (for example electronic portfolios).
- Given the nature of some of the short courses (for example Drama and Theatre Studies) it will not be feasible to assess these without some participation by

teachers and schools in the assessment process. This is in line with international practice in these areas of study, even in high stakes settings. No models have been developed for assessment of students in such areas on an external basis. External moderation of assessments will apply in these cases.

Certification

The student's achievement in the short courses studied as part of her/his programme will be recorded on the certificate of senior cycle education.

In the period September 2005 – June 2007 the ideas outlined in this section will be developed more comprehensively with priority given to

- presenting detailed syllabuses for all the short courses listed above. The design of these courses will be carried out by the NCCA in conjunction, where appropriate, with other agencies
- clarifying the assessment arrangements which best reflect the aims and objectives of each course
- advising on the phased introduction of the first set of short courses and identifying the courses which will comprise the second set of short courses to be introduced
- quantifying the professional development and additional support required for the successful integration of short courses into the senior cycle.

3.5 Transition Units

The restructured senior cycle will include new curriculum components called Transition Units (TUs). These are 45-hour units of study, inclusive of time for assessment activity, that will be available to all students, whether they follow a two-year or a three-year senior cycle programme. Transition units will build on the philosophy and methodology of successful modules already developed by schools as part of the current transition year programme. Successful transition year programmes have been marked by curriculum innovation and creativity among teachers and by

schools. The introduction of TUs will continue to harness this creativity and will provide schools with the opportunity to offer a broad range of educational experiences that best meet the social, personal and cognitive needs of their students.

Transition units will provide recognition of a wide range of learning in senior cycle. TUs will facilitate the participation and integration of Leaving Certificate Applied students and provide a means by which adult and returning learners can receive recognition for prior learning. Transition units will support all learners in the development of key skills in the context of lifelong learning.

One of the most important aims of the current Transition Year Programme has been to support learners in making a successful *transition* from junior to senior cycle, from adolescence to adulthood, from a highly structured to a more flexible learning environment and from school to working life. It is envisaged that many of the new and modified TUs, will continue to pursue and achieve this aim.

Teaching and learning in transition units

Transition units will be characterised by the use of a wide range of teaching/learning methodologies in their delivery. These include

- negotiated learning
- activity-based learning
- integration of different areas of learning (cross-curricular learning)
- group work: discussion, debate, interview, role play
- project work
- research
- use of ICT
- study visits
- work experience, voluntary work.

There will also be greater opportunity to consider the needs of learners with different educational backgrounds and different learning styles. Educational activities undertaken will enable all students to have a valid and worthwhile learning experience

with emphasis given to their personal and social development, the development of key skills and capacity for self-directed learning.

Development of transition units

The involvement of schools and teachers with wide experience of implementing Transition Year and transition year modules will be essential to the development of transition units.

In the period September 2005 – June 2007

- NCCA will develop a common template for transition unit descriptors. A draft sample template for the design of transition units is included as Appendix 4.
- NCCA will work with schools to develop and validate a large range of TUs, written to the common template. This will include both the adaptation of modules currently being offered successfully in transition year and the development of new TUs.

Having worked with schools on the validation of a number of transition units, NCCA will explore models for the validation of *schools* to develop their own TUs. Validation of TUs developed by other agencies in consultation with schools will also be considered.

Assessment of transition units

Assessment will be built into the teaching and learning of each transition unit. Assessment of TUs will be both diagnostic, so as to provide accurate information with regard to learners' strengths and weaknesses, and formative, so as to provide feedback to learners to help them improve their learning and to facilitate effective planning.

Appropriate modes of assessment will be employed to complement the different transition units and the type of learning involved. Assessment may include one or

more of the following:

- summative evaluation
- written, practical oral and aural assessment
- report on work experience
- project, portfolio, presentation
- production of an artefact
- student diary or logbook
- record of skills attained.

The State Examinations Commission will not externally assess transition units.

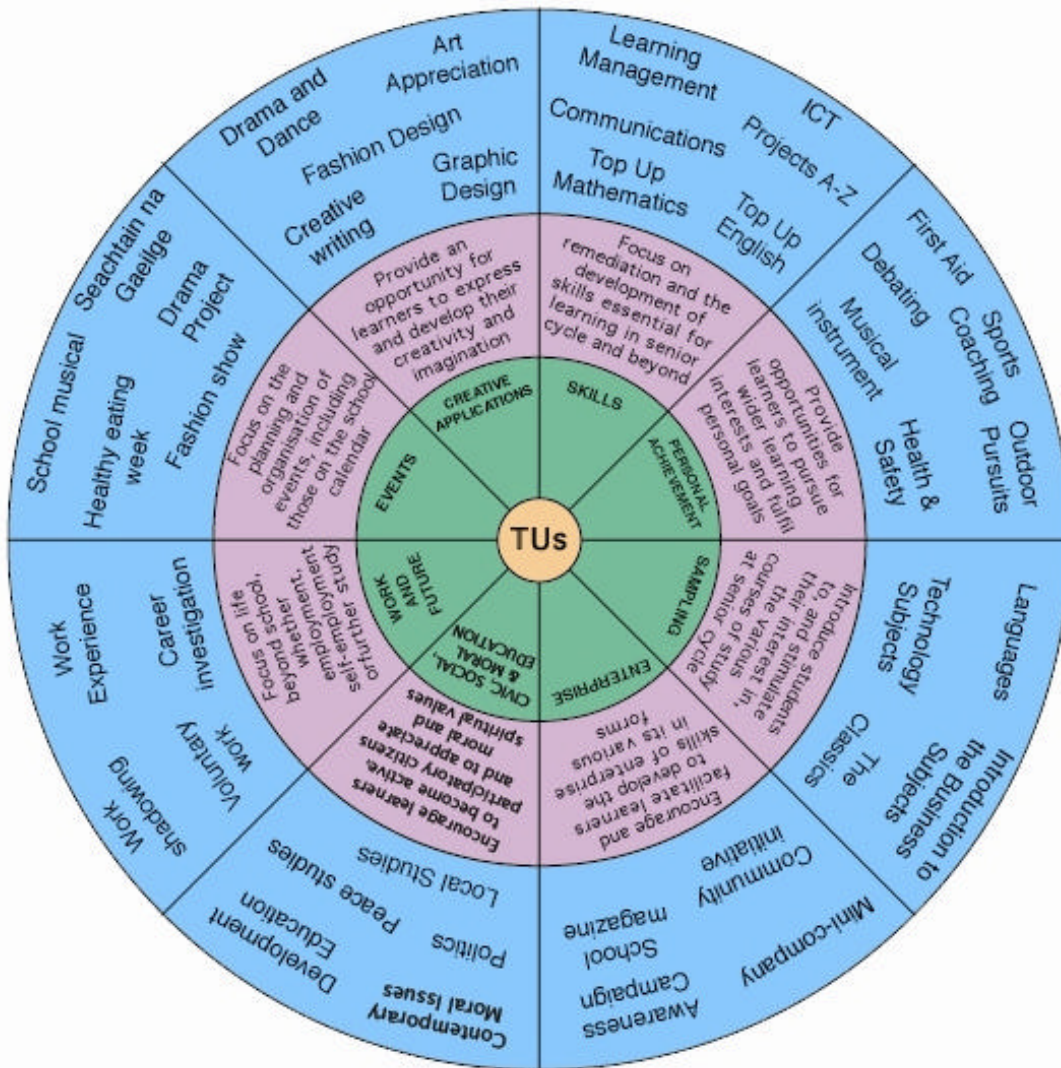
Certification of transition units

The State Examinations Commission will certificate transition units on their completion. All transition units completed by the student during the course of senior cycle will be recorded on her/his certificate of senior cycle education. Completion of at least one transition unit will be a requirement for entry to higher education.

Types of transition unit

A broad range of TUs is exemplified in the diagram below. It is by no means an exhaustive list of possibilities. Many of the TUs listed are already offered by schools as transition year modules.

TYPES OF TRANSITION UNIT



Section 4: Key skills

4.1 Description of the key skills

There will be a strong emphasis on key skills in subjects, short courses and transition units. Six key skills have been identified as central to teaching and learning across the curriculum at senior cycle. All of these key skills are important for all students to achieve their full potential, both during their time in school and into the future. They enable students to participate fully in society, including family life, the world of work and lifelong learning. The term ‘key’ is significant as the key skills set out the tools that will unlock a range of learning experiences for students, improving their access to learning, social interaction, their information and communication abilities and their ability to work collaboratively. As such, the six key skills are a set of categories of essential skills that all students need to develop in the senior cycle of their schooling.

The skills are not intended to be developed in isolation, but will be developed through the learning outcomes of each subject, short course and transition unit. Students will not take separate courses or units in key skills; rather, they will encounter the skills through their chosen programme of study. This approach of embedding the key skills within all curriculum components ensures their relevance and use value for students. Great attention will be given to ensuring that the key skills are central to the development of all subjects, short courses and transition units and that their inclusion will have a significant positive impact on the learning experience of students.

The key skills identified are:

Learning to learn

These are skills that enable students to engage effectively with the process of learning. Students are enabled to develop and use strategies for thinking and learning that enhance achievement in school and encourage independent lifelong learning.

Information processing

Information processing skills enable students to access, classify, compare, evaluate, integrate and present information efficiently and effectively.

Personal effectiveness

Skills in personal effectiveness enable students to set targets and prepare action plans, implement those plans and then review progress and achievements.

Communication

Communication skills enable students to take part in discussions, to make oral reports and presentations, and to read and respond to written material and to write.

Critical thinking

Critical thinking skills enable students to ask appropriate questions, make reasonable predictions and come to informed decisions in a variety of contexts.

Working with others

The skills required to work effectively with others enable students to plan and negotiate activities with others, work with others towards identified targets, and identify progress and suggest improvements.

4.2 Developing the key skills through the curriculum

The development of the key skills is central to the learning experience of every student. As such, all students should encounter them frequently and in an integrated way across the curriculum. In the revision or development of each subject, short course and transition unit the learning outcomes for an agreed number of the key skills will be developed through the learning outcomes identified in the syllabus. In the case of subjects and short courses, each subject or short course will be responsible for the development of a number of the essential elements of three of the key skills. Transition units may develop some of the essential elements of three or four of the key skills or, in some cases, they may focus in more depth on developing all of the essential elements of one or two skills. This will depend on the nature of the transition unit.

The **essential elements** of the six key skills are outlined below. These essential elements will be further considered and modified through consultation early in the development stage September 2005 – June 2007.

Key skills	Essential elements
Learning to learn	<ul style="list-style-type: none"> ▪ Developing an interest in learning and a desire to learn ▪ Taking responsibility for one's own learning, setting learning goals and planning and following schedules ▪ Using a variety of learning styles ▪ Accessing, recording and managing relevant information ▪ Learning independently and in groups ▪ Evaluating one's own performance ▪ Receiving and responding to feedback ▪ Making informed school and career choices
Information processing	<ul style="list-style-type: none"> ▪ Accessing information from a range of sources ▪ Discriminating between sources of information and distinguishing fact from opinion ▪ Organising and analysing information ▪ Processing and summarising information ▪ Presenting information using a range of information and communication technologies
Personal effectiveness	<ul style="list-style-type: none"> ▪ Identifying, evaluating and achieving personal goals ▪ Using initiative and developing positive attitudes to making decisions and solving problems ▪ Planning action, implementing, managing and evaluating plans ▪ Taking responsibility for decisions and actions ▪ Ability to appraise oneself ▪ Being flexible and adapting to new situations ▪ Being reliable and persevering when difficulties arise ▪ Developing self esteem

<p>Communication</p>	<ul style="list-style-type: none"> ▪ Recording information accurately and effectively ▪ Reading, analysing and evaluating written materials ▪ Expressing opinions, speculating, discussing, reasoning and engaging in debate and argument ▪ Receiving and conveying instructions ▪ Composing in a range of information genres ▪ Presenting in written and oral formats ▪ Using a variety of information and communication technologies
<p>Critical Thinking</p>	<ul style="list-style-type: none"> ▪ Classifying and ordering information ▪ Thinking creatively, using initiative and imagination and exploring options and alternatives ▪ Identifying and analysing problems and estimating and hypothesising solutions ▪ Identifying and challenging assumptions and distinguishing between opinion, anecdote and evidence ▪ Reflecting on problems critically, reasoning and applying a variety of perspectives ▪ Drawing conclusions and solving problems
<p>Working with others</p>	<ul style="list-style-type: none"> ▪ Identifying, evaluating and achieving collective goals ▪ Identifying responsibilities within a group, acknowledging individual differences and respecting the opinions and rights of others ▪ Developing good relationships with others ▪ Establishing team working practices for working as a team member and as a team leader ▪ Developing a sense of responsibility for the well-being of others and for the environment ▪ Checking progress towards the achievement of agreed objectives ▪ Reviewing the work as a group and agreeing ways of progressing

Learning outcomes will be established for each of the essential elements. These learning outcomes will then be considered in the review of subject syllabuses and the development of short courses and transition units, to encourage the development of the skills where they are most relevant.

The example shown here takes one of the essential elements of the key skill—*working with others*—and shows the development of the learning outcomes for that element.

Key skills	Essential elements	Learning outcomes
Working with others	<ul style="list-style-type: none"> ▪ Identifying, evaluating and achieving collective goals 	<p>Students will demonstrate that they can</p> <ul style="list-style-type: none"> ▪ Work in pairs and larger groups ▪ Co-operate with the members of the group to identify collective goals ▪ Co-operate with group members to identify how different roles can contribute to achieve the desired goals ▪ Communicate ideas and needs within the group ▪ Agree action plans for achieving the goals set ▪ Agree methods of keeping each other informed of progress.

4.3 Embedding the key skills in a subject

Each syllabus and course statement will have a **Key Skills Statement** that identifies the key skills that are particularly suited to that subject, short course or transition unit and explains how these will be developed through the teaching and learning in that curriculum component. The sample here exemplifies how this might look for the subject English.

Sample Key Skills Statement for English

There are six key skills identified as central to teaching and learning across the curriculum at senior cycle. These are: learning to learn, information processing, personal effectiveness, communication, critical thinking and working with others. Elements of all of the key skills will be developed through all of the subjects, short courses and transition units.

These key skills are developed through the methodologies and learning outcomes of the syllabus and through student participation in a range of skill-based activities. While some of the elements of the skills have always been developed in the teaching and learning of English, others have a more significant role.

Three of the key skills—information processing, communication and critical thinking—are particularly suited to the teaching and learning of English, and their development is progressed through the learning outcomes, methodologies and assessment set out in the English syllabus.

- Information processing skills are necessary for students to access, interpret, analyse, organise, use, produce and present information in a variety of contexts...
- Communication skills are integral to the English syllabus and are developed through.....
- Critical thinking skills

There are, of course, other skills that are specific to English that are not referred to under key skills; for example, literacy development, and advanced reading and writing skills. These skills, which are integral to the teaching and learning of English, are the main focus of the syllabus.

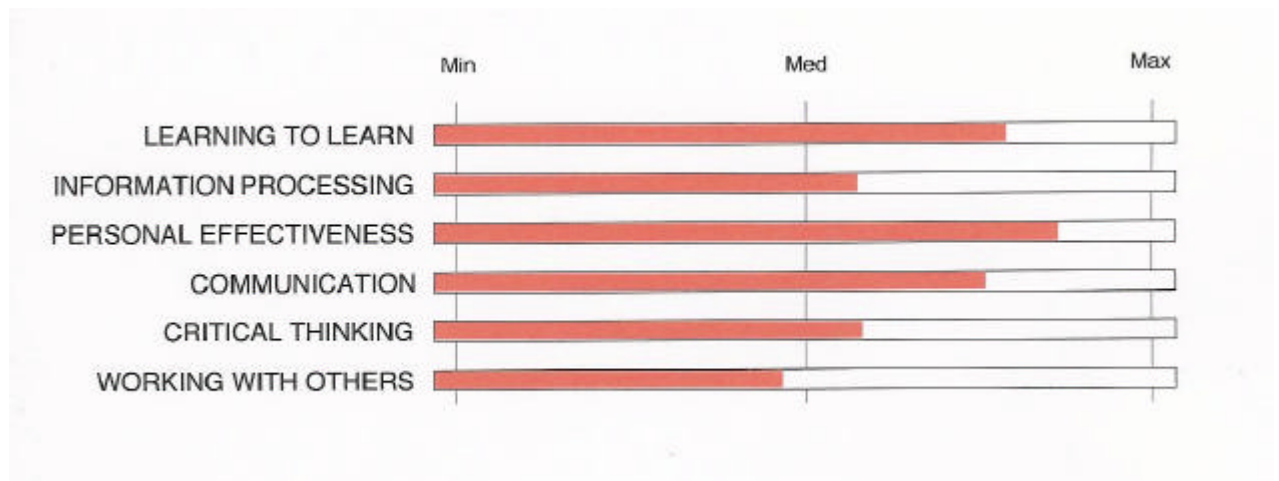
4.4 Key skills and assessment

The assessment methods arrived at for each subject and short course will aim to assess the learning outcomes associated with the relevant key skills, where appropriate and feasible. Key skills will not be assessed separately but their assessment through each subject and short course will be considered in the review of syllabuses and the development of the short courses. The assessment of the key skills embedded in transition units will be assessed as an integral part of the transition units.

Certification

Students will receive recognition for the level of key skills encountered on a skills profile that will accompany their certificate. The key skills that each student experiences in the course of his or her senior cycle will be recorded electronically with values proportional to the subject, short course or transition unit. The level of interaction with each key skill will be measured and presented graphically on a **Key Skills Profile**.

A Sample Key Skills Profile



Section 5: Assessment and certification

5.1 Introduction

In its *Overview Advice*, NCCA provided a background to and rationale for assessment reform at senior cycle. The advice described the shortcomings of the Leaving Certificate examination as a vehicle of educational assessment, and highlighted the narrow range of learning assessed, the lack of congruence between the aims and objectives of syllabuses and their assessment, the dominance of assessment of recall and the pressure on students to perform over a concentrated period of time at the end of senior cycle.

It is recognised that the proposed expansion of assessment activity for senior cycle will not be possible without considerable change to the existing examination system. The capacity of the current system is already stretched, especially with regard to the availability of sufficient numbers of teachers willing to examine the work of candidates, and the developments proposed in this advice will require significant re-engineering of examination processes and the examination system. Such re-engineering will have regard to the availability of examiners, the impact of modes and frequency of assessment on tuition time and on candidates and the capacity of the operational examination system to deliver the increased activity. Equally, specific additional personnel will be needed to manage the assessment programme in schools and the interface between schools and the State Examinations Commission. Where assessment change gives rise to changes in the conditions of service of teachers, the agreement of the appropriate parties will need to be secured.

The *Overview Advice* laid out a set of principles that should characterise the nature and direction of the reforms. These principles underpin the specific assessment proposals for transition units, short courses and senior cycle subjects described earlier in this document. They are summarised below and are exemplified in the sample assessment schedules for a two-year and three-year senior cycle programme of study.

Congruence

Methods of assessment prescribed for the different curriculum components at senior cycle—subjects, short courses and transition units—will clearly reflect the stated aims and objectives of those components. Assessment of the key skills will be part of the assessment of the curriculum components.

Variety

A greater variety of assessment components will be employed across subjects and short courses offered at senior cycle. This will build on current experience of the use of written examinations, orals, aurals, projects, portfolios and practical coursework in assessment. In the period September 2005 – June 2007, the use of ICT and video technology in assessment will be explored, in particular, the potential of these technologies to contribute to greater variety and improved validity of assessment.

Number, timing and frequency

During the planned review of subjects the particular features and assessment requirements of individual syllabuses will be considered. It is envisaged that subjects will, in general, have two assessment events and short courses will have one assessment event. Assessment in a short course and the final assessment event in a subject will take place in the year of completion of that short course or subject. In addition, the review and restructuring of subject syllabuses may offer the potential for units of study in some subjects to be assessed in the year of completion of those units. Assessment will be spread over students' two or three-year programme of study. However, students' assessment load will be light in the first year of senior cycle, with a majority of assessment events taking place at the end of their terminal year of senior cycle.

Scale

This new flexible assessment model will enable students to spread out their assessment load across the two or three years of senior cycle. It will be important, however, to ensure that students are not over-assessed. To this end, planning for assessment change will include research into the optimum number of assessment events that should be accessed by students following a two-year and those following a

three-year senior cycle. Students will also need to be supported, by provision of appropriate educational guidance, to consider the implications of their selected programme of study on the number and nature of assessment events they will be required to take in any one year of senior cycle.

Mode

The assessment components of subjects and short courses will be predominantly examined on an external basis. Given the nature of some of the short courses, for example Drama and Theatre Studies, it will not be feasible to assess these without some participation by teachers and schools in the assessment process. This is in line with international practice in these areas of study, even in high stakes settings. No models have been developed for assessment of students in such areas on an external basis. External moderation of assessments will apply in these cases.

Assessment information

More frequent assessment and the greater variety of assessment methods will enable students to receive timely assessment information that can assist them in planning future stages of their learning.

Teachers and schools

Research will be carried out into the potential cumulative effects of all the changes in assessment on the workload of teachers and the organisation of schools. Changes in assessment arrangements would be subject to agreement between the parties involved.

Differentiation

The approach to differentiation that will inform senior cycle developments will aim to challenge learners to achieve to their potential and to provide a basis for recognising different standards and quality of achievement. It will aim to facilitate greater access to subjects and short courses for a wider range of students. It is envisaged that differentiation, as at present, of subjects into Ordinary and Higher levels will provide the starting point for movement over time towards a greater focus on differentiation in teaching and learning and at the point of assessment.

5.2 Sample assessment schedules

The following assessment schedules are based on the sample programmes of study illustrated earlier in this document. The schedules illustrate the number of assessment events that might be encountered by a student taking the particular programme of study, and the possible distribution of those assessment events across a two-year and a three-year senior cycle.

Assessment components listed in the schedules are generally, but not entirely based on current arrangements for examining the respective subjects in the Leaving Certificate. The nature of the assessment for each subject and short course in a restructured senior cycle will, of course, be determined by the review of subjects already outlined in this document. Appropriate assessment arrangements for short courses will be determined as each is developed.

Sample assessment schedule: two -year programme of study

In the schedule for a two-year programme of study below, the assessment load is light in Year 1, the bulk of assessment events falling at the end of Year 2.

The term—*second assessment component*—refers to the assessment component with the lower mark weighting.

Assessment Period	Summer: Year 1	Spring: Year 2	Summer: Year 2
Subjects			
English		Second Assessment Component	Examination Paper
Mathematics	Second Assessment Component		Examination Paper
Irish		Oral Examination	Examination Paper (including Aural)
Spanish		Oral Examination	Examination Paper (including Aural)
Art		Practical Examination/s	Examination Paper
Religious Education	Second Assessment Component		Examination Paper
Short Courses			
Psychology	Assessment		
Italian Language			Assessment
Total number of assessment events	3	4	7

Sample assessment schedule: three-year programme of study

A particular feature of the three-year programme of study is the absence of assessments in short courses at the end of the second year. Students will, in fact, be more likely to study short courses in Year 1 and Year 3 as most of the timetable in Year 2 will be taken up with starting or completing the course in the selected subjects.

The term—*second assessment component*—refers to the assessment component with the lower mark weighting.

Assessment Period	Summer: Yr 1	Spring: Year 2	Summer: Year 2	Spring: Year 3	Summer: Year 3
Subjects					
Mathematics	Second asst. component		Exam. Paper		
Physical Education			Second Asst. Component		Exam. Paper
English			Second Asst. Component		Exam. Paper
Chemistry				Second Asst. Component	Exam. Paper
Irish				Oral Examination	Exam. Paper (incl. aural)
French				Oral Examination	Exam. Paper (incl. aural)
Physics				Second Asst. Component	Exam. Paper
Short Courses					
Sports Studies	Assessment				
European Studies	Assessment				
Mathematical Applications					Assessment
Science and Society					Assessment
Total number of assessment events	3	0	3	4	8

5.3 Certification

In the consultations on the future direction of senior cycle, discussions on certification focused on the need for an inclusive and equitable certificate. The certificate should be inclusive in that it should recognise a broader range of student achievement; and equitable in that it should avoid the certification of activities that depended on the availability of additional school or family resources.

The new certificate of senior cycle education will provide an account of the student's achievements in *subjects* and *short courses* as well as recording her/his completion of *transition units*. The certificate will be awarded to all students on their departure from or completion of senior cycle. Students will also receive recognition for the key skills encountered on a skills profile that will accompany their certificate.

A sample certificate is included below.



COIMISIÚN NA SCRÚDUITHE STÁIT
STATE EXAMINATIONS COMMISSION

Certificate of Senior Cycle Education
2011

AWARDED TO

WHO ACHIEVED THE FOLLOWING

Subjects

Irish (H)	C1	Physical Education (H)	B2
Mathematics (O)	B1	French (O)	C2
Physics (H)	A2	Chemistry (H)	B1
English (H)	B2		

Short Courses

Mathematical Applications	A2	Science and Society	C1
Sports Studies	C1	European Studies	B3

Transition Units completed

Drama Project

Art Appreciation

Irish Language

Outdoor Pursuits

Mini Company

Projects A-Z

Creative Writing

ICT: Data Handling

Learning Management

Career Investigation

First Aid

Date of birth:

Chairman

Examination number:

Chief Executive

Section 6: A different school culture for senior cycle

In the course of the review of senior cycle education, the development of a school culture conducive to teaching and learning in the post-compulsory period of education was the subject of extensive debate. This culture was largely described in terms of the key skills to be fostered in order for students to fulfil their potential as learners and to contribute to the needs of society and the economy. Greater emphasis on self-directed, independent learning was also a prominent feature of this view.

The idea of changing school culture along the lines envisaged is inextricably linked to other developments in curriculum, assessment and certification and is predicated on the support strategies outlined in the *Overview Advice* as well as in this advice.

Curriculum

The restructured curriculum outlined in the advice on programmes of study and curriculum components, along with the changes recommended in assessment and certification will redefine differences between the junior cycle and senior cycle learning environments. Schools and students will have more flexibility in their selection of programmes and curriculum components. In the period September 2005 – June 2007 the NCCA will work with schools to exemplify curriculum plans and student, teacher and school timetables for schools of different types and sizes that will include the various curriculum components as well as opportunities for students to have time to become involved in other activities to support their learning—research, small group work and ICT assisted work.

The change in emphasis within subjects towards an increased focus on the development of skills and the addition of short courses and transition units, also with a skills focus, will create space for a greater student role in structured, well-managed, independent learning and research, thus creating an environment where students become more self-directed in their learning over time.

The articulation of the six key skills and their development through subjects, short courses and transition units will also encourage a learning culture that involves

students being more participative in their learning through the development of critical thinking skills, learning management skills and working with others.

Assessment

The changes proposed in assessment involving assessment schedules that are more diverse in nature and frequent in occurrence will also support the creation of greater opportunities for students to engage in more self-directed learning.

Support strategy

Appropriate investment in the supporting strategies will also contribute to changes in school culture. Piloting of proposals for different ways of organising the school day will take place in the period September 2005 – June 2007. Such pilot schemes and proposals will require the agreement of appropriate parties to the Teacher Conciliation Council, where the terms and conditions of employment of teachers are discussed.

Professional development and support for teachers and school management will be crucial in creating a learning environment that encourages students to gradually take more responsibility for their own choices and management of learning. The proposals relating to the management of change that put schools at the centre of change and promote a more coherent model of change are supportive of a whole school approach that will encourage the school to consider the total learning experience of the senior cycle student.

Areas for further development

Analysis of the implications of these changes for school buildings will be required. Achievement of a school culture based in more varied approaches to the management and experience of learning will give rise to the need to view the physical spaces and facilities within schools differently and will necessitate investment in

- libraries
- ICT equipped learning spaces
- social spaces
- access to learning environments beyond the school.

Consultations with the Building Unit of the DES will inform and progress these proposals in the period September 2005 – June 2007.

Furthermore, during this period, the NCCA will collaborate with a number of agencies on initiatives designed to support a changing school culture including projects on

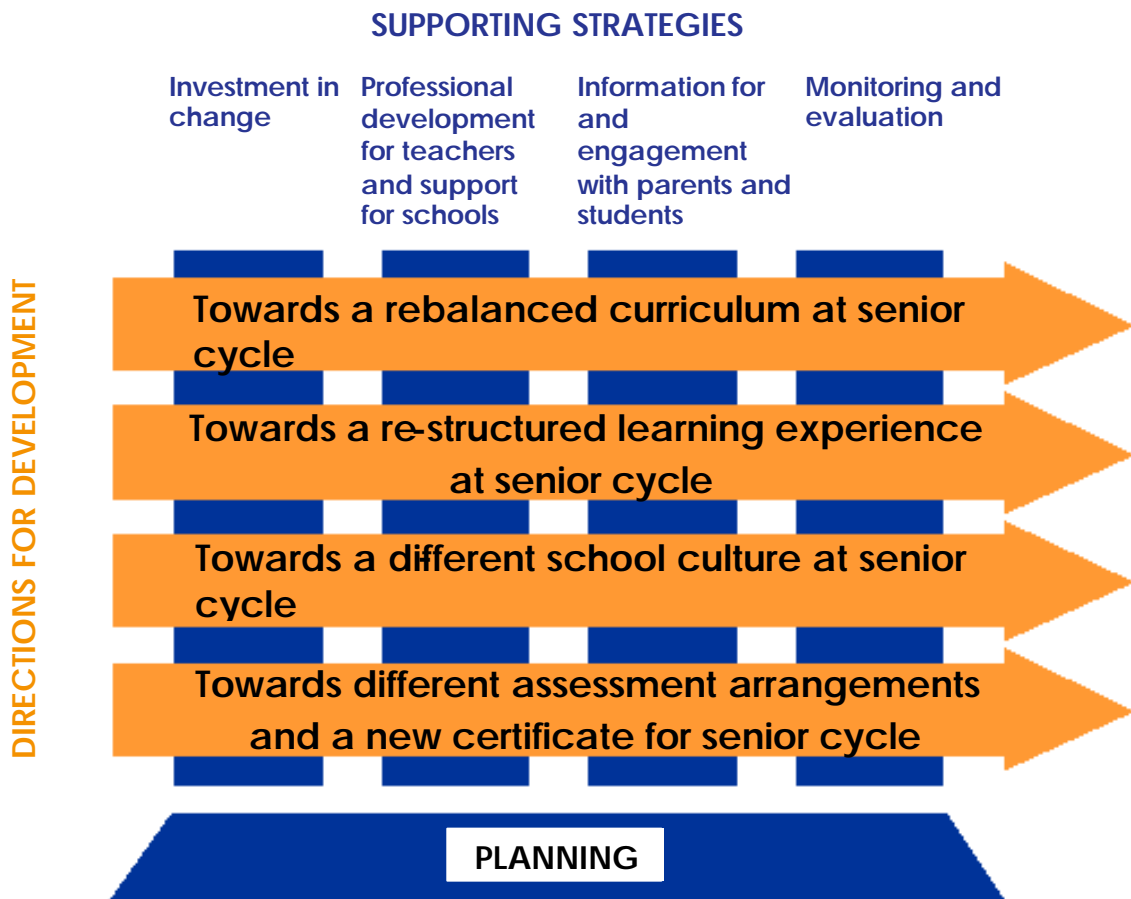
- *The management of learning* to develop ideas around the respective roles of school management, teachers, students and parents in achieving a structured, well-managed learning environment which offers students the potential to become more self-directed and responsible as learners. Concern was expressed throughout the consultation that students are leaving school well prepared for examinations but without having developed the skills required to continue learning into the future. The development of the skills required to assist students in managing their own learning would be promoted by teachers in the methodologies used in the classroom as well as monitored activities in the library, in the community, at home and through the use of ICT resources. It would also involve looking at class and group sizes to accommodate the learning opportunities envisaged. Finally, the exemplification of ways of organising the school day and the school timetable to provide for the greater range of learning approaches and opportunities available to students would be an important outcome of the project. Exemplification from the student, teacher and school perspectives will be provided.
- *Guidance tools for parents and students* to help them to understand the nature and structure of a revised senior cycle and how to maximise the potential benefits from the learning experience.
- *Models for greater inclusion of the student voice* to work with and support in increasing the involvement of students in the organisation and management of their learning and learning environment.

Section 7: Supporting Change in Senior Cycle

7.1 Background

In presentations to the education sector since the proposals emerged, it has been evident that one of the most appealing features of the proposals for change has been the undertaking to ‘do the change differently’. That ‘difference’ is associated with a number of aspects of how curriculum, assessment and school change is currently planned, resourced, organised and evaluated. There is particular support for the notion that the change process will put the school at the centre and place the teacher as the change agent. Similarly, there is enthusiasm for planning and coherence as they have been outlined by the NCCA in the proposals for reform and for the commitment to see the change process as a whole as well as focusing on the component parts. There is particular support for clarity in relation to an overall sense of direction for the change process.

One of the most significant points of discussion during this review of senior cycle education has been the connection between the vision for change and the strategies necessary to support that change. Each of the directions identified for development is dependent on the simultaneous development of the other directions. Likewise the achievement of meaningful change in each of the directions is predicated on an integrated, coherent and well-resourced planning and implementation process that includes strategies related to investment; professional development for teachers and support for schools; involvement of parents and students; and research, monitoring and evaluation. This section sets out some of the challenges of delivering on the promise to ‘do change differently’ and to propose how the strategies for supporting change can be integrated into a coherent Strategy for Senior Cycle by re-orientating some of the strategic stress points in current change models.



**Proposals for the Development of Senior Cycle Education
Directions for Development and Supporting Strategies**

7.2 Current strategies for supporting change

As part of this current advice for the reform of senior cycle, a Strategy for Senior Cycle will need to be prepared that will include the schedule of key events, critical decisions and areas for investment associated with the various aspects of the reforms. Traditionally, implementation plans have been prepared by the NCCA identifying the in-career implications and other resource implications of curricular change. These plans have been informed by the ‘cascade’ or ‘proliferation of centres’ models that have, to date, underpinned the approach to educational change in Ireland. The plans have been used to inform the planning for the scale of the support service needed, and

have generally guided the work of the support service, especially in its initial start-up. As the support service becomes established and more developed, the implementation plan becomes less and less significant, and the NCCA becomes more and more distant from the 'delivery' of the in-career support on the ground. The Primary Curriculum Support Programme is a good example of how a large-scale curriculum change strategy was devised using this model. The change was supported by in-career development as the key change 'lever' with monitoring by the Inspectorate being the other. For support teams established for post-primary curriculum change, the in-career support has also been the main 'lever' but the monitoring has been through the certificate examinations, with the Inspectorate only recently taking on a more direct monitoring role in the post-primary sector.

The approaches taken to implementing change have developed from the early efforts at supporting implementation that failed to adequately recognise the culture of schools and classrooms and the complexity of teaching and learning practices in which, it was hoped, fundamental change would become embedded. The in-career programme associated with the introduction of the Junior Certificate in the early nineties is probably the most significant example of what might be termed 'context naivety'. This programme of in-career support for teachers was based on a combination of information-giving seminars and workshops for large groups of teachers. It was the first time that teachers were involved in the planning and delivery of large-scale professional development for other teachers. However, even at an early stage in the introduction of the Junior Certificate, evaluations were indicating that the significant changes in teaching and learning methodologies envisaged in the revised syllabuses were not happening in classrooms. More than ten years since the introduction of the new syllabuses, the concerns raised in the early evaluation continue to be raised, most recently in the research conducted by the ESRI for the NCCA.

Telling teachers about changes did not result in changes being implemented in classrooms. It should be noted however that the Junior Certificate programme was introduced in the context of severely curtailed resources for in-career support.

More recently, implementation processes have been characterised by increased levels of resources and investment, by improved consultation and planning, by efficient and

effective support structures with responsibility for professional development of teachers, by greater attention to engagement with the organisational realities and culture of schools, by linkage with the providers of teacher education, and by attention to providing public information on the changes before and as they happen. The contrast between the Primary Curriculum Support Programme and the in-career support for the Junior Certificate best exemplifies the scale of development in the system. However, the recent data collected by the NCCA as part of the first phase of the review of the Primary School Curriculum gives some indication of the strengths and weaknesses of current models. Teachers are familiar with the ‘content’ of the curriculum; but putting it into practice in classrooms continues to be a challenge. If the change is focused on classrooms, then the change process must also be focused there. The approach to change has come a long way since the introduction of the Junior Certificate programme, but it remains some distance from the classroom where teachers must enact their professional practice.

Despite the progress made, the predominant models remain the ‘cascade’ and ‘proliferation of centres’—both falling within the ‘technical’ category of change or improvement models. The change—in this case curriculum and assessment change—is centrally planned, then ‘implemented’ through a centrally driven structure. The model is essentially **linear**, with a change message being generated at one end of the line, and implemented at another. While the representative nature of the NCCA and its high degree of commitment to consultation ensures that teachers are involved in the development process, nonetheless the vast majority of teachers will be on the ‘receiving end’ of the message. With some variations, the current model can generally be represented using the diagram below.



The diagram readily illustrates the strengths and weaknesses of the current model. The central planning should support a high degree of efficiency, and over time, as the model is replicated, patterns and procedures can become established. In a relatively

small system such as ours, the needs of teachers are close to the centre of planning and delivery and the support can be easily modified if needs be. Colleagues in the Northern Ireland Council for Curriculum, Examinations and Assessment are envious of this system as they see it as offering a more direct lever for change. They do not recruit support teams centrally but use the eight Education and Library Boards to deliver in-career support and consider that their ability to deliver change in the system is considerably reduced as a result.

However, the model has obvious weaknesses from the NCCA perspective. While the key interface for the teachers is with the support service, arguably, the most significant interface is the one between the NCCA and the support service. If the key change messages are not ‘transferred’ at that point, they may be lost completely further ‘down the line’. Yet, as is illustrated in the diagram, that interface is mediated by the Teacher Education Section (formerly ICPU)—the NCCA is a long way from the teachers, there is a long distance between the curriculum message and the classroom and the students. This ‘distance’ also makes it difficult for the information on implementation to be fed back to the NCCA to inform future reviews of curriculum, although in recent times, effective links with the Inspectorate have allowed for some feedback from classrooms.

7.3 The current strategies and the proposed senior cycle reforms—the need for strategic re-orientation

Three particular features of the approach to the implementation of innovation represent strategic stress points that have system-wide implications, and are of particular concern in the light of the features of the proposed senior cycle reforms.

The first of these is **fragmentation**—too many separate initiatives operating in isolation from each other, often trying to achieve very similar aims. Over a period of time this has led to the capacity of the education system to engage with and absorb change being put to the test. Innovation in curriculum and assessment shares in this fragmentation, and contributes to it. The approach is so fragmented that there is no opportunity to ‘scale up’; it can only replicate itself when further change is necessary.

Thus we are close to a situation where school management is finding it impossible to release teachers to the number of support services now in operation. Teachers attending a number of support sessions for different subject areas often become frustrated with repetition of approaches and materials.

Fragmentation at the level of policy development makes strategic planning for the education system impossible and results in unacceptable pressures being placed on schools. A plethora of initiatives leads to feelings of ‘overload, fragmentation and incoherence’ among teachers ¹.

When this sense of change overload begins to appear in the system, research evidence suggests that ‘compliance without commitment’ is what follows along with the development of what Fullan calls ‘Christmas Tree schools’—schools that are ‘decorated’ with all the innovations but the adornment is only superficial ². Writing of the range of reforms in the U.K Stephen Ball describes the culture of ‘performativity’ that pervades schools—schools filled with development plans, policies, curriculum plans, literacy strategies and inspection reports—a paper trail of change without any real substance. ³ What mattered in the research of Fullan and Ball, and more recently in work by Hargreaves, was not the *amount* of change, but the fact that teachers felt that there was no coherence, no planning. ‘The worthy pursuit of continuous improvement can turn into an exhausting process of ceaseless change’⁴.

As discussed in the introduction to this section, in the consultations that informed the development of the senior cycle proposals there was considerable criticism of existing approaches to the implementation of change, of the demands made by those approaches on schools and teachers and of the apparent lack of return for the investment in the change. The lack of coherence was singled out for particular criticism and the ‘joined-up’ nature of the proposed reforms singled out for particular praise. Current fragmented approaches to implementation cannot be the basis for the

¹ Fullan, (2001) p.27

² *ibid*

³ Ball (1999)

⁴ Hargreaves, et al. (2001) p. 123

viable implementation of the proposed reforms.

The first strategic re-orientation will be from **fragmentation to coherence**. This means that during the period of implementation (which will include lead-in time) all the change activities of schools and of the wider system (as it relates to senior cycle) must be focused on or arise from the reforms.

The second major weakness of the approach to in-career support for teachers that has developed since the establishment of the ICPU has been a **lack of a comprehensive evaluation programme**. This lack of commitment to evaluation is not particular to Ireland:

A key question is the effectiveness of different professional development programmes—their quality, relevance and impact need to be addressed. However, in many countries it seems that the outcomes are not evaluated in a rigorous manner. What evaluation is carried out is often limited and poorly disseminated so that models of best practice are not readily available to policy makers or to practitioners.⁵

⁵ *ibid.* 5

ACHIEVING COHERENCE IN MANAGING CHANGE



While there have been evaluations of in-career initiatives in terms of their quality and effectiveness as professional development activities (Relationships and Sexuality Education by Dr. Mark Morgan, for example, and the forthcoming evaluations of PCSP by Trinity College and of the SLSS by Prof. Gary Granville) there has been little work done on evaluating whether the desired impact on teacher/school practice was achieved, and to what degree. The education system in Ireland is also slow to collect comprehensive data prior to a change being introduced. A critical analysis of policy and practice in teacher professional development conducted by researchers from St. Patrick's College in Drumcondra and UCD noted that a lack of evaluation appears to pervade the Irish context.⁶ The researchers speculated whether the failure to evaluate systematically sends subliminal messages to teachers about the importance of evaluation and rigour generally in the system.

The proposed senior cycle reforms depend on ongoing monitoring and evaluation with data being collected from schools, from students and from parents as the changes roll out, and fed back to decision-makers and to schools, students and parents who are engaged with the changes. This approach to monitoring and evaluation is particularly significant if schools are to be the focus of the change rather than the object.

The second strategic re-orientation is from **post-hoc synoptic evaluation to ongoing multi-level monitoring and evaluation.** This will require engagement with researchers from the outset and on a continuous basis as well as a commitment to respond to issues and challenges that are identified through this monitoring process.

The third weakness of current approaches relates to the positioning of schools, classrooms and teachers in the change process. Both the cascade and proliferation of centres models of in-career development position schools 'at the receiving' end of the change process. Change becomes something schools must do, rather than a process in which they must participate. The underlying model is one of the school 'doing' the change rather than as the critical site of change, of principals leading the response,

⁶ Sugrue et al (2001)

rather than leading the change. This ‘*development*’—*then*—‘*implementation*’ model remains pervasive; in our policy processes, the support services seem to inhabit that space between the two, rather than the space where schools are, which is where they need to be, with clear goals and purposes, set by schools participating in a change process rather than trying to put some good idea into practice. Positioning schools at the end of a change process, forcing them into responding to rather than leading change deprives schools of the organisational agility needed to work in a rapidly changing environment. Schools spend considerable creative energy working out how to implement multiple unconnected initiatives, how to meet the requirements of a circular, or to produce the policy or plan required. If schools were to re-focus that energy on learning—on student, teacher and organisational learning—and on supporting learning at senior cycle in particular, if schools were to engage in planning for the new senior cycle in a spirit of enquiry rather compliance, the gains for schools and for the system at large would be considerable.

The third strategic re-orientation is from **placing schools at the end of the change process to positioning them at the centre**. This will have implications for the focus of the work of the support services, with all support services being more closely connected to the school and meeting the needs of the school rather than presenting a particular package designed in isolation from the school.

What does a change process that places schools at the centre look like? What are the indicators that schools are indeed at the heart of the process? One indicator would be the prioritising of the needs of schools in the allocation of resources associated with the senior cycle strategy. Any allocation of resources would be made *before* schools are required to make any changes.

A further indicator would be the active involvement of schools in the development of curriculum and assessment components. Schools would be given time during the two-year phase of preparation to engage in the process of development, to feed in their own good practice and to evaluate the components as they emerge. Furthermore schools are to be the focus of the changes—and the critical site of evaluation of the effectiveness of the changes—time would need to be made available to schools to

identify school needs and to plan, organise and implement a senior cycle programme most appropriate to those needs. Support on how best to use this time would also be needed.

Providing time of this nature is not without its challenges. Time in planning, is time for teachers away from classrooms and from students. In the context of a system-wide reform process and in the context of a rigorous evaluation strategy the time spent in planning will need to result in improvements for students, and for the system at large.

A further indicator of a school-focused change process relates to information. Key messages about the changes would need to be provided to schools, for students and parents, as well as for principals and teachers as the changes are introduced along with relevant evaluation information.

7.4 Building on the re-orientation; developing the Strategy for Senior Cycle

Arising from a commitment to the re-orientations as described, a Strategy for Senior Cycle can be developed. Such a strategy would represent a significant departure from the established ‘implementation plan’ approach. In the first instance, the actions identified in the strategy would be ‘essential’ rather than ‘desirable’—given the commitment to coherence; each action would arise from a previous action and have implications for a subsequent action and beyond. Secondly, the strategy would include actions beyond in-career support to include actions such as the development of curriculum and assessment components, their benchmarking against similar components in other countries, the development of the certificate and the award descriptors for senior cycle.

A third feature of the strategy would be its engagement with schools, even before schools are required to ‘implement’ any of the changes. The active involvement of schools—teachers, parents, principals and students—in the development of curriculum and assessment components would go some way towards overcoming the

‘development—implementation’ gap identified earlier in this section and the positioning of schools at the end of the change process rather than at its centre.

A fourth feature of the strategy would be the emphasis placed on communication. It is important to ensure that all those involved in the proposed changes are familiar with developments and have the opportunity to discuss those developments at each stage of the reform process. Teachers and schools will need to be provided with detailed information on agreed changes as they emerge in order to facilitate planning. It will also be important to ensure that the education and business communities as well as the general public are kept informed about the proposed developments and that parents and students have access to appropriate information to enable them to participate in the change process and derive optimum benefit from the outcomes.

A fifth feature of the strategy would be its focus on ‘making things happen’. Pointing to this emphasis may seem something of a tautology—but it arises from growing criticism of the education system in Ireland as being stronger in talking about change than actually achieving change. The strength of the partnership process in education is obvious; moving beyond consensus to action continues to be a challenge. The expectations that the nineties would be the decade of action following the decade of consultation were only met in part; instead schools were faced by the demands of much needed legislation. In this new decade, partly as a result of the consultations associated with the development of the senior cycle proposals, change expectations are again heightened. The Strategy for Senior Cycle will need to meet these expectations.

7.5 Supporting the senior cycle developments: some costs involved

The NCCA’s *Overview Advice* published in June 2004 underpinned investment in change as an essential supporting strategy for the implementation of senior cycle reform. The indivisibility of the vision for change and the strategies necessary to support the management of that change was presented as a distinguishing feature of the proposals for the reform of senior cycle. The *Overview Advice* drew attention to some of the major areas of cost and highlighted the importance of arriving at a more

comprehensive and accurate picture of the costs associated with the senior cycle developments. This section presents an initial, indicative statement of the areas of cost and, in a number of cases, aims at quantifying that cost in percentage or real terms.

It is important to emphasise that the ideas presented here are indicative and will be fleshed out in further detail during the developmental period 2005-2007 and through the work of the proposed Strategy Group, whose brief will include the quantification of costs and planning for the investment needed. A more detailed outline of costs will also identify the nature of the costs involved, some being once-off start-up costs which will diminish over time, some involving re-allocations from existing areas of expenditure, others being new areas of expenditure which will need to be sustained over a long period of time. But the first step towards ensuring the ultimate efficient use of the resources involved and value for money spent is to identify the main areas of cost involved. The areas are outlined below with limited attention paid to order of priority. A greater level of detail and suggested cost attaches to the first three areas of cost: this aims to offer insights into the level of detail that will ultimately be required in all areas.

Areas of cost

Increased curricular choice

In order to facilitate schools in exercising the choice available to them through the more flexible senior cycle curriculum and to facilitate school and curriculum planning, an increased allocation of teachers will be needed. Such an increased allocation would also need to incorporate the demands that increased activity in the areas of learning management and educational/vocational guidance will place on schools. It is envisaged that the level of increase will need to be of the order of 5-7.5%. This means that in a small school of 350 students the expenditure on pay may need to increase from in the region of €1.4m to €1.5m. In a large school of 850 students the increase may need to be of the order of €3.13m to €3.35m.

Increased assessment activity

The senior cycle developments will give rise to increased assessment activity in the education system. Generating the capacity in the system to meet increased assessment

activity at senior cycle will involve additional numbers of examiners to undertake the increased number and frequency of assessment events and the allocation of increased funding, primarily to the State Examinations Commission, to effect a re-engineering of the operational dimension of the examinations system. This will also need to be supported at the level of the school; a re-engineered examinations system will require specific additional personnel to manage the assessment programme in schools and the interface between schools and the State Examinations Commission. In addition, where assessment change gives rise to changes in the conditions of service of teachers, the agreement of the appropriate parties will need to be secured.

It is envisaged that the increased assessment activity can be introduced on a phased basis, and will vary between the programmes of study undertaken by schools, but ultimately and on average an increase of between 15-20% on existing assessment activity is likely.

Building ICT infrastructure

Many aspects of the senior cycle developments are predicated on the integration of Information and Communication Technology with teaching and learning processes in schools. A major cost associated with the idea of encouraging teachers as facilitators of learning, students as independent learners and the increased use of ICT in the area of assessment, relate to building ICT infrastructure to critical thresholds for teachers and learners.

Of course, this area of cost can be conceived as part of a broader plan and policy for the provision of ICT infrastructure in the education system as a whole. As in other countries, it is arguable that such provision should include teachers receiving a laptop computer and training in its use (at an approximate cost of €50m—25,000 post-primary teachers @ €2000 each) and learners having access to computers on the basis of a ratio of 5 or 7 to 1 in their schools. Most recent surveys indicate that the ratio currently stands around 10:1 though that figure has been contested on the grounds of obsolescence of computer equipment included in establishing the ratio. In addition, any costing in this area needs to take account of the ongoing costs of maintaining infrastructure, of continued provision of broadband access, of improving projection and display facilities, of replacing stock etc.

There are other cost areas that will require further investigation.

- In general terms the senior cycle developments will give rise to a need for extensive **professional development** of teachers. The principles on which such a model should be based have been outlined earlier in this section. The vehicles for professional development should be extensive in their nature and variety, including centralised/regional provision and online provision. But the main vehicle should be locally based and school-based professional development. The latter should be achieved through schools receiving a budget allocation for professional development appropriate to their size and needs. The Department of Education and Science is currently in the process of developing a revised model of professional development and this will provide the basis for further planning to meet the professional development needs associated with the senior cycle developments.
- The senior cycle developments emphasise the idea of learners having access to **non-classroom learning spaces** in which to pursue independent study, undertake group projects etc. The generation of these learning spaces will need to be built into plans for new school buildings and for developments and renovations of existing buildings. Some schools may also be able to exploit the freeing up of existing spaces, for example due to declining intake, for this purpose also. The potential for schools adjacent to each other sharing facilities or accessing community facilities jointly in this context could also be explored. The implications of these ideas for the work of the Buildings Unit of the Department of Education and Science and the cost associated with the various options identified here will need to be analysed in further detail.
- There are significant costs for the NCCA associated with the **development** of the curricula, assessment arrangements and ideas in relation to school culture, which are central to the senior cycle developments. These costs have been estimated at €0.6m for the period 2005-2007.
- The inclusion of a **research, evaluation and monitoring** strand prior to and throughout the period of implementation of the senior cycle developments has been identified as an essential support strategy. Some of the review work in this

context can be undertaken by the NCCA. The Inspectorate could undertake some of the evaluation work. But it is likely that researchers/research agencies will also need to be contracted for this purpose. Over a five-year period, for example, the cost of this research activity could amount to €2m.

- Funding the improved **outreach** of schools that will enable schools to extend the site of learning in areas such as those of enterprise education, work related initiatives and school-community links.
- Prior to and throughout the period of implementation, a **public information campaign** will be necessary so that those with an interest in the senior cycle developments will be kept fully informed of the rollout of the reforms.

This offers an indication of some areas of cost associated with the senior cycle developments. Other costs will present themselves both within the context of the examples provided and additional to these areas. For example, generating the capacity for all schools to offer both a two-year and a three-year programme of study would represent a significant additional cost.

What is evident, even at an early stage in the presentation of indicative costs, is that change on the scale envisaged through the senior cycle developments involves substantial reform of aspects of the education system and this inevitably involves substantial investment to ensure that the change happens and that the key elements of the change take root.

7.6 Co-ordinating the Strategy for Senior Cycle

The Strategy for Senior Cycle, as outlined above, will encompass a number of different features that will require the involvement of various organisations to ensure a coherent approach to supporting the proposed changes. The preparation of the Strategy and the establishment of a co-ordinating structure is included in the proposals for the next phase of the work. The NCCA will play a key role in the development of the curriculum and assessment reforms but delivering on other aspects of the reforms will require the support and direction of other agencies and organisations and sections within the Department of Education and Science.

It is envisaged that the Strategy Group will be responsible for the implementation of the senior cycle developments. In this context its brief will relate to planning for, resourcing and scheduling implementation of the developments over the timeframe envisaged. The Strategy Group will be representative of the partners in education, given their centrality to the process of implementing the developments. Over the period of implementation, the NCCA's ongoing development and review of the senior cycle reforms will take place in parallel with the work of the Strategy Group. NCCA will participate in the work of the Strategy Group and will input, in particular, to planning the model and schedule of implementation.

Section 8: Conclusion

This advice, in addition to the earlier *Overview Advice*, has set out proposals for the development of senior cycle education and described the strategies necessary for their implementation. The proposals have been developed with a view to improving the educational experience and learning achievements at senior cycle for all. Attention has been paid to ensuring coherent and meaningful progression from junior cycle and improving access to, and equality in, senior cycle education for all. At a broader level, the developments proposed aim to contribute in tangible, practical ways to the emergence of Ireland as a knowledge society. On so doing, care has been taken to align proposed developments at senior cycle with developments in the field of qualifications in Ireland and Europe, in keeping with the guiding principle of lifelong learning. The development of the proposals has also drawn extensively on good practice and international developments in education systems at upper secondary level.

The advice does not propose change for change's sake. Rather it builds on the best features of the existing senior cycle educational experience, which is well regarded by people in Ireland and abroad but which does not justify complacency in a rapidly changing social and economic landscape. In the latter context, leaving things as they are is not an option, especially when the interests of those whom the current senior cycle serves least well are taken into account.

The issuing of this more detailed advice to the Minister for Education and Science signals the completion of this stage of the reform process for senior cycle that commenced with the publication of the consultative paper on senior cycle education (2002) and proceeded through a range of consultative fora and publications to this point. A general direction for the future of senior cycle education has been envisioned, articulated and advised. The next challenge is to adopt that direction as a policy goal, to advance the preparation of detailed plans for reform, and to engage in an extensive communication strategy so that all those involved will be familiar with developments and have the opportunity to discuss developments at each stage of the reform process.

Appendix 1

Aspects of the proposals for further development by NCCA in the period September 2005 – June 2007

Curriculum and assessment developments

<p>Programmes of study</p>	<ul style="list-style-type: none"> ▪ Further exemplification of programmes of study including different types of programmes to meet the needs of different school sizes and types ▪ Exploration of programmes of study for part-time learners ▪ How the two-year/three-year option will be managed by schools ▪ Liaison with schools to develop examples of student, teacher and school timetables
<p>Curriculum components</p>	<p>Subjects</p> <ul style="list-style-type: none"> ▪ Development of the model for the review of subjects ▪ Preparation of a schedule for the review ▪ Commence implementation of schedule <p>Short courses</p> <ul style="list-style-type: none"> ▪ Preparation of an action plan for the development of short courses ▪ Preparation of a schedule for the phased implementation of short courses ▪ Preparation of syllabuses for the short courses listed in the detailed advice (some of these may change in the course of the subject list review) ▪ Clarification of the assessment arrangements for short courses ▪ Liaison with relevant agencies and organisations in relation to the recognition of short courses <p>Transition units</p> <ul style="list-style-type: none"> ▪ Liaise with schools to refine and develop the template for transition units and to develop some transition units ▪ Further consideration and development of a validation process, building on existing good practice <p>Courses offered by the school</p> <ul style="list-style-type: none"> ▪ Further consideration of the case for and against having a category of curriculum components called ‘courses offered by the school’ with a view to deciding whether they should exist or whether all curriculum components should be encompassed by transition units, short courses and subjects.

Differentiation	<p>Consideration of</p> <ul style="list-style-type: none"> ▪ Ensuring that the aims and learning outcomes of curriculum components facilitate the development of assessment instruments which cater for the differentiation envisaged ▪ Differentiation through assessment instruments ▪ Grading scales currently used in senior cycle ▪ Implications of any preferred approach for the adjustment of the current ratings on the points system ▪ Implications of the approach to differentiation for the placing of school awards on the National Framework of Qualifications
Key skills	<ul style="list-style-type: none"> ▪ Further consideration and development of the essential elements and learning outcomes for all of the key skills ▪ Preparation of an action plan for the embedding of the key skills in subjects as part of the subject review process and in the development of short courses ▪ Embedding and tagging the key skills in subjects, short courses and transition units ▪ Development of a system for the preparation of the key skills profile
Assessment and certification	<ul style="list-style-type: none"> ▪ Continuous liaison with the SEC on the implications of the assessment proposals and how assessment proposals can be progressed ▪ Investigation of the role of ICT in assessment ▪ Development of clearly defined guidelines for decisions on assessment instruments recommended for short courses and subjects ▪ Development of recommendations relating to the repeating of curriculum components and their assessment ▪ Preparation of advice on the development of award descriptors for senior cycle awards

Supporting developments

School culture	<ul style="list-style-type: none"> ▪ Development of guidance for schools on the management of learning that would offer students the potential to become more self-directed and responsible in their learning ▪ Describing and advising on the changing role of teachers in supporting teaching and learning in a new senior cycle ▪ Preparation of guidance for parents and students on the nature and structure of the new senior cycle ▪ Preparation of advice on models for greater inclusion of the student voice ▪ Liaison with schools to develop proposals for different ways of organising the school day
Supporting change	<ul style="list-style-type: none"> ▪ Liaisons with key organisations ▪ Preparation of advice on pre-service and inservice professional development needs of teachers ▪ Plan for monitoring and evaluation ▪ Advice on the development of the Strategy for Senior Cycle
Communication strategy	<ul style="list-style-type: none"> ▪ Publication of regular bulletins providing updates on developments using of a variety of printed, electronic and broadcasting media ▪ Provision of information that is accessible to all, including people from ethnic minorities and people with disabilities ▪ Publication of specific information to assist teachers and schools in planning and implementing agreed changes ▪ Dissemination of the outcomes of research ▪ Periodic review of the effectiveness of the communications strategy.

Appendix 2

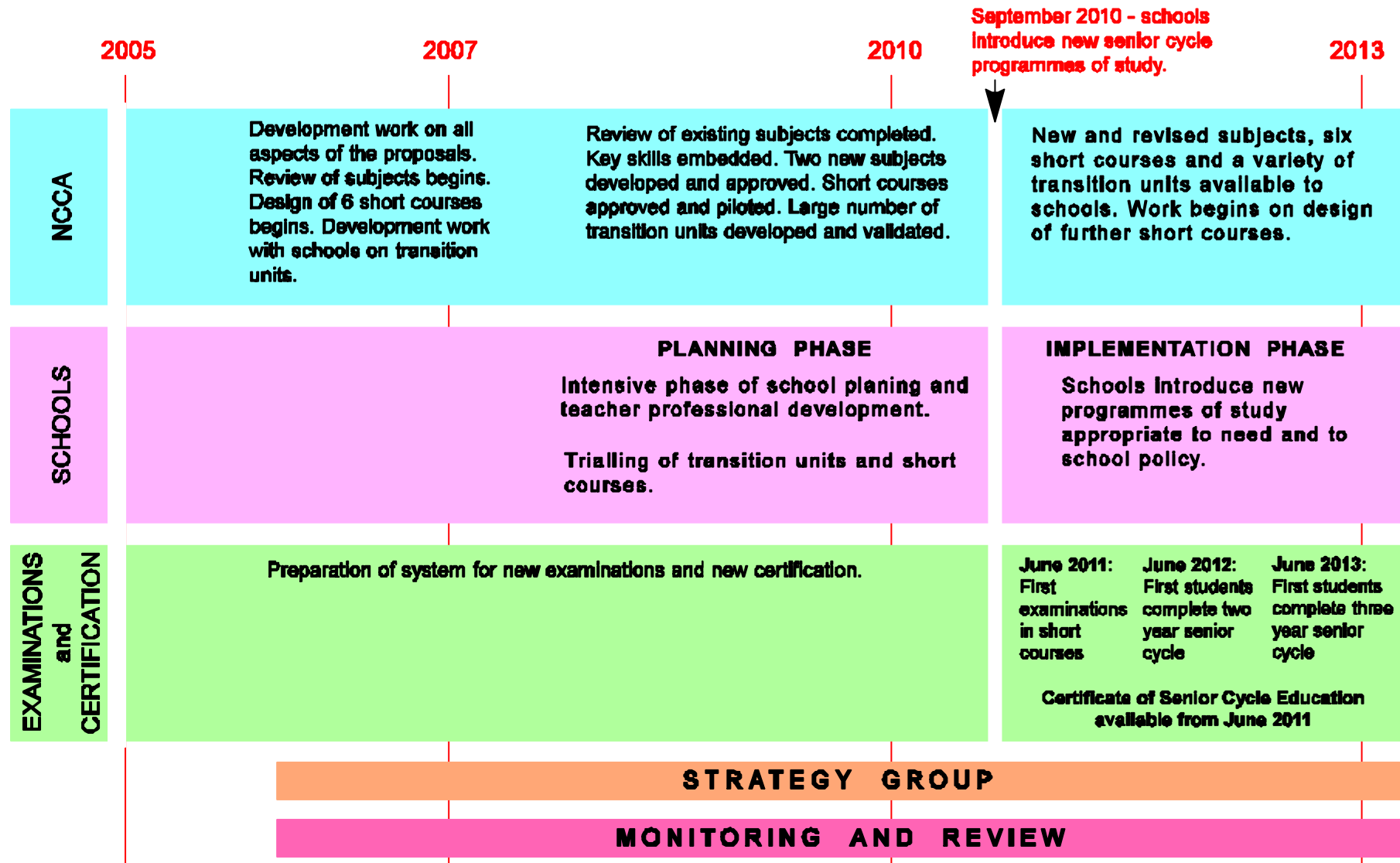
Development of Senior Cycle: draft implementation plan

While it is important to develop a sense of momentum within the change process, it is also essential to be realistic about what can be achieved within the system over a particular time-frame. Schools, teachers and the education system in general must be given adequate time to plan for and introduce the changes. A phased approach is suggested, taking into account the need to maintain stability in the system, to build confidence in the direction the changes are taking, to allow for monitoring and review, and to avoid overloading the system at any one point in the implementation period.

The draft implementation plan below, which is highly indicative, identifies some of the possible milestones in the development, planning and introduction of the proposed changes to senior cycle. The chart refers specifically to the development work of the NCCA, to planning in schools for implementation of change, and to examination and certification activity during the implementation period.

DRAFT INDICATIVE DEVELOPMENT PLAN FOR SENIOR CYCLE

THIS DRAFT PLAN OUTLINES POSSIBLE MILESTONES IN THE PLANNING AND DEVELOPMENT OF A RESTRUCTURED SENIOR CYCLE, TAKING SEPTEMBER 2010 AS AN INDICATIVE INTRODUCTION DATE.



Appendix 3

Draft Template for Short Courses

Draft Template for Short Courses	
1. Introduction and rationale	This is a paragraph describing the principles on which the short course has been prepared, indicating how a study of the course contributes to the purpose and aims of senior cycle education.
2. Aims of the course	These comprise broad statements (3-5 usually) outlining the projected impact of the course on the learning of the students and do not distinguish between levels.
3. Objectives of the course	These are more specific statements (8-12) describing the nature of the student learning which will take place during the study of the course. Objectives refer to knowledge/understanding, attitudes and skills that students will develop.
4. Key skills statement	<p>There are six key skills identified as being central to learning and teaching across the curriculum at senior cycle. These are;</p> <ul style="list-style-type: none"> • learning to learn • information processing • personal effectiveness • communication • critical thinking • working with others. <p>Essential elements of all key skills will be developed through student participation in a range of skill-based activities in subjects, short courses, and transition units. While some elements of the key skills have been developed in senior cycle in the past it is envisaged that the use of targeted learning outcomes and associated methodologies including appropriate assessment will lead to a more concerted approach to their development.</p> <p>In the case of this short course the skills of,, and are particularly emphasised though opportunities to incorporate other key skills and more general skills ought to be availed of. The learning outcomes designed for short courses contain items which bring to the fore the development of the specific, identified key skills.</p>
5. Statement of links	<p>This section of the syllabus describes the links between the short course and:</p> <ul style="list-style-type: none"> ▪ junior cycle—specifically identifying paths of progression from junior cycle syllabus/es ▪ senior cycle subjects—in particular this section will clarify the relevant connections where the short course is an extension of

	<p>a senior cycle subject</p> <ul style="list-style-type: none"> ▪ vocational pathways and areas of further study which the student might undertake at the conclusion of senior cycle.
6. Course overview	In order to provide an easily accessible image of the course a tabular representation showing units and topics to be studied will be presented.
7. Units of course	<p>The description of each unit of the course will refer to;</p> <p>Content:</p> <ul style="list-style-type: none"> ▪ These sections provide a brief outline of content areas indicating where options or elements of student choice exist <p>Learning Outcomes: These are;</p> <ul style="list-style-type: none"> ▪ clear, detailed statements of what it is expected each student will have achieved and will be able to do as a result of the learning associated with the unit ▪ for all students except where a specific level is indicated.
8. Statement of assessment	<p>This detailed description of the assessment is designed to set out the amount and forms of assessment that students will undertake as part of the course.</p> <p>It will:</p> <ul style="list-style-type: none"> ▪ relate directly to the learning outcomes ▪ describe the different assessment components and their relative weighting ▪ include both assessment of learning and assessment for learning ▪ indicate, where necessary, requirements for examination at different levels.

Appendix 4

Draft Template Transition Units

1. **Title and reference number** of transition unit.
2. **Field of learning**—relates the transition unit to a particular field of learning, e.g. *Work and Future*.
3. **Duration**—a transition unit makes up one 45 hour unit of study. There would be a statement here about the breakdown of the unit e.g. 30 hours class contact, 15 hours community work.
4. **Rationale**—a short paragraph describing generally the type of learning experiences the transition unit will afford the student, with particular focus on the development of knowledge, attitudes and skills consistent with the purpose, aims and key skills of senior cycle education.
5. **General aims**—three to five short statements describing what learners can achieve through participation in the transition unit. i.e. *'Learners who successfully complete this transition unit will...'*
6. **Key skills statement**—a statement that identifies the key skill or skills that will be developed through the teaching and learning in the transition unit. The key skills would be clearly identified by means of a key skills grid. For example, a key skills grid for a transition unit in *debating* might look like:

Key skill		Essential elements
Learning to learn		<ul style="list-style-type: none"> ▪ Taking responsibility for one's own learning ▪ Accessing, recording and managing relevant information
Information processing		
Personal effectiveness		<ul style="list-style-type: none"> ▪ Being flexible and adapting to new situations ▪ Ability to appraise oneself
Communication		<ul style="list-style-type: none"> ▪ Expressing opinions, discussing, reasoning and engaging in debate and argument
Critical thinking		
Working with others		

7. **Statement of links**—learning does not take place in isolation. The descriptor should therefore link the learning (attitudes, knowledge, skills) in the unit with previous, current and future learning. In the case of learners who have completed junior cycle, links could be made with Junior Certificate subjects. Within senior cycle, links can be established with LCA modules, with other transition units, with short courses and with subjects. Vocational links and the contribution the unit can make towards lifelong learning could also be outlined.
8. **Body of transition unit**—describes the structure, content and specific learning outcomes of the transition unit. The body should include
- (a) an **overview table**—shows a breakdown of the transition unit into groups of learning outcomes, called **sections** (see example below). Transition units should have 1 to 3 sections. The overview should also indicate any options that are available to the student. For example, an overview table for a TU in *social studies* might look like:

Students will study any **two** of the following sections

Sections	
Section I	Conflict and conflict resolution
Section II	Equality studies
Section III	Interculturalism

- (b) a brief **introduction to each section** that describes generally the type of learning activity the student will engage in or body of knowledge that the student will encounter
- (c) a set of **learning outcomes** which describe in specific terms the knowledge attitudes and skills that learners will have achieved on successful completion of that part of the transition unit.
9. **Statement of assessment**—provides details on how the learning outcomes are to be assessed. The following principles should be applied when drawing up this statement

- the primary purpose of assessment of transition units is to provide feedback to the learner on
 - the achievement of the learning outcomes of the transition unit
 - the knowledge gained and skills and attitudes developed
 - the next steps that might be taken in learning in this area.

- the statement on assessment should identify a number of assessment approaches that would be appropriate to the type of learning in the unit. Examples might include
 - a learner diary/journal
 - a written examination
 - an essay or report
 - a project
 - an oral/visual presentation
 - the production of an artefact.

- student self-assessment and, where appropriate, group assessment should be a feature of transition units.

10. Evaluation

The unit descriptor should provide advice as to how teachers and students might evaluate the success of the transition unit. The purpose of this evaluation would be to continually improve the effectiveness of the unit in meeting its stated objectives.

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