



Written submission: Consultation on the draft Leaving Certificate Construction Technology specification

NCCA is redeveloping Leaving Certificate Construction Technology. The aim of this consultation is to obtain the open and honest views of all stakeholders: students, teachers, parents, and other interested parties. The feedback gained from the consultation will inform the work of the development group in preparing the final specification.

NCCA would greatly appreciate your feedback on the draft specification which can be found here: [Draft Leaving Certificate Construction Technology specification](#)

When providing feedback, observations or comments, please reference the specific section and / or relevant learning outcomes.

The closing date for this consultation is 2nd May 2025 at 5pm. Please email your written submission to scconsultations@ncca.ie.

Data protection and open data section

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Respondent's details

What organisation are you submitting on behalf of?

TechnoTeachers Association

Are you consenting to be listed as a respondent to this consultation?

☒ Yes

☐ No

If yes, please enter the name you wish to have published in the final report.

TechnoTeachers Association

Are you consenting to have the submission published on ncca.ie?

☒ Yes

☐ No



Rationale, Aim, and Key Competencies [Pages 2, 3 and 5]

Rationale: The rationale (Page 2) outlines the nature of Construction Technology and the role and importance of Construction Technology in realising the purpose and vision of senior cycle.

Aim: The Aim (Page 3) outlines the over-arching purpose of the subject and the relevance and expected impact of the subject on student learning.

In your opinion, do the rationale and aim capture the overarching purpose and nature of Construction Technology; the importance of the subject in realising the vision of senior cycle and the relevance and expected impact of this subject on student learning. Please provide specific feedback / observations / comments.

The rationale outlined on page two effectively captures the overarching purpose and nature of Construction Technology. It appropriately emphasises the subject's role in fostering a holistic understanding of the built environment. By stating that the subject provides "opportunities for students to develop confidence to navigate challenges and contribute to a sustainable future," the rationale highlights a future-focused approach that reflects the core values of the senior cycle.

The document explains how Construction Technology supports the wider purpose and vision of senior cycle education. Its emphasis on cultivating "an appreciation for architectural heritage while promoting innovation, craft excellence, and environmentally responsible design" supports the senior cycle's aim to promote intellectual, social, and personal development.

The rationale outlines the anticipated impact on student learning, particularly in fostering informed decision making around materials, construction methods, and environmental conservation. By emphasising environmental responsibility, sustainable construction methods, core STEM principles, and a strong focus on design, the subject is positioned as a significant contributor to broader educational goals while the emphasis on an active, hands-on approach where students blend theory with practice accurately reflects a modern, student-centred approach to teaching and learning.

Lastly, by highlighting future pathways in apprenticeships, further and higher education, and STEM-related careers, the rationale successfully establishes the subject's relevance beyond the classroom and its role in preparing students for a diverse range of futures.



The aims of the Leaving Certificate Construction Technology specification also effectively capture the subject's overarching purpose. At its core, the subject seeks to ignite students' curiosity and enthusiasm for the built environment, promoting deeper engagement with learning. It highlights the importance of developing essential skills and dispositions for the modern world by fostering technological literacy and encouraging students to become responsible citizens who prioritise ethical and sustainable practices.

This vision is further reinforced through the aim of cultivating a holistic understanding of the built environment. Students are supported in building foundational knowledge of core construction concepts, enhancing their visual literacy, and appreciating the broader social and environmental impacts of construction. Such an approach reflects the multifaceted nature of Construction Technology and promotes active, student-led learning through creativity and problem solving.

The specification's aims are also closely aligned with the broader goals of senior cycle education, which emphasis on the development of the whole person - intellectually, socially, and personally. Construction Technology contributes meaningfully to this vision by empowering students to become lifelong learners and ethically minded individuals capable of engaging with complex social, environmental, and technological issues.

Additionally, the aim to prepare students for future challenges and to broaden their awareness of potential career and educational pathways reflects the senior cycle's commitment to support meaningful progression. The craft skills assessment (AAC 2) plays a key role in this by valuing practical, hands-on expertise and ensuring that students who wish to pursue apprenticeships or skilled trades are recognised and supported. This practical component not only affirms the subject's relevance to industry needs but also strengthens links to further education, training, and employment. In doing so, Construction Technology provides students with real-world direction and purpose, making their educational experience more relevant, inclusive, and impactful.



Key Competencies: Key competencies is an umbrella term which refers to the knowledge, skills, values and dispositions students develop in an integrated way during senior cycle. These competencies are linked and can be combined; can improve students' overall learning; can help students and teachers to make meaningful connections between and across different areas of learning; and are important across the curriculum.

The draft specification sets out examples of how key competencies can be developed in Leaving Certificate Construction Technology on pages [Pages 7 and 8]

In your opinion, does this section effectively capture the development of student key competencies in Leaving Certificate Construction Technology? Please provide specific feedback / observations / comments.

Yes, the section on Key Competencies in the draft *Leaving Certificate Construction Technology* specification effectively captures how these competencies are developed through the subject. The examples clearly demonstrate the integration of knowledge, skills, values, and dispositions in ways that reflect authentic, real-world learning. Rather than treating key competencies as standalone elements, the specification embeds them meaningfully throughout the learning process.

The focus on design processes and creative problem-solving aligns strongly with *Thinking and Solving Problems* and *Being Creative*. This provides students with the opportunity to engage with practical hands-on tasks. Competencies such as *Being Literate and Participating in Society* are well supported through the development of technological literacy and an emphasis on ethical construction practices, encouraging students to make informed, sustainable decisions which is critical in the context of the modern built environment.

Collaborative learning is also highlighted through group-based activities that foster *Working with Others* and *Communicating*, reflecting the cooperative nature of the construction industry. Additionally, *Managing Learning and Self* is meaningfully addressed through opportunities for reflection, organisation, and awareness of wellbeing which is key to both personal development and future readiness.

Overall, this section presents a comprehensive representation of how key competencies are embedded in Construction Technology, clearly supporting the broader aims of senior cycle education.



Strands of study and learning outcomes [Page 9-23]

Course overview: The course overview sets out the knowledge, skills, values and dispositions for students in four strands. The specification emphasises a non-linear, integrated approach to learning across the strands.

The details of the strands are described on pages [Pages 9 and 10] of the specification.

In your opinion, does the structure illustrate the connected nature of the strands and the development of student knowledge, skills, values and dispositions in an appropriate way? Please provide specific feedback / observations / comments.

Yes, the course overview effectively illustrates the interconnected nature of the four strands and supports the development of students' knowledge, skills, values, and dispositions in an appropriate way.

The emphasis on a non-linear, integrated approach to learning is a particular strength, as it reflects the nature of the construction industry, where theory and practice are often interconnected.

The descriptions of the individual strands further support this interconnectedness, with the Built Environment strand focusing on sustainability and the holistic connection of buildings to their context, this directly relates to the Design, Craft Skills, and Materials strand, which also emphasises sustainable material use and ethical decision making and the Building Fabric strand, which centres on the design and construction of sustainable buildings. Similarly, the Services and Control Technology strand considers the factors contributing to a healthy indoor environment, which is directly influenced by decisions made in the Building Fabric strand. This approach supports deeper learning and contributes to the development of values and dispositions. For example, the focus on sustainability and responsible decision making helps cultivate ethical awareness, while the inclusion of design, innovation, and practical application fosters creativity, resilience, and confidence.

Overall, the structure promotes flexibility in teaching and learning, allowing students to engage with the subject in dynamic and diverse ways. This aligns well with the broader goals of senior cycle education. However, given the minimum 180 hours of class contact time allocated to the subject, there may be concerns about the overall volume of learning outcomes across the strands. The current number of learning outcomes may place significant demands on both students and teachers. It could be worth considering a review of the quantity or scope of these outcomes, either through reduction or by amalgamating certain outcomes to ensure the learning remains focused, manageable, and achievable within the available timeframe.



Strand 1: The Built Environment [Page 11]

Please provide your views on the learning set out in this strand with reference to

- clarity for planning for teaching and learning
- alignment with the rationale and aims
- opportunities for the development of key competencies and
- access and challenge for all students.

Please provide specific feedback / observations / comments.

Strand 1 offers a well-structured framework for planning, clearly outlining key areas of learning alongside specific, action-oriented outcomes. The inclusion of a glossary in Appendix 1, defining key terms further supports clarity and consistency in teaching and assessment. However, the broad scope of some topics, may pose concerns and challenges for teachers in determining which aspects to prioritise within the constraints of the 180 hours.

The learning in Strand 1 aligns well with the aims of the specification. It supports the development of a holistic understanding of the built environment, promotes sustainability, and encourages responsible citizenship. Emphasis on safety further aligns with fostering responsibility among students.

Strand 1 offers strong opportunities for developing key competencies. Analytical and evaluative outcomes support *Thinking and Solving Problems*, while tasks like designing site layouts promote *Being Creative*. Group discussions and evaluations enhance *Communicating* and *Working with Others*, and exploration of housing and environmental issues supports *Participating in Society*. The strand also encourages independent learning and reflection, linking to *Managing Information and Thinking*.

Strand 1 appears accessible to a diverse range of learners, offering appropriate levels of challenge through differentiated expectations. This structure allows all students to engage with the same core concepts at varying degrees of complexity, promoting inclusive learning while supporting the development of critical thinking and analytical skills. However, clearly assigning certain learning outcomes as Higher Level only could further support effective delivery, helping teachers gauge the appropriate depth of coverage for Ordinary Level students.

Additionally, with just a minimum of 180 hours of class contact time, ensuring sufficient depth across all outcomes may prove challenging for both teachers and students.



Strand 2: Design, Craft Skills, and Materials [Page 14]

This strand presents a well-structured framework that supports effective planning and delivery. The learning outcomes are clear, with action verbs from Appendix 1 helping to define the expected level of student engagement. This clarity enables teachers to align lesson planning with specific learning intentions.

Strand 2 also aligns strongly with the rationale and aims of the specification. It supports the integration of theory and practical, while fostering excellence in craft skills and responsible, sustainable design practices. This reflects the specification's commitment to developing technologically literate, innovative, and ethically aware learners.

This strand provides multiple opportunities for the development of key competencies. Engaging with design problems and producing creative artefacts fosters *Being Creative*, while planning and reflecting on tasks develops *Thinking and Solving Problems* and *Managing Learning and Self*. Skills in *Communicating* are developed through graphical communication when presenting design work. Additionally, the strand promotes *literacy* and *numeracy* through interpreting technical drawings, calculating materials, and documenting processes.

In terms of access and challenge, Strand 2 supports diverse learners through practical, hands-on tasks. Outcomes such as executing craft skills or developing innovative solutions can be adapted in complexity.

Overall, Strand 2 effectively supports the development of essential construction skills, aligns well with the subject's aims, and provides a strong foundation for inclusive and engaging learning.

Finally while the inclusion of Building Information Modelling (BIM) is a welcome addition reflecting industry trends, its placement may be better suited to Strand 1, where a broader contextual understanding of the built environment is explored. As it currently stands, BIM seems somewhat disconnected from the core focus of Strand 2.



Strand 3: Building Fabric [Page 17]

Strand 3: Building Fabric in the specification presents a well-structured and coherent framework for planning teaching and learning. The learning outcomes are clearly stated and supported by precise action verbs, helping teachers identify the intended student learning and design appropriate activities. However, given the 180 hours of class contact time, teachers may struggle to cover each topic to a sufficient depth.

This strand aligns strongly with the overall rationale and aims of the specification. It promotes technical proficiency, integrates sustainability principles, and reinforces the importance of environmental responsibility. Learning outcomes that explore energy efficiency, moisture control, airtightness, and the environmental impact of materials reflect the specification's focus on developing technologically literate and environmentally conscious students. The inclusion of biophilic design and reference to building regulations supports real-world relevance and responsible construction practices.

Strand 3 also offers strong opportunities for the development of key competencies. Students are encouraged to analyse and evaluate construction detailing, supporting *Thinking and Solving Problems*. Producing and interpreting construction drawings fosters *Communicating* and *Being Literate*, while engaging with energy-efficient design nurtures *Acting Sustainably* and *Participating in Society*. Research tasks and the need to reflect on building practices further support *Managing Learning and Self*.

Overall, Strand 3 offers a comprehensive and purposeful framework for exploring sustainable building fabric within construction technology. However, while the structure appears broadly accessible, clearer guidance on the level of depth required at each level would support more inclusive teaching.



Strand 4: Services and Control Technology [Page 20]

This offers a well-structured and clearly defined approach to understanding essential building services, energy systems, and modern control technologies. The learning is broken down into focused sub-topics, each supported by corresponding learning outcomes that use consistent and purposeful action verbs from Appendix 1. This supports clarity for teachers when planning units and lessons.

Strand 4 aligns strongly with the overall rationale and aims of the specification. It emphasises energy efficiency, environmental awareness, and the integration of smart and sustainable technologies, all of which underpin the goal of producing technologically literate and ethically responsible students. Learning outcomes such as evaluating renewable energy sources, analysing building systems, and exploring smart control technologies demonstrate a clear connection between theoretical knowledge and practical application, while reinforcing the specification's emphasis on sustainability, innovation, and responsible design.

This strand supports the development of several key competencies. *Thinking and Solving Problems* is nurtured through the analysis of environmental impacts and energy loss calculations. *Communicating* is developed through discussion, presentation, and explanation of system designs. Students also engage in *Participating in Society* by exploring sustainable technologies and healthy living environments.

Strand 4 offers potential for both accessibility and challenge through differentiated expectations. While the content is relevant, its complexity may require clearer guidance on the depth of understanding required at Ordinary and Higher Level.

Further clarification would assist teachers in ensuring all students are appropriately supported and challenged. Given the substantial scope of this strand, consideration could be given to strategies such as rotating topics or introducing clearer parameters around content depth, to better manage teacher workload and ensure realistic coverage within the available time.



Additional Assessment (AAC1) [Page 26]

The Additional Assessment Component 1 (AAC1), *Exploring the Constructed Environment*, presents a meaningful opportunity for student learning within the Leaving Certificate Construction Technology specification. Its design offers strong potential to motivate students by promoting hands-on, inquiry-based engagement. Through investigating a real-world challenge, designing a creative and functional solution, and evaluating their outcomes, students are encouraged to take ownership of their learning. The ability to apply knowledge from all four strands of the specification provides a holistic learning experience and fosters a sense of accomplishment and purpose.

In terms of alignment with the specification's learning outcomes, the AAC1 is explicitly designed to integrate knowledge, skills, values, and dispositions across all strands. The use of key action verbs from Appendix 1 helps to provide a clear connection between the tasks within the AAC and the intended outcomes of the course. The brief, issued by the State Examinations Commission (SEC), will be intended to support both teacher planning and student understanding by targeting key areas of the specification. It may however be worth considering the inclusion of multiple brief options, perhaps three distinct briefs like at junior cycle, allowing students to choose one that best aligns with their interests and strengths. This would enable students to showcase a range of skillsets while providing choice could empower students and promote deeper investment in their project work.

Additionally, it would be beneficial for the SEC to provide a recommended timeframe for AAC1, as well as clear guidelines regarding the structure and content of the accompanying folio. This would help ensure that the assessment remains manageable for both students and teachers, while maintaining its educational value. A well-structured brief, with time expectations and a defined folio outline, would support consistent standards and reduce ambiguity across classrooms.

AAC1 also strongly facilitates the development of senior cycle key competencies. *Thinking and Solving Problems* is embedded as students investigate, analyse, and respond to the given brief. *Being Creative* is central to designing innovative, meaningful solutions. *Communicating* is fostered through explaining ideas and justifying design choices. *Managing Learning and Self* is cultivated through project planning, time management, and reflective evaluation.

Overall, the AAC offers a dynamic, integrative assessment that promotes motivation, aligns well with the curriculum aims, and meaningfully develops key competencies in a real-world context.



Additional Assessment (AAC2) [Page 28]

Craft Skills Assessment

Please provide specific feedback / observations / comments on the AAC in Leaving Certificate Construction Technology with reference to how the AAC might motivate students, how it aligns to the learning outcomes in the specification and how it facilitates the development of key competencies.

The Additional Assessment Component 2 (AAC2), *Craft Skills Assessment*, in the Leaving Certificate Construction Technology specification offers an opportunity for students to demonstrate their practical competence. The requirement to create an artefact in response to a prescribed task fosters a sense of accomplishment, ownership, and pride in their workmanship.

This component is particularly engaging for kinaesthetic learners, allowing them to express their learning through hands-on activity. The focus on accuracy, attention to detail, and quality of finish promotes high standards and motivates students to strive for excellence as they develop a skillset in a range of craft techniques.

AAC2 aligns strongly with the learning outcomes in Strand 2: *Design, Craft Skills, and Materials*. Students must interpret scaled drawings and dimensional data, reinforcing outcomes related to graphical communication. The marking out, cutting, assembling, and finishing of materials with precision directly corresponds to outcomes focused on executing a range of craft skills to a proficient standard. The prescribed task issued by the State Examinations Commission (SEC) will be designed to guide teachers in aligning classroom practice with these outcomes and to support student learning in a focused, structured way. For this reason it would be critical to receive Sample AAC2s to help teachers with planning and pedagogy.

In terms of scheduling AAC 2, it may be worth considering whether AAC2 could take place at the end of 5th year. This could help reduce the assessment load in 6th year and allow students to focus on other components of the course during their final year.

Furthermore, the possibility of offering both higher and ordinary level versions of the craft skills assessment could be explored. A differentiated approach may better support the diverse range of student abilities and ensure accessibility while still maintaining high standards of technical skill and craftsmanship.

AAC2 also facilitates the development of key senior cycle competencies. *Numerical reasoning, critical thinking, problem-solving, self-management, and*



effective communication are all embedded in the task. Overall, AAC2 seems to be a well-aligned, practical assessment that supports meaningful learning and the development of valuable lifelong skills.

Supports for Successful Enactment

Please provide specific feedback / observations / comments on supports that might be needed for successful enactment of this subject specification.

The successful implementation of the Leaving Certificate Construction Technology specification will depend on the provision of strong, practical supports for both teachers and students. Key areas requiring focused attention include professional development and training, choice in AAC1, assessment resources and time management guidance, content delivery time analysis and investment in school infrastructure and equipment.

1. Professional Development and Training

Continuous, high-quality professional development will be essential for teachers. Clear, structured guidance should be provided on interpreting the learning outcomes, embedding key competencies, and effectively delivering both AAC1 and AAC2 in the classroom. This support delivered by Oide should take place during school time to ensure full accessibility and engagement. Targeted CPD sessions on specific areas requested by teachers would further enhance teacher confidence and consistency.

2. Choice in AAC1

Providing multiple brief options for AAC1 is important to ensure that students can engage with a project that aligns with their interests and strengths. Like in Junior Cycle Wood Technology, offering choice gives students the opportunity to select a task that suits their individual skill set, interests and learning style. This can lead to better outcomes by increasing motivation, supporting differentiated learning, and allowing students to demonstrate their abilities in a more meaningful way. It also helps ensure the assessment is accessible and relevant to a wide range of learners.

3. Assessment Resources and Time Management Guidance

A comprehensive suite of sample materials should be developed to support teaching and assessment. This includes sample written papers at both Higher and Ordinary Level, each accompanied by marking schemes; sample AAC2 tasks; a variety of sample AAC1 briefs; and exemplars. Detailed marking schemes for both AACs, along with clear breakdowns of marks for the folio and project, would ensure transparency and consistency. Suggested headings and layouts for the AAC1 folio would also help manage workload and maintain national standards.



Clear guidance on time management across the two-year cycle is equally important. It may be beneficial to explore if completing AAC2 by the end of 5th year, would help to reduce the assessment burden in 6th year. Likewise, recommended timelines and planning support for AAC1 would help teachers deliver the project in a structured and manageable way.

4. Content delivery time analysis

It could be worth considering a review of the quantity or scope of the Learning outcomes, either through reduction or by amalgamating certain outcomes to ensure the learning remains focused, manageable, and achievable within the available timeframe. A content delivery time analysis should be undertaken to assess whether the volume and complexity of the learning outcomes are realistically achievable within the minimum 180 hours allocated for the subject. This would support effective curriculum planning and help ensure a balanced, manageable experience for both students and teachers.

5. Resources and Infrastructure

To meet the requirements of the specification, schools must be adequately resourced with appropriate tools, materials, and digital technologies. Additional funding may be required to ensure all students have equal access to high-quality learning environments.

In summary, a coordinated, well-resourced support system anchored in quality CPD, clear assessment guidance, and practical planning tools is vital to ensuring the effective delivery of this new specification and to supporting meaningful student learning experiences.