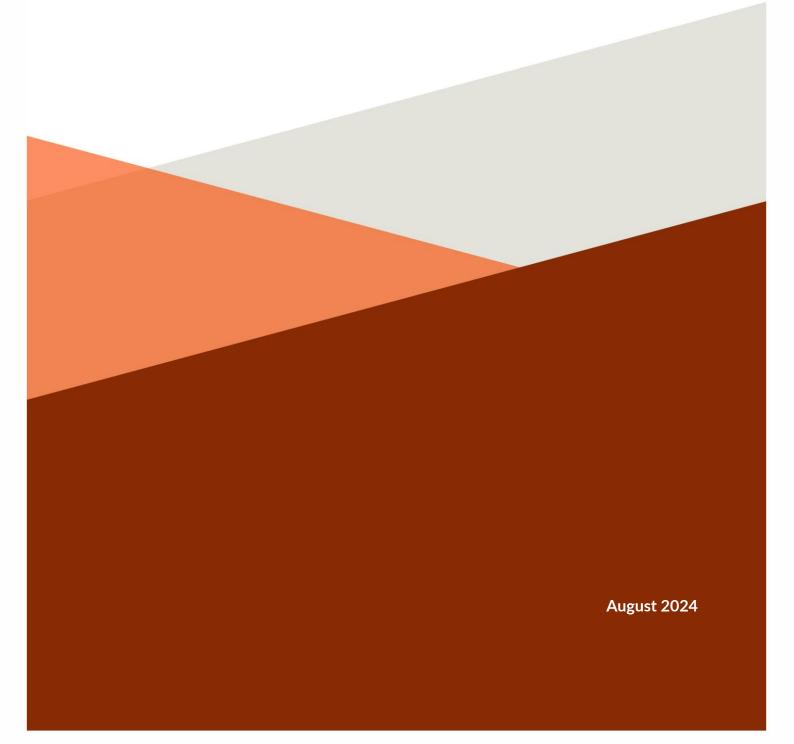


# Key competencies in senior cycle



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# Key competencies in senior cycle

Senior cycle helps students to become more engaged, enriched and competent, as they further develop their knowledge, skills, values and dispositions in an integrated way.



Figure 1 The components of competencies and their desired impact

Key competencies is an umbrella term which refers to the knowledge, skills, values and dispositions students develop during senior cycle<sup>1</sup>. Their learning is deeper when they can draw upon, integrate and apply their knowledge, skills, values and dispositions to various tasks, contexts, situations and events.

Students develop key competencies within and across the curriculum during senior cycle. For this reason, this is an important document for NCCA development groups, the Board for Senior Cycle and Council to use as subjects, modules **and programmes** are being developed. It is also an important document for schools to use as they put into practice the curriculum for teaching, learning, and assessing in senior cycle. The key competencies described in this document support students to grow and develop intellectually, personally, socially, morally, and physically. They foster and make deep learning possible. Student progress and mastery of key competencies in senior cycle is very important, as they prepare to embark on adult life, though these competencies continue to develop and evolve through lifelong learning. The key competencies:

- are linked and can be combined
- build on prior learning
- are visible and important across the curriculum
- can help students and teachers to make meaningful connections between and across different areas of learning
- can improve students' overall learning.

<sup>&</sup>lt;sup>1</sup> Knowledge, skills, values and dispositions are explored further in the glossary at the end of this document.

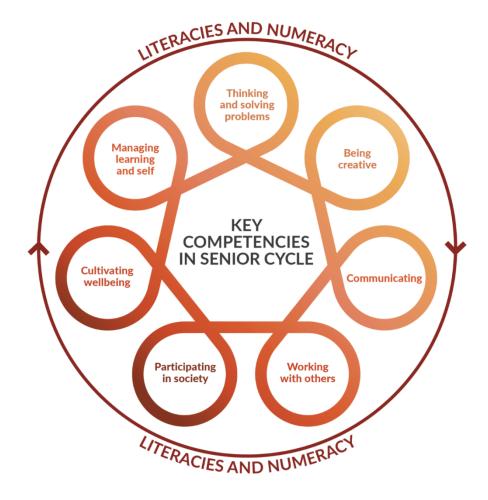


Figure 2 Key Competencies in senior cycle, supported by literacies and numeracy.

The relationship between key competencies, literacies and numeracy is a two-way, reciprocal one. The development of literacies and numeracy supports the development of competencies and vice-versa. Key competencies are supported when:

- students' literacies are well developed, i.e., when they can meaningfully and effectively read, watch, write, speak, listen, and mediate meaning.
- students' numeracy is well developed, i.e., when they can understand numbers, data and symbols meaningfully and interpret and use them effectively.
- students make good use of various tools, including technologies, to support their learning.

All students can work at and be supported to improve their key competencies. Key competencies can give young adults the power and potential to meaningfully take part in their schools, families, communities, and society, in the here and now, and in the future. Students whose key competencies are well-developed are better able to understand and learn; to deal with and respond to social opportunities and problems; to make the transition from school to further, adult and higher education, apprenticeships, traineeships and/or the world of work; and to embrace adult life. As students mature, these key competencies **can be combined** to help students handle and respond to more complex and varied tasks, as appropriate to their needs and abilities. They come to know what to do and how to do it, to know when to act and when not to act. When their

key competencies become more embedded and sophisticated, their capacity to thrive and flourish is enhanced.

The key competencies build on important learning from early childhood, primary and junior cycle. They come to life through the learning experiences and pedagogies teachers choose and through students' responses to them. Students can and should be helped to develop their key competencies no matter what path they follow through senior cycle, what **programmes**, subjects and modules they choose, and irrespective of their past or present background, circumstances or experiences. As part of teaching, learning and assessing, they should have many opportunities to make their key competencies visible. The transformative potential of key competencies is most likely to be realised when teachers and students discuss the competencies they are developing and when teachers offer students opportunities to make meaningful connections across their different subjects and modules.

The ecology of each of our students' lives, past and present, at school, at home, in their communities and the wider society, may impact on the development of these competencies and attributes. Because all human beings are different, it is unlikely that any one individual will develop all of the key competency attributes equally. Rather, the aim is that students strive to develop as many of these attributes as possible, while retaining what makes them uniquely themselves.

Each competency is described below, followed by a grid which sets out the overarching learning outcomes in the left-hand column and the associated attributes in the right-hand column. The learning outcomes apply to all subjects and modules, albeit to a greater or lesser degree depending on the subject, module or programme and inform the development of subject-specific and module-specific learning outcomes in individual curriculum specifications.

The attributes (shown in the right-hand column) help to make each competency clearer through setting out how students will develop and apply the competency, and describe characteristic learning and development opportunities for students in each key competency. Every subject and module should endeavour to help students to develop all of the key competencies. However, some attributes may be more relevant in some subjects and modules than in others.

# Thinking and solving problems

This competency is about students using logic and reason to make well-thought-out decisions, decide what to do next, and to craft questions, responses and solutions. They figure out what works and what doesn't work in terms of their thinking strategies and the way they approach tasks. They try to improve their thinking and problem-solving using different approaches, including dialogue, study, feedback, reflection and continued practice.

<b>Learning outcomes</b> Students should be able to	Attributes Thinking and solving problems by
apply critical thinking in both familiar and new situations.	<ul> <li>getting knowledge, ideas, theories and concepts from different places and putting them to use.</li> <li>using criteria to choose between sources e.g., reliability, suitability, relevance, cost and accessibility.</li> </ul>

- using criteria to tell the difference between opinions, judgements, biases, and facts.
- thinking critically about social norms and practices.
- exploring data, information, patterns, trends, connections, and relationships to gain deeper understanding and better explanations.
- creating hypotheses, making predictions, exploring and weighing up arguments and evidence, and coming to clear and coherent conclusions.
- challenging assumptions and errors; formulating valid arguments and counter arguments.

identify problems, come up with potential solutions and make informed decisions.

- understanding, analysing, synthesising, evaluating, interpreting and creating.
- using numbers and data to make observations, estimates and calculations.
- exploring different options and solutions, predicting likely consequences and results.
- making informed decisions and evaluating the shortterm and long-term results and consequences.
- being alert to the pros and cons of hindsight.
- recognising and investigating how real-world constraints affect possible solutions and actions.

develop and use a range of thinking strategies, values and dispositions to develop and respond critically to questions and tasks and to solve problems.

- asking questions and seeking challenges.
- being open minded, speculating, looking for different points of view and exploring multiple possibilities.
- being open to feedback and able to use it to improve their learning.
- making connections across different learning and between prior knowledge and new knowledge.
- reflecting on thinking strategies to improve learning.
- acting with integrity, taking responsibility for your own work and the work of the group.
- being transparent about sources, learning from and crediting the work and ideas of others.

# Being creative

This competency is about coming up with novel ideas, questions, thinking, theories, solutions, and creative works, often by playing with and combining existing concepts in new ways, and by embracing divergent thinking, the power of human imagination and the potential of technologies. Being creative can benefit individuals, groups, communities and society and can result in innovation. Creativity can help human beings to navigate difficult problems. Developing strategies, habits of mind and dispositions which nurture creativity can help students to develop and sustain a personal response to their learning.

<b>Learning outcomes</b> Students should be able to	Attributes Being creative by
be creative and develop a range of strategies and processes which support their creativity.	<ul> <li>participating in cultural experiences and learning from creative works.</li> <li>exploring and learning from examples of innovation and entrepreneurship.</li> <li>coming up with and exploring questions, identifying problems and speculating about possible answers and solutions.</li> <li>trying different things to respond to tasks and situations.</li> <li>combining ideas that already exist to enhance concepts, ideas, processes, products, and communities.</li> <li>turning ideas into actions, creating new ideas, designs, creative works, performances, processes, and products.</li> <li>imagining sustainable futures and taking steps to achieve these.</li> </ul>
develop values and dispositions which nurture their creativity.	<ul> <li>being curious, open-minded, adventurous, and imaginative.</li> <li>being playful and willing to take appropriate risks in pursuit of learning.</li> <li>being comfortable with ambiguity and uncertainty, while still finding ways to move forward.</li> <li>developing internal standards about how good your own and other people's work is.</li> <li>reflecting on your creativity and creative process.</li> </ul>

# **Communicating**

This competency is about meaningfully interacting with others and gaining a deeper understanding of how important communication is to human relationships. Through this competency, students further develop their communicative repertoire. They communicate to make connections and to share their thoughts, feelings and ideas in a clear, authentic and effective way. They develop habits and nurture dispositions which support their capacity to communicate, in person and using various media.

<b>Learning outcomes</b> Students should be able to	Attributes Communicating by
deepen their understanding of various forms of communication and of the material they are studying.	<ul> <li>deepening understanding words, symbols, numbers, language, sound, movement, tools, media, and texts.</li> <li>listening, viewing, and reading attentively and responding meaningfully.</li> <li>asking questions to figure out ideas, viewpoints and emotions.</li> </ul>

	<ul> <li>mediating meaning and changing understanding and approach for different formats, audiences and situations.</li> <li>expressing opinions, speculating and discussing, arguing, informing and persuading.</li> <li>analysing and interpreting a range of texts.</li> <li>developing critical understanding.</li> </ul>
communicate meaningfully and effectively, using various tools and formats, for different purposes and audiences.	<ul> <li>gathering information from all of the senses.</li> <li>using a variety of tools to communicate, including languages, instruments, equipment, materials and technology.</li> <li>using appropriate language, formats and techniques to present data and information clearly.</li> <li>being aware of the purpose and the target audience for the communication.</li> <li>creating, designing and composing texts, objects, artefacts and performances.</li> </ul>
develop habits and nurture dispositions which help them to communicate meaningfully and effectively.	<ul> <li>communicating authentically, in person and virtually, using various forms of communication.</li> <li>listening actively and seeking clarity and understanding.</li> <li>recognising and trying to counteract misinformation and disinformation.</li> <li>being patient and reflective when communication challenges occur and adapting to the situation.</li> <li>being open to diverse perspectives and worldviews.</li> <li>understanding how tone, gestures, body language, emotions and visuals affect communication and using this understanding in an ethical and responsible way.</li> <li>reflecting on what you do well and what you could do</li> </ul>

# Working with others

This competency is about working cooperatively in a range of contexts for many different purposes. When structured well, working with others can enrich students' learning and deepen their understanding of the dynamics of pairs, groups, and teams. Students can further develop their social and emotional skills and their understanding and appreciation of the talents, opinions, experiences and personalities of their peers, teachers and others. Working with others can deepen students' appreciation of the importance of diversity and inclusion. It gives students opportunities to get better at navigating emotions, challenges, and conflicts which may arise, and to figure out how to negotiate a way forward. Technology is an increasingly important tool which can both support and present challenges to working with others.

better when communicating.

Learning outcomes Students should be able to	Attributes Working with others by
work co-operatively in pairs, groups and teams.	<ul> <li>deciding things as a group and working together to achieve shared goals.</li> <li>taking on different roles, including taking the lead on occasion.</li> <li>contributing meaningfully to the work of the group.</li> <li>evaluating the work as it progresses and changing approach if necessary.</li> <li>giving and responding to feedback and understanding its importance.</li> <li>understanding group dynamics, being able to give and take and navigating differences of opinion and approach.</li> </ul>
develop strategies, values and dispositions which make working with others more meaningful.	<ul> <li>interacting ethically, in person and virtually.</li> <li>understanding and appreciating the value of diversity within groups and promoting inclusivity.</li> <li>encouraging and celebrating the success of peers.</li> <li>understanding the emotional involvement needed to work well with others and managing emotional challenges which may arise.</li> <li>reflecting on what you do well and what you could do better when working with others.</li> </ul>

# Participating in society

This competency is about participating meaningfully in school, families, communities, and society, at local, national and global level, in person and online. As students participate in society, they deepen their understanding of human rights and responsibilities, diversity, equity, inclusion, social justice, and sustainability. They demonstrate their commitment to meaningful participation in school and society in a range of ways. They are aware of and engaged with societal issues, seeking to understand why these issues arise and to mitigate their impacts. They advocate for and try to bring about positive change.

Learning outcomes	Attributes
Students should be able to	Participating in society by
participate meaningfully in their schools, communities, and wider society.	<ul> <li>developing and expressing your own ideas.</li> <li>having choice, voice and influence both in your learning and in society.</li> <li>investigating complex societal issues.</li> <li>reflecting on your own role in relation to societal challenges.</li> <li>learning to critique, challenge, protect and/or transform systems.</li> </ul>

	<ul> <li>planning and taking individual and collective action to bring about positive change.</li> <li>contributing to peaceful and democratic values and practices at school and community levels.</li> <li>seeking solutions to situations that undermine human dignity and rights.</li> <li>making choices which contribute towards creating sustainable futures.</li> <li>reflecting on your values, perceptions and actions and being able to compromise or take a stand, as appropriate.</li> </ul>
develop values and dispositions which support meaningful participation.	<ul> <li>acting ethically, informed by individual and collective rights and responsibilities.</li> <li>showing solidarity where there is inequity and injustice.</li> <li>showing respect for the needs and rights of current and future generations and for nature.</li> <li>cultivating hope and efficacy in the face of uncertainty, ambiguity and risk.</li> </ul>

# **Cultivating wellbeing**

Student wellbeing is present when students realise their abilities, take care of their physical wellbeing, can cope with the normal stresses of life, and feel a sense of purpose and belonging. When setbacks occur, students know how to cope and to ask for help when they need it. This competency helps students understand how to protect and nurture their own wellbeing and support the wellbeing of others. They come to understand how social, economic and cultural factors can positively and negatively impact on the overall quality of life and wellbeing of individuals, groups and societies. Students' overall wellbeing – their social, emotional, environmental, intellectual, spiritual, and physical wellbeing – and their academic success mutually support each other, and healthy, caring relationships are key to both.

<b>Learning outcomes</b> Students should be able to	Attributes Cultivating wellbeing by
cultivate the wellbeing of self and others.	<ul> <li>being aware of and looking after your physical wellbeing.</li> <li>making and sustaining caring relationships.</li> <li>developing and expressing your personal identity, values and beliefs.</li> <li>contributing to making your class and school an inclusive, supportive space.</li> <li>appreciating, celebrating and understanding diverse identities and cultures.</li> </ul>
develop values and dispositions which support wellbeing and the	<ul> <li>having a sense of meaning and purpose and developing your self-confidence.</li> </ul>

capacity to cope with and respond to challenges.	<ul> <li>recognising, accepting and regulating emotions, as appropriate.</li> <li>feeling empowered to act in solidarity when others are treated unfairly.</li> <li>being aware of what to do and where to go when help is needed.</li> </ul>
	<ul> <li>building resilience when facing challenges and difficulties.</li> <li>being able to assess risk and respond in healthy ways.</li> </ul>

## Managing learning and self

This competency is about students understanding who they are as people and as learners, as they set goals and make life plans. They deepen their understanding of how learning works and can use this knowledge to improve their learning. They become more aware of and nurture their aptitudes, abilities and interests. They develop strategies which help them to make decisions and to take action, to reflect on their learning and to decide next steps in learning and in life. They understand how to get things done and how to use resources effectively and become more adept and confident in acting autonomously.

Learning outcomes Students should be able to	Attributes  Managing learning and self by
manage their own learning, with support from their teachers, other adults, their peers and technology.	<ul> <li>developing your commitment to improving your learning.</li> <li>making choices and setting personal learning goals.</li> <li>making connections across different areas of learning.</li> <li>managing your learning in different contexts and environments.</li> <li>figuring out ways to respond to complexity and uncertainty.</li> <li>reflecting on and evaluating your learning.</li> <li>developing internal standards in relation to your own and others' work.</li> </ul>
develop strategies, values and dispositions which support their learning and their future life path.	<ul> <li>having a sense of self-efficacy and experiencing achievement.</li> <li>being flexible, adaptable and willing to learn from your mistakes.</li> <li>identifying and pursuing your hopes and goals for the future.</li> <li>making informed choices and taking responsibility for your educational journey and career path, with appropriate support.</li> </ul>

# **Glossary of terms**

An outline of the meaning of important terms, as used in this document, is included below.

### **Key competencies**

Key Competencies is an umbrella term which refers to the knowledge, skills, values and dispositions students develop during senior cycle. Competencies refers to a person's capacity to use their knowledge, skills, values and dispositions in a co-ordinated way to act in response to various tasks, contexts, situations and events.

### Knowledge

Knowledge can be described as 'encompassing established facts, concepts, ideas and theories', including 'theoretical concepts and ideas as well as practical understanding based on the experience of having performed certain tasks'<sup>2</sup>. A useful categorisation of knowledge organises it into four types: disciplinary, interdisciplinary, epistemic and procedural. Disciplinary knowledge, organised by subject disciplines or knowledge domains, can be an essential foundation and can help students to develop and acquire other types of knowledge and skills. Interdisciplinary knowledge enables students to identify connections and transfer concepts, skills and ideas across disciplines, potentially generating new insights, ideas or understanding. Epistemic knowledge refers to knowing what knowledge is; knowing what you know and can do; and how that learning came about. Finally, procedural knowledge refers to understanding how a task is performed, often by working through structured processes, and this can support students in solving complex problems. Students learn, use and leverage a range of skills, values and dispositions in the process of further expanding, deepening and demonstrating their knowledge and understanding.

### **Skills**

Skills can be described as 'the ability and capacity to carry out processes and to be able to use one's knowledge in a responsible way to achieve one's goal<sup>3</sup>. A useful categorisation of skills organises skills into three types: cognitive and meta-cognitive skills (for example, critical thinking, creative thinking and self-regulation); practical and physical skills (for example, using materials and tools, new information and technological devices); and social and emotional skills (for example, empathy, responsibility and collaboration). Skills, alongside knowledge, values and dispositions, are developed and used in an integrated and co-ordinated way, often in response to a specific task or demand or to work towards a particular goal.

### Values and dispositions

Values can be described as 'the beliefs that a person holds about what is desirable – for themselves and for society more generally'<sup>4</sup>. Dispositions can be described as 'the tendency for a person to act in a certain way in given circumstances'<sup>4</sup>. Dispositions are linked to values, as people are often

<sup>&</sup>lt;sup>2</sup> OECD (2019), Future of Education and Skills 2030, Concept note: knowledge for 2030, p3.

<sup>&</sup>lt;sup>3</sup> OECD (2019), Future of Education and Skills 2030, Concept note: skills for 2030, p4.

<sup>&</sup>lt;sup>4</sup> McGuinness, C. (2018), Research-Informed Analysis of 21<sup>st</sup> Century Competencies in a Redeveloped Primary Curriculum, NCCA research report, https://ncca.ie/media/3500/seminar\_two\_mcguinness\_paper.pdf

disposed to act in a certain way because of their underlying values and beliefs. Dispositions are also connected to skills. One shorthand description of dispositions is having 'a will as well as a skill' <sup>3</sup> to attempt or achieve something. Dispositions are equally connected to knowledge, as the thinking and learning dispositions that students develop have the potential to enrich their learning as they engage with knowledge across various disciplines. There are many ways of organising and categorising values and dispositions, which can encompass personal, social, societal and human values and dispositions, for example.

### **Learning outcomes**

Learning outcomes are statements which describe the knowledge, skills, values and dispositions students should be able to demonstrate after a period of learning. Learning outcomes may be broad and global in nature as seen in those set out for each of the key competencies in this document or may or may present learning that is more specific to the individual subject or module in question as seen in subject and module specifications.

### **Attributes**

The attributes help to make each competency clearer through setting out how students will develop and apply the competency, and describe characteristic learning and development opportunities for students in each key competency. Every subject and module should endeavour to help students to develop all of the key competencies. However, some attributes may be more relevant in some subjects and modules than in others.

### **Texts**

Text includes all products of language use such as oral, gestures, signs, written, Braille, visual, tactile, electronic, and digital.

### **Sources**

Sources include any type of text; both traditional and new media; individuals and groups; primary and secondary sources; databases, research articles, books, objects.

### **Strategies**

Strategies are ways of approaching learning to improve knowledge and skills and to help to engage effectively with tasks.

### **Tools**

Any device, instrument or technology which can assist learning or help to demonstrate learning.

