



Tracking Career-Long Professional Learning in STEM

Support notes

Please help us recognise the contribution your organisation makes to the professional learning of practitioners and technicians in relation to sciences, technologies, engineering, mathematics (STEM).

Who is this guidance for?

This guidance, and the STEM professional learning tracking process, is targeted at those organisations that provide external career-long professional learning support to the following groups and sectors:

- Early learning and childcare practitioners
- Primary school practitioners
- Additional support needs practitioners
- Classroom assistants
- Secondary school practitioners
- School-based technical support staff
- College/FE practitioners.

This invitation will, therefore, be relevant to a wide range of organisations including, amongst others, local authorities, colleges, universities, employers, STEM providers, science centres and festivals, Third Sector organisations and national agencies.

Introduction

In 2017, the Scottish Government published the [STEM Education and Training Strategy for Scotland](#). A key ambition of the strategy is to enhance the provision of high-quality career-long professional learning (CLPL) to the groups listed above.

Education Scotland consulted many of the target groups to find out more about their STEM CLPL needs and [the findings](#) are now being used to shape the national offering. A new *Enhancing Professional Learning in STEM Grants Programme* has been launched by Education Scotland to promote innovation in this area and build further delivery capacity.

On an annual basis, we will be gathering data to track progress against the following STEM Strategy [Key Performance Indicator](#): *Increase the cumulative hours of STEM professional learning accessed by early years, schools, college and CLD practitioners annually*. If your organisation provides STEM CLPL to the target groups listed above then we'd be very grateful for your support in helping us measure progress against this KPI.

Why are we asking for this data?

The commitment in the STEM Education and Training Strategy is to enhance the existing provision of professional learning in STEM. As we progress with our plans we want to be sure that there is an equity of provision across all sectors and geographical areas and that the needs of various groups are being met. The tracking process and annual return survey will help us to allocate resources to where they are needed most to address gaps and imbalances. We will produce an overall analysis of the data provided to us and will be sharing this with key partners such as Scottish Government and Scottish Funding Council to inform decision-making and planning in relation to the STEM strategy. The analysis will also be shared widely with the education system through Education Scotland's communication channels. The data provided by your organisation will not be identifiable from the analysis but we will give you the option to have you listed as one of the organisations listed as having submitted data.

About the tracking process

The following two-step process is designed to make the on-going capture of this data as easy as possible. If you already have systems in place to capture the relevant data (as outlined in Appendix 1) then please disregard Step 1 and proceed straight to Step 2.

Step 1: Collate your STEM & digital skills CLPL data throughout the year

- We have created a CLPL Tracker Template to help you track the STEM professional learning your organisation provides. This Excel-based tool automatically tallies data on your CLPL activities; making it easy for you to capture the key quantitative information required.
- Instructions on how to use the Tracker are contained within the Tracker Excel document – see the *How to use this tracker* worksheet/tab. Further notes have been embedded in the sample table and the *Enter Data* worksheet. Just hover your mouse over the relevant table heading to reveal the notes.
- We are inviting your organisation to use this Tracker on an on-going basis to capture data on your CLPL activities from 1st August to 31 July each year. **If you are willing to support this then we'd be grateful if you could start this process by entering data on your CLPL activity from 01 August 2018.**

Step 2: Enter your cumulative CLPL data totals in our annual return survey

- In August each year, we will send you our annual return online survey to complete.
- If you have been using the STEM CLPL Tracker then you can find the data to be entered into the survey in the *My Totals* worksheet/tab.
- If you will be tracking the professional learning you provide using your own internal processes then please refer to Appendix 1 below to see the data that will be required.

- The annual return survey that we will issue will also contain free-text options for you to enter any qualitative data you would like to share.
- Please ensure that you only enter data on the CLPL that *your organisation has led on*. We are keen to avoid any duplication or double-counting of CLPL activity undertaken.
- We will send you more details about the 2018/19 annual return in due course.

Help us to establish a baseline with your retrospective CLPL data

We are also keen to establish a baseline of activity for academic year 2017/18. **We, therefore, would be very grateful if you could provide us with retrospective data for STEM CLPL you provided between 1 August 2017 and 31 July 2018.** We appreciate that this may be a challenge given the time that has elapsed since then, so we have created a simple survey to capture this data. We are happy to receive estimated figures.

The survey can be accessed at: <https://forms.education.gov.scot/s/STEM20172018/>

We would be very grateful if you could complete the retrospective data gathering survey by Friday 14 December.

This online survey also asks if you would like to be included in this annual data return process so that the contribution your organisation makes to STEM learning in Scotland can be captured on an on-going basis. If you would like to be involved in the coming years, then please complete the relevant section to ensure that we have the most up-to-date contact details.

You may be interested to know that we will shortly be sending out a survey to practitioners in early learning and childcare, school and community learning and development sectors to invite them to share information about the professional learning they have accessed this year and to identify their professional learning priorities.

I'd like to take this opportunity to thank you for the support you provide for STEM learning in Scotland. If you have any questions then please get in touch.

Best wishes / *Dùrachdan*

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Appendix 1

The table below provides further details about the data required for the annual return survey which will be issued in August 2019. If you are using your own internal processes to track the STEM professional learning your organisation provides then the table below will help you to identify the information you should gather and enter into the annual return survey next year.

If you decide to use the STEM CLPL Excel Tracker spreadsheet provided by Education Scotland then you simply need to enter the relevant data into the Tracker following each CLPL session that you facilitate. The Tracker will then automatically tally your data for you. This tallied data can be found in the *My Totals* worksheet/tab in the Tracker.

Data descriptor	Detail
1. Total number of sessions delivered	<p>The total number of CLPL sessions you have delivered during the period of 01 August – 31 July each year. <i>Some CLPL is delivered as a course involving multiple sessions with the same group of practitioners in the same geographical location. Please record this kind of engagement as a single entry in the Tracker. The ‘Duration’ of the course will be the combined hours delivered across the multiple sessions.</i></p>
2. Themes covered by your sessions	<p>Total instances of coverage across the following themes¹:</p> <ul style="list-style-type: none"> ○ Sciences ○ Technologies ○ Engineering ○ Mathematics and Numeracy ○ Digital Skills
3. Total number of hours delivered	<p>The total hours of CLPL your organisation has delivered between the period of 01 August – 31 July each year.</p>
4. Total reach of your sessions	<p>Total instances of the coverage of your CLPL across the following categories:</p>

¹ Please refer to the definitions of each of these themes as provided in Appendix A of the [STEM Education and Training Strategy for Scotland](#).

	<ul style="list-style-type: none"> ○ One school cluster/Associated school group (ASG) ○ Single local authority ○ Multiple local authorities ○ Regional/Regional Improvement Collaborative (RIC) ○ National
<p>5. Your CLPL and accreditation</p>	<p>Please indicate whether your CLPL leads to any form of accreditation for participants. We only require a simple 'yes' or 'no' answer.</p>
<p>6. Geographical location of your sessions</p>	<p>Total instances of where the CLPL was actually held, across the following categories:</p> <ul style="list-style-type: none"> ○ Each of the individual 32 local authority areas ○ Online
<p>7. Total number of participants at your sessions</p>	<p>Participant numbers should be broken down by sector and geographical location as per the following categories. <i>Please note that any participants from independent sector settings should be recorded according to sector type, but not aligned to a particular geographical area.</i></p> <p>Sector</p> <ul style="list-style-type: none"> ▪ Early Years ▪ Primary ▪ Secondary ▪ Additional support needs (school sector) ▪ Technical support (school sector) ▪ Classroom assistants (school sector) ▪ College and Further Education ▪ Community learning and development. <p>Geographical location</p> <ul style="list-style-type: none"> ▪ Each of the individual 32 local authority areas ▪ Independent sector (regardless of actual geographical location)
<p>8. Total cumulative hours of CLPL undertaken by participants</p>	<p>'Cumulative' hours are the total number of hours of CLPL undertaken by participants during a CLPL session: e.g. if the session lasted for 3 hours and there were 10 participants, then the total cumulative hours delivered would be 30 (i.e. session duration x number of participants). This data should be broken down according to the same sectors listed in section 6.</p>