# QUALIFICATION SPECIFICATION

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qualifications

Access to HE

Apprenticeships

Digital

Employability & Enterprise

English & Maths

ESOL

Personal & Social Development

Professional Development

Vocational

# Developing and Managing STEM in Primary Schools (Level 3)

This qualification specification covers the following qualification:

| Qualification Number | Qualification Title |
|---|---|
| 603/0132/6 | Gateway Qualifications Level 3 Certificate in Developing and Managing STEM in Primary Schools |

## About this qualification specification

This qualification specification is intended for tutors, assessors, Internal Quality Assurers, Centre Quality Managers and other staff within Gateway Qualifications recognised centres and/or prospective centres.

It sets out what is required of the learner in order to achieve the qualification. It also contains information specific to managing and delivering the qualification including specific quality assurance requirements.

The guide should be read in conjunction with the Gateway Qualifications Centre Handbook and other publications available on the website which contain more detailed guidance on assessment and verification practice.

In order to offer this qualification you must be Gateway Qualifications recognised centre.

If your centre is not yet recognised, please contact our Development Team to discuss becoming Gateway Qualifications Recognised Centre:

Telephone:   01206 911211
Email:       enquiries@gatewayqualifications.org.uk
Website:     www.gatewayqualifications.org.uk/recognition

## Contents

# 1. Qualification Information

## 1.1. About the qualification

The qualification has been approved by the Office of Qualifications and Examinations Regulation (Ofqual) that regulates qualifications, examinations and assessments in England.

Embedding STEM in teaching and learning within primary schools is gathering momentum as a successful way of raising standards, yet there is no national qualification for learners to aspire to or for recruiters to seek from potential employees.

This qualification has been developed to address that gap, in conjunction with training provider, Educator Solutions, which provides learning and training programmes and qualifications to the school workforce.  Educator Solutions has undertaken market research and gained feedback from schools / learners that indicates the need for a qualification to help teachers and other school-based staff to support the growing need for children and young people to engage with science, technology, engineering and maths.

The qualification covers the core competencies needed by a primary school practitioner leading on STEM, along with the underpinning knowledge and understanding.   Learners will develop an understanding of what constitutes a STEM approach to learning and how this benefits primary schools and their pupils. They will learn the skills needed to lead on STEM, how to manage and develop staff and resources, set STEM quality improvement targets and goals and introduce STEM enrichment activities.

The qualification can be offered by any provider meeting the appropriate approval criteria.

## 1.2. Objective

The objective of the qualification is to provide practitioners in primary schools with the necessary knowledge and skills to develop and lead STEM teaching and learning in their setting.

## 1.3. Key Facts

| Qualification Title | Total Qualification Time | Guided Learning | Credit Value |
|---|---|---|---|
| Gateway Qualifications Level 3 Certificate in Developing and Managing STEM in Primary Schools | 130 | 60 | 13 |

**Total Qualification Time** is the number of notional hours which represents an estimate of the total amount of time that could be reasonably expected to be required for a Learner to achieve and demonstrate the achievement of the level of attainment necessary for the award of the qualification.

Total Qualification Time is comprised of the following two elements:

- The number of hours which an awarding organisation has assigned to a qualification for Guided Learning, and

- An estimate of the number of hours a Learner will reasonably be likely to spend in preparation, study or any other form of participation in education or training, including assessment, which takes place by – but, unlike Guided Learning, not under the Immediate Guidance or Supervision of – a lecturer, supervisor, tutor or other appropriate provider of education or training.

## 1.4. Achievement methodology

The qualification will be awarded to learners who successfully achieve an approved combination of units through a Portfolio of Evidence that has been successfully verified and monitored through Gateway Qualifications' Quality Assurance process.  Achievement is therefore determined by successful completion of unit assessment with no further requirement for additional/summative assessment.

## 1.5. Geographical Coverage

This qualification has been approved by Ofqual to be offered in England.

## 1.6. Progression Opportunities

This qualification enables learners to gain expertise in developing and managing a specific aspect of the primary curriculum.  It may provide a useful stepping stone to middle management positions within primary schools or academy chains.

## 1.7. Relationship with other frameworks

The content of the qualification has been developed with the KS1 and KS2 Science, Technology and Mathematics national curriculum in mind.

## 1.8. Funding

For information regarding potential sources of funding please visit the following websites;

The Education Funding Agency http://www.gov.uk/efa
The Skills Funding Agency https://www.gov.uk/sfa.

## 1.9. Equality, Diversity and Inclusion

It is Gateway Qualifications' aim that there shall be equal opportunities within this organisation and in all the services it provides and within its recognised centres and via the services they provide and so meet the organisation's legal responsibilities to prevent discrimination.

In particular it is the organisation's intention that there should be no discrimination on the grounds of a protected characteristic including age, disability, gender assignment, marriage and civil partnership, pregnancy and maternity, race, religion and belief, sex, sexual orientation.  It is acknowledged that this is not an exhaustive list.

## 2. Learner Entry Requirements

### 2.1. Age

The approved age range for these qualifications is: 16+

### 2.2. Prior Qualifications

There is no requirement for learners to have achieved prior qualifications or units prior to undertaking this qualification.

### 2.3. Prior Skills/Knowledge/Understanding

There are no formal entry requirements but candidates will need to be working in a primary school and have some responsibility for STEM in order to meet the assessment criteria.

### 2.4. Restrictions

There are no restrictions to entry.

### 2.5. Access to qualifications for learners with disabilities or specific needs

Gateway Qualifications and recognised centres have a responsibility to ensure that the process of assessment is robust and fair and allows the learner to show what they know and can do without compromising the assessment criteria.

Gateway Qualification has a duty to permit a reasonable adjustment where an assessment arrangement would put a disabled person at a substantial disadvantage in comparison to someone who is not disabled.

The following adaptations are examples of what may be considered for the purposes of facilitating access, as long as they do not impact on any competence standards being tested:

- adapting assessment materials;
- adaptation of the physical environment for access purposes;
- adaptation to equipment;
- assessment material in an enlarged format or Braille;
- assessment material on coloured paper or in audio format;
- British Sign Language (BSL);
- changing or adapting the assessment method;

- changing usual assessment arrangements;
- extra time, e.g. assignment extensions;
- language modified assessment material;
- practical assistant;
- prompter;
- providing assistance during assessment;
- reader;
- scribe;
- transcript;
- use of assistive software;
- using assistive technology;
- use of CCTV, coloured overlays, low vision aids;
- use of a different assessment location;
- use of ICT/responses using electronic devices.

It is important to note that not all of the adjustments (as above) will be reasonable, permissible or practical in particular situations. The learner may not need, nor be allowed the same adjustment for all assessments.

Learners should be fully involved in any decisions about adjustments/adaptations. This will ensure that individual needs can be met, whilst still bearing in mind the specified assessment criteria for a particular qualification.

A reasonable adjustment for a particular learner may be unique to that individual and may not be included in the list of available access arrangements specified above.

**Special Considerations**

Requests for special consideration should be submitted as soon as possible. Please refer to the Reasonable Adjustments and Special Consideration Policy.

## 2.6. Additional Requirements/Guidance

There are no formal entry requirements but candidates will need to be working in a primary school and have some responsibility for STEM in order to meet the assessment criteria.

## 2.7. Recruiting Learners with Integrity

It is vital that centres recruit with integrity with regard to qualifications. Centres must ensure that learners have the correct information and advice on their selected qualification and that the qualification will meet their needs.

The recruitment process must include the centre assessing each potential learner and making justifiable and professional judgements about the learner's potential to successfully complete the assessment and achieve the qualification. Such an assessment must identify, where appropriate, the support that will be made available to the learner to facilitate access to the qualification.

## 3. Achieving the Qualification

### 3.1. Qualification Structure (Rules of Combination and Unit List)

The knowledge, skills and understanding that will be assessed as part of the qualification are set out within the unit specification.  These include the learning outcomes and associated assessment criteria.  To obtain unit information, please contact Gateway Qualifications who will enable access to our unit library.

For information on Recognition of Prior Learning/Exempt and Equivalent units please see section **3.2 Recognition of Prior Learning (RPL)/Exemptions/Equivalencies**

**Gateway Qualifications Level 3 Certificate in Developing and Managing STEM in Primary Schools**

Learners must achieve the single mandatory unit.

**Mandatory**

| Unit Reference Number | Unit Title | Level | Guided Learning | Credit Value |
|---|---|---|---|---|
| R/615/0496 | Developing and Managing STEM in Primary Schools | Level 3 | 60 | 13 |

### 3.2. Recognition of Prior Learning

Recognition of Prior Learning (RPL) provides learners and Centres with an alternative assessment method by which a learner's previous achievements can meet the assessment requirements for a unit/qualification through the knowledge, understanding or skills that they already possess and so, do not need to develop these through a course of learning.

It enables the recognition of achievement from a range of activities using any valid assessment methodology.  Provided that the assessment requirements of a given unit or qualification have been met, the use of RPL is acceptable to contribute to a unit, units or a whole qualification according to the RPL criteria for a given qualification.

The process of Recognition for Prior Learning is not applicable to this qualification.

### 3.3. Units Details

**Unit Title:** Developing and Managing STEM in Primary Schools

**Unit Reference Number:** R/615/0496

**Level:** Level 3

**Guided Learning Hours:** 60

**Credit Value:** 13

**Sector Subject Area:** 13.1 Education and Training

**Unit Aim:**

| LEARNING OUTCOMES | ASSESSMENT CRITERIA |
|---|---|
| **The learner will:** | **The learner can:** |
| 1   Understand the importance of a STEM (Science, Technology, Engineering and Maths) approach to learning in the primary phase. | 1.1   Explain how a STEM approach can contribute to raising standards across the curriculum.<br><br>1.2   Explain how a STEM approach can enhance primary schools' development planning.<br><br>1.3   Explain how and why a primary school's approach to STEM should take account of the local STEM 'landscape'. |
| 2   Be able to provide leadership in relation to STEM in a primary school. | 2.1   Promote the value of STEM teaching and learning to different stakeholders (e.g. senior managers, colleagues, parents).<br><br>2.2   Develop and implement policies and procedures to support a STEM approach in a primary school.<br><br>2.3   Support staff to plan and embed a STEM approach to teaching and learning. |

| LEARNING OUTCOMES | ASSESSMENT CRITERIA |
|---|---|
| **The learner will:** | **The learner can:** |
| 3 Be able to plan and set targets for STEM for a primary school. | 3.1 Develop short, medium and long term plans for STEM in a primary school. |
| | 3.2 Develop realistic and challenging targets for improving standards through a STEM approach, based on analysis of relevant pupil data. |
| 4 Be able to plan and set targets for STEM for a primary school. | 4.1 Summarise staffing needs and other resources required to support a STEM approach within a primary school. |
| | 4.2 Organise staffing to support a STEM approach in a primary school. |
| | 4.3 Develop and manage resources to support a STEM approach in a primary school. |
| | 4.4 Make effective use of STEM resources in the local area, e.g. facilities, businesses, organisations and individuals. |
| 5 Be able to plan and set targets for STEM for a primary school. | 5.1 Analyse school STEM needs, identifying those that can be met through enrichment activities. |
| | 5.2 Plan STEM enrichment activities (e.g. STEM Club) for a primary school, based on analysis of pupil needs. |
| | 5.3 Develop a sustainable STEM enrichment programme that promotes access to a variety of STEM learning. |
| | 5.4 Evaluate the impact of STEM enrichment opportunities offered by a primary school |

| LEARNING OUTCOMES | ASSESSMENT CRITERIA |
|---|---|
| **The learner will:** | **The learner can:** |
| 6   Be able to plan and set targets for STEM for a primary school. | 6.1   Identify CPD needs with regard to STEM subjects in a primary school.<br><br>6.2   Plan appropriate CPD for staff (and self) to ensure high quality STEM teaching and learning.<br><br>6.3   Lead and facilitate STEM CPD for staff.<br><br>6.4   Utilise local businesses and the community in planning and delivering appropriate STEM CPD. |

### 3.4. Links to other qualifications

There are no direct links between this and other qualifications.

# 4.   Assessment and Quality Assurance

**The following are in addition to the standard assessment and quality assurance requirements set out in the Gateway Qualifications Centre Handbook.**

## 4.1.  Method of Assessment

The method of assessment for the qualification is through a portfolio of evidence.

## 4.2.  Assessment Materials

There are no specific assessment materials provided for this qualification.

## 4.3.  Qualification-Specific Centre Requirements

Centres must ensure that they have the appropriate resources in place when delivering the qualification.

## 4.4.  Qualification-Specific Tutor/Assessor Requirements

Tutor/Assessors must be fully qualified and experienced in the subject area in which they are delivering, details of which must be provided to Gateway Qualifications as part of the Qualification Approval application.

## 4.5.  Qualification-Specific Quality Assurance Requirements

There are no additional internal/external quality assurance requirements for this qualification.

## 4.6.  Additional Requirements/Guidance

There are no additional requirements that Learners must satisfy in order for assessment to be undertaken and the unit/qualification to be awarded.

## 5. What to do next

For existing centres please contact your named Development Manager or Development Officer.

For organisations, not yet registered as Gateway Qualifications centre please contact:

> Gateway Qualifications
> Gateway House
> 3 Tollgate Business Park
> Colchester
> CO3 8AB

Tel:    01206 911211

Email:  enquiries@gatewayqualifications.org.uk

## 6. Gateway Qualifications

Gateway Qualifications, a not for profit registered charity, is an Awarding Organisation based in Colchester.

We work with learning providers and industry experts to design and develop qualifications that benefit the learner and the employer.

We support flexible, responsive and quality assured learning opportunities whether it's in the classroom, at work, in the community or through distance learning.

We are recognised by Ofqual, to design, develop and submit qualifications to the Regulated Qualifications Framework (RQF).