

Creative and Critical Thinking Micro-credentials

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Introduction and context

In Scotland, all colleges and other credit-rating bodies are able to credit-rate qualifications to enable them to sit on the Scottish Credit and Qualifications Framework (SCQF). Within the UK, this credit-rating opportunity is unique and is overseen by the SCQF Partnership, which quality assures all credit-rated awards through a robust and detailed submission and acceptance process.

Credit rating allows Edinburgh College the freedom to design creative awards without being constrained by the sometimes rigid and prescriptive awarding organisations' criteria.

In 2019, the College created and credit-rated a suite of innovative qualifications with the aim of developing creative and critical thinking along with meta-skills. These qualifications mainly comprised project-based learning, each designed to allow learners to develop meta-skills and sound habits of cognitive thinking strategies that could be used in any given subject or situation. The approved awards are the product of three years of research including input from experts in the fields of meta-cognition, education and neuroscience.

Developing learners' critical thinking skills

Awards are at SCQF Levels 1–7 (Levels 1–4 on the frameworks for Wales, Northern Ireland and England) to enable the awards to be appropriate for all age groups (from primary school pupils), across all abilities and to be delivered across the wide education sector including schools, colleges, and through community education groups and organisational training. Each of the qualifications consists of 5 elements taking learners on an exploration of effective thinking methods in order to pose questions, find solutions or discover new perspectives. Each element is between 3 and 11 credits, with Level 5 typically being larger than the Level 1–4 elements. The full Level 5 award is 34 credits and each of the Level 1–4 awards are 24 credits.

		SCQF Level(s)	Credits
Elements	1. Explore and Prepare	1-6	7
		7	11
	2. Incubation	1-6	5
		7	6
	3. Illumination	1-6	5
		7	5
	4. Validation	1-6	4
		7	6
	5. Reflection	1-6	3
		7	6
Qualifications	Creative and Critical Thinking	1-6	24
		7	34

The Creative and Critical Thinking qualifications have developed since their first delivery in 2021. Following feedback from a school, we changed the name to Creative and Critical Thinking (from the original title of Let's Get Thinking Creatively!). Also during 2024/25, we decided to credit-rate each unit (element), to allow candidates who may not achieve the overall qualification to be certificated for the units they achieve. Most of the candidates are from schools (S4 to S6), but we have had some internal candidates and from National Galleries. The success rate is 74% (397 enrolments) where the candidates have completed a full qualification.



Developing educators' critical thinking skills

We also considered that educators themselves needed to understand how to deliver differently in order to develop these skills within their own subject areas.

At that point, we looked to the UK's Education Endowment Foundation paper regarding metacognition in the classroom to develop the teaching qualification. The UK's Education Endowment Foundation examined more than 40 years of research into metacognition and made 7 practical recommendations:

- Teachers should acquire the professional understanding and skills to develop their learners' metacognitive knowledge.
- Teachers should explicitly teach metacognitive strategies, including how to plan, monitor and evaluate their learning.
- Teachers should model their own thinking to support learners in planning monitoring and evaluating their learning.
- Teachers should set an appropriate level of challenge to develop learner self-regulation and metacognition.
- Teachers should promote metacognitive skills in the classroom.
- Teachers should explicitly teach their learners how to organise and manage their learning independently.
- Schools should support teachers to develop their knowledge of these approaches and expect them to be applied appropriately.

We recognised that, as well as being able to deliver subject matter and skills, teachers have an important third role: cultivating creative and critical thinking and other capabilities.

We designed the Teaching Creative and Critical Thinking qualification, SCQF Level 10 (Level 6 on the frameworks for Wales, Northern Ireland and England), to enable and empower teachers to design, develop and deliver flexible pedagogical approaches that enable deep thinking skills including creative and critical thinking, meta-cognition and ethical reasoning. In this way, teachers can enable learners to deeply understand and apply the curriculum and prepare learners for a lifetime of learning. A feature of the award is an innovative assessment process that ensures the award develops educators' skills and provides them with a toolkit for future use.

We have offered Teaching Creative and Critical Thinking since 2021 to both internal and external candidates, including delivering to educators from National Galleries, Police

Scotland, Midlothian Council and Edinburgh Council as well as individual schools and organisations (full list provided below). The success rate for the qualification is 85% (99 enrolments) of those completing the qualification.

We have delivered the qualification to whole teams within Edinburgh College and have had multiple staff from individual organisations who enrolled, after hearing positive results from successful colleagues who have achieved the award. There is an increasing number of high school staff undertaking the award in response to the ever-changing demands of the classroom. The underpinning knowledge, skills, collaborative learning and the toolbox of resources demonstrated and given to participants has been cited as a great benefit to the course learners.



We are very proud to say that we have never had any negative comments about the qualification or its delivery. Retention and attainment are significantly above initial expectations and Education Scotland recognised Teaching Creative and Critical Thinking as a positive catalyst for change in the classroom.

Our suite of creative and critical thinking qualifications designed and credit-rated by Edinburgh College also includes:

- Developing Creative and Critical Thinking Skills in Leadership, SCQF Level 10, 38 credits
- Writing Creative and Flexible Assessment Tools, SCQF Level 9, 17 credits.

The awards were not developed with micro-credentials in mind, but as part of our wider approach to developing qualifications that respond to the needs of society and giving learners the knowledge, skills and thinking strategies they need to be successful.

List of educators

- Edinburgh College
- College of West Anglia
- Midlothian Council
- Edinburgh Council
- YMCA's Brave Juniors (using esports to engage with disengaged students)
- National Galleries
- Police College Scotland
- Gateshead Council
- Lasswade High School
- Hawick High School
- Selkirk High School
- Brunstane Primary School
- Haddington Primary School
- James Gillespie Primary School
- Liberton High School
- Preston Lodge High School
- Live, Create, Teach – St Andrews
- Queensferry High School
- Clovenstone Primary School
- Bruntsfield Primary School
- All Saints High School
- Galashiels Academy

This case study was presented at the QAA Cymru webinar 'Micro-credential postcards from the Nations: Practice-sharing event with a focus on micro-credential development around the UK' on 3 June 2025. The webinar formed part of the work of the Medr-funded Micro-credentials Special Interest Group (MIC.SIG).

Find out more about the MIC.SIG on the QAA Cymru [website](#).

