The ability to think critically and creatively, innovate and adapt to change, to work independently and in a team, and to be a reflective learner are prerequisites for life and for the workplace in the 21st century. In line with international trends and influenced by the Lisbon strategy and the OECD DeSeCo (Defining and Selecting Key Competencies) initiative, a framework of key skills has been developed as part of the curriculum and teaching and learning at senior cycle. In addition, these skills support the development and enhancement of the basic skills of literacy and numeracy which are crucial for learners to access the curriculum and for their future life chances. For example, skills in communication, problem-solving, accessing and selecting information to mention just a few, will contribute to literacy and numeracy mastery in all areas of the curriculum.

Following consultation, engagement with schools and research five key skills have been identified as central to teaching and learning across the senior cycle curriculum. These are information processing, being personally effective, communicating, critical and creative thinking and working with others. These key skills play an important part in all learners achieving their potential, both during their time in school and in the future. They also enable learners to participate fully in society, including family and community life and the world of work.

Many of the elements that make up these skills are already a feature of teaching and learning across subjects. The embedding of key skills in the curriculum will thus involve building on current practice but it also involves increasing attention to the skills and their potential for actively engaging learners. By embedding the key skills in the curriculum learners will be presented with a range of learning experiences and outcomes that will improve their present and future access to learning, their social interaction, their information and communication abilities and their ability to work collaboratively.

The key skills framework is an integrated framework reflecting the strong inter-relationships between each of the five skills. As learners engage with each of the key skills they grow in their knowledge about learning and their skills of learning, both in general terms and in the particular context of their own learning. Therefore, as learners absorb the five key skills they also learn how to learn.

Each key skill has associated elements and learning outcomes. The elements further describe the skill, clarifying the skills that students will develop. The learning outcomes are phrased at a more behavioural level and indicate what students might show as evidence of achieving in the key skill.

Learners will encounter the key skills frequently and in an integrated way in many areas of the curriculum. As each new subject, short course and transition unit is developed, the key skills will be embedded in the learning outcomes. These learning outcomes will provide the basis for assessment as part of ongoing learning and in examinations.

KEY SKILLS DEVELOP KNOWLEDGE AND SKILLS FOR LEARNING

The vision of learners completing senior cycle is that they will pursue excellence in learning and develop a love of learning. They will engage with the knowledge, skills, attitudes and values that will enable them to learn how to learn. Learning
to learn requires the development of positive beliefs about learning and a willingness to engage in new learning situations. It helps learners to take more responsibility for their own learning as they proceed through their senior cycle education, gradually decreasing their levels of dependency on teacher direction. As learners engage with each of the key skills they grow in their knowledge about learning and their skills of learning, both in general terms and in the particular context of their own learning. In this way each of the five key skills contributes to learning to learn.

**DEVELOPING THE KEY SKILLS THROUGH THE CURRICULUM**

Learners should encounter the key skills frequently and in an integrated way in many areas of the curriculum. They 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 learners. The key skills are central to the development of all subjects, short courses and transition units so that their inclusion will have a significant positive impact on the learning experience of students.

For more information, learning activities and examples of key skills in the classroom, visit www.action.ncca.ie and follow the links for key skills.
FIVE KEY SKILLS

THE LEARNER

INFORMATION PROCESSING

COMMUNICATING

CRITICAL AND CREATIVE THINKING

BEING PERSONALLY EFFECTIVE

WORKING WITH OTHERS
INFORMATION PROCESSING

This key skill helps learners become competent in an information-intensive environment. As well as developing the specific skills of accessing, selecting, evaluating and recording information, learners develop an appreciation of the differences between information and knowledge and the roles that both play in making decisions and judgements.

CRITICAL AND CREATIVE THINKING

This key skill assists learners in being aware of different forms and patterns of thinking so that they become more skilled in higher order reasoning and problem solving. In engaging with this key skill, learners reflect critically on the forms of thinking and values that shape their own perceptions, opinions and knowledge.

COMMUNICATING

This key skill helps learners to appreciate how central communication is to human relationships of all kinds, and to become better communicators in both formal and informal situations. As well as developing specific skills in a variety of media they form a deeper understanding of the power of communication-particularly language and images-in the modern world. It also incorporates competence and confidence in literacy as an essential basic skill for all learners.

WORKING WITH OTHERS

This key skill highlights the role that working with others plays in learning and in reaching both collective and personal goals. It helps learners gain some appreciation of the dynamics of groups and the social skills needed to engage in collaborative work. It contributes to an appreciation that working collectively can help motivation, release energy and capitalise on all the talents in a group. In a broader context, they come to recognise that working collectively is important for social cohesion and for engaging with diverse cultural, ethnic and religious groups.

BEING PERSONALLY EFFECTIVE

This key skill contributes to the personal growth of learners, to them becoming more self-aware and to their using that knowledge to develop personal goals and life plans. As well as giving learners specific strategies related to self appraisal, goal setting and action planning, an important dimension of this key skill is in building the know-how of learners in recognising how to get things done, how to garner and use resources effectively, and how to act autonomously according to personal identities and personal values.
## Key Skill Elements

<table>
<thead>
<tr>
<th>Key Skill</th>
<th>Elements</th>
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| **Information Processing** | • Accessing information from a range of sources  
• Selecting and discriminating between sources based on their reliability and suitability for purpose  
• Recording, organising, summarising and integrating information  
• Presenting information using a range of information and communication technologies |
| **Critical and Creative Thinking** | • Examining patterns and relationships, classifying and ordering information  
• Analysing and making good arguments, challenging assumptions  
• Hypothesising and making predictions, examining evidence and reaching conclusions  
• Identifying and analysing problems and decisions, exploring options and alternatives, solving problems and evaluating outcomes  
• Thinking imaginatively, actively seeking out new points of view, problems and/or solutions, being innovative and taking risks |
| **Communicating**          | • Analysing and interpreting texts and other forms of communication  
• Expressing opinions, speculating, discussing, reasoning and engaging in debate and argument  
• Engaging in dialogue, listening attentively and eliciting opinions, views and emotions  
• Composing and performing in a variety of ways  
• Presenting using a variety of media |
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| WORKING WITH OTHERS | • Working with others in a variety of contexts with different goals and purposes  
• Identifying, evaluating and achieving collective goals  
• Identifying responsibilities in a group and establishing practices associated with different roles in a group (e.g., leader, team member)  
• Developing good relationships with others and a sense of well-being in a group  
• Acknowledging individual differences, negotiating and resolving conflicts  
• Checking progress, reviewing the work of the group and personally reflecting on one’s own contribution |
| BEING PERSONALLY EFFECTIVE | • Being able to appraise oneself, evaluate one’s own performance, receive and respond to feedback  
• Identifying, evaluating and achieving personal goals, including developing and evaluating actions plans  
• Developing personal qualities that help in new and difficult situations, such as taking initiatives, being flexible and being able to persevere when difficulties arise  
• Becoming confident and being able to assert oneself as a person |
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<th>LEARNING OUTCOMES STUDENTS SHOULD BE ABLE TO:</th>
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<tbody>
<tr>
<td>INFORMATION PROCESSING</td>
<td>Accessing information from a range of sources</td>
<td>• recognise the wide range of information sources that is available both within their schools, at home and beyond</td>
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<td>• access information quickly in written materials by strategies such as using table of contents, glossaries, summaries at the end of chapters and so on</td>
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<td></td>
<td>• use library catalogues and referencing systems to find books and other materials</td>
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<tr>
<td></td>
<td></td>
<td>• access new information quickly through using dictionaries, reference materials and the internet</td>
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<td>• navigate the internet to find specialist sites related to a topic they are studying</td>
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<td>• use people as well as hardcopy/electronic sources as sources of information</td>
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<td></td>
<td>Selecting and discriminating between sources based on their reliability and suitability for purpose</td>
<td>• develop well-focused questions to guide their selection of sources</td>
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<td>• evaluate the reliability and credibility of sources using criteria such as the authorship, affiliation, currency, bias, expertise of the author</td>
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<td>• explain and justify the basis for their selection</td>
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<td></td>
<td>Recording, organising, summarising and integrating information communication</td>
<td>• use systematic observational and note-taking techniques</td>
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<td>• keep well ordered notes so that they are readily accessible for future use</td>
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<td>• identify main ideas in a text using both prior knowledge and clues within the text (e.g., headings and sub-headings, paragraphing, conclusions)</td>
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<td>• use a range of methods for organising information, e.g. lists, concept-maps, flow diagrams</td>
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<td>• create summaries of information in their own words</td>
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<td>• integrate information from different sources by systematically examining similarities and differences between them and looking for alternative perspectives</td>
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<td>Presenting information using a range of information and communication technologies</td>
<td>• make choices about what medium to use when presenting information, taking account of audience, purpose and available facilities</td>
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<td>• explain and justify their choices</td>
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<td>• use a range of ICT tools effectively (e.g., PowerPoint, video clips, digital camera)</td>
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| CRITICAL AND CREATIVE THINKING | Examining patterns and relationships and classifying and ordering information | • use a range of methods for identifying patterns in information and ideas, e.g., lists, networks, hierarchies, matrices, flow diagrams, graphs, maps, etc.  
• explain the relationships between wholes and parts  
• systematically examine similarities and differences as the basis for comparing and contrasting  
• be able to group objects, events or ideas according to attributes and explain the basis for their classification  
• be able to re-classify by changing the basis for their classification |
| | Analysing and making good arguments, challenging assumptions | • understand the difference between opinion, reasoned judgment and fact  
• judge the credibility of an information source using criteria such as authorship, currency, potential bias  
• recognise components of an argument such as assumptions, reasons, counterarguments and conclusions  
• use these components when making their own arguments  
• recognise the effects of using emotive words in arguments |
| | Hypothesising and making predictions, examining evidence and reaching conclusions | • develop a line of reasoning from prediction/evidence/conclusion  
• understand the need to isolate and control variables in order to make strong causal claims  
• describe the relationship between variables  
• point out the limits of correlational reasoning  
• draw generalisations and be aware of their limitations |
| | Identifying and analysing problems and decisions, exploring options and alternatives, solving problems and evaluating outcomes | • recognise that problem solving and decision making can be approached systematically  
• use techniques to help explore alternative solutions and options such as brainstorming, visualisation, listing positive/negative/interesting attributes  
• predict the likely consequences of options and alternatives and systematically examine the pros and cons of each  
• recognise the impact of real-world constraints  
• evaluate outcomes of solutions and decisions both in the short and long term  
• appreciate the likely bias in analysing by ‘hindsight’ |
| | Thinking imaginatively, actively seeking out new points of view, problems and/or solutions, being innovative and taking risks | • recognise that different mind-sets are associated with different forms of thinking (e.g., letting ideas flow, building up associations, suspending judgment in order to produce ideas, are often associated with creative thinking)  
• be motivated to seek out alternative perspectives and viewpoints and to reframe a situation  
• be willing to take risks and to learn from mistakes and failures  
• be persistent in following through ideas in terms of products and/or actions  
• develop a strong internal standard in relation to the merits of their own work |
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| Communicating | Analysing and interpreting texts and other forms of communication | • analyse texts from several perspectives (e.g., intended audience, genre, viewpoint of the author, cultural/historical viewpoint)  
• use agreed frameworks for analysing texts and other forms of communication (e.g., the composition of film, visual art, computer graphics)  
• check the reliability and credibility of sources, and critically analyse arguments and claims  
• identify how language and other forms of communication are used for persuasion and rhetoric (e.g., for political argument, advertising, propaganda)  
• identify and explain their own personal responses to text and other forms of communication |
| Expressing opinions, speculating, discussing, reasoning and engaging in debate and argument | | • recognise the importance of speculation and argument as forms of dialogue for learning and for leisure  
• be sufficiently open-minded and curious to engage in speculation and argument  
• marshal and defend an argument while listening to opposing points of view  
• recognise the possible emotional impact of a robust argument on others |
| Engaging in dialogue, listening attentively and eliciting opinions, views and emotions | | • listen attentively to what others have to say  
• elicit opinions, views and emotions from others through the appropriate use of questioning and responding strategies  
• develop empathy by imagining the situation from others’ point of view  
• respond perceptively to contributions made by others |
| Composing and performing in a variety of different ways | | • identify a range of genres, their purposes and styles  
• compose in a variety of genres, showing the capacity to plan, draft and revise  
• express meaning and emotions through a range of performances (e.g., visual art, drama, music, design and graphics) |
| Presenting using a variety of media | | • identify the main purpose of a communication and relate its form and nature to the purpose  
• make choices about what medium to use, taking account of audience and purpose  
• make appropriate adjustments depending on whether they are making an oral or a written presentation  
• use of range of general ICT tools effectively (e.g., PowerPoint, video clips, and more specialized ICT if appropriate)  
• make appropriate use of dramatic modes of presentation (e.g., role-play, storytelling)  
• explain and justify choices |
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| WORKING WITH OTHERS | Working with others in a variety of contexts with different goals and purposes | • recognise that working with others is an intrinsic part of home, school, work and leisure  
• explore the contexts in which they work in groups (e.g., learning groups, sports groups, family groups) and examine the differences between them  
• recognise the need to respond flexibly in different contexts  |
|                   | Identifying, evaluating and achieving collective goals | • work in pairs and larger groups to plan the work of the group  
• co-operate with other members of the group to identify collective goals  
• co-operate with group members to identify how different roles can contribute to the overall goals  
• communicate ideas and needs within the group  
• agree action plans for achieving the goals  
• agree methods for keep each other informed of progress  |
|                   | Identifying responsibilities in a group and establishing practices associated with different roles in a group | • help to break tasks down into parts as a way of sharing the work of the group  
• take on the responsibilities of the role whether as a team member or a team leader  
• recognise how his/her role blends with the responsibilities of others in the group  
• express views about how the work of the group is progressing  |
|                   | Developing good relationships with others and a sense of well-being in the group | • listen carefully to other points of view  
• develop empathy and see alternative perspectives  
• express emotion in appropriate ways  
• help others to feel included in the group  
• help motivate the group to persist in the face of difficulties  
• celebrate the achievements of the group  |
|                   | Acknowledging individual differences, negotiating and resolving conflicts | • respect the rights and views of others in the group  
• recognise that different positions and viewpoints are likely to be adopted and expressed  
• identify areas of agreement and disagreements among the different positions  
• make suggestions about possible compromises and alternative ways forward  
• agree ways to resolve conflict  |
|                   | Checking progress, reviewing the work of the group, and personally reflecting on one’s own contribution | • keep to deadlines and agreed plans  
• monitor progress in the group against agreed plans  
• negotiate individual responsibilities  
• critically evaluate and change the approach of the group if necessary  
• participate in evaluating the outcomes against the collective goals  
• reflect on their own contribution to the group and identify strengths and weaknesses  
• identify ways of further improving their skills in working with others  |
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| **BEING PERSONALLY EFFECTIVE** | Being able to appraise oneself, evaluate one’s own performance, receive and respond to feedback | • identify their own aspirations and what they would like to achieve  
• set time aside to take stock of current achievements and, with the help of others, to engage in an honest appraisal of their strengths and weaknesses  
• show the resilience to receive and make sense of feedback  
• identify areas for action and move on                                                                                   |
|                         | Identifying, evaluating and achieving personal goals, including developing and evaluating action plans | • set realistic personal goals and targets to be achieved within a time frame  
• construct action plans to help reach the targets and identify methods for monitoring how well the plans are working (e.g., deadlines, feedback from others)  
• identify any help and resources that will be needed to implement the plans and reach the targets  
• within a specific time frame, evaluate the extent to which the targets have been reached and engage in personal reflection on the process of setting goals and targets  
• take responsibility for decisions and actions, making informed choices  
• identify strategies for making informed choices                                                                               |
|                         | Developing personal qualities that help in new and difficult situations, such as taking initiatives, being flexible, being reliable and being able to persevere when difficulties arise | • recognise that new situations are likely to be uncertain and present personal challenges  
• take the initiative on some occasions and not always leave it to others  
• be flexible and be prepared to try a different approach  
• show that they are reliable in following through with tasks and undertakings  
• show persistence and not give up at the first sign of difficulty                                                                  |
|                         | Confident and able to assert oneself as a person                          | • recognise the need to make their ‘voices’ heard in appropriate ways  
• become more skilful at ‘reading’ social situations and responding appropriately  
• celebrate their achievements  
• develop strategies for maintaining a positive sense of self in the face of disappointment and frustration                                      |