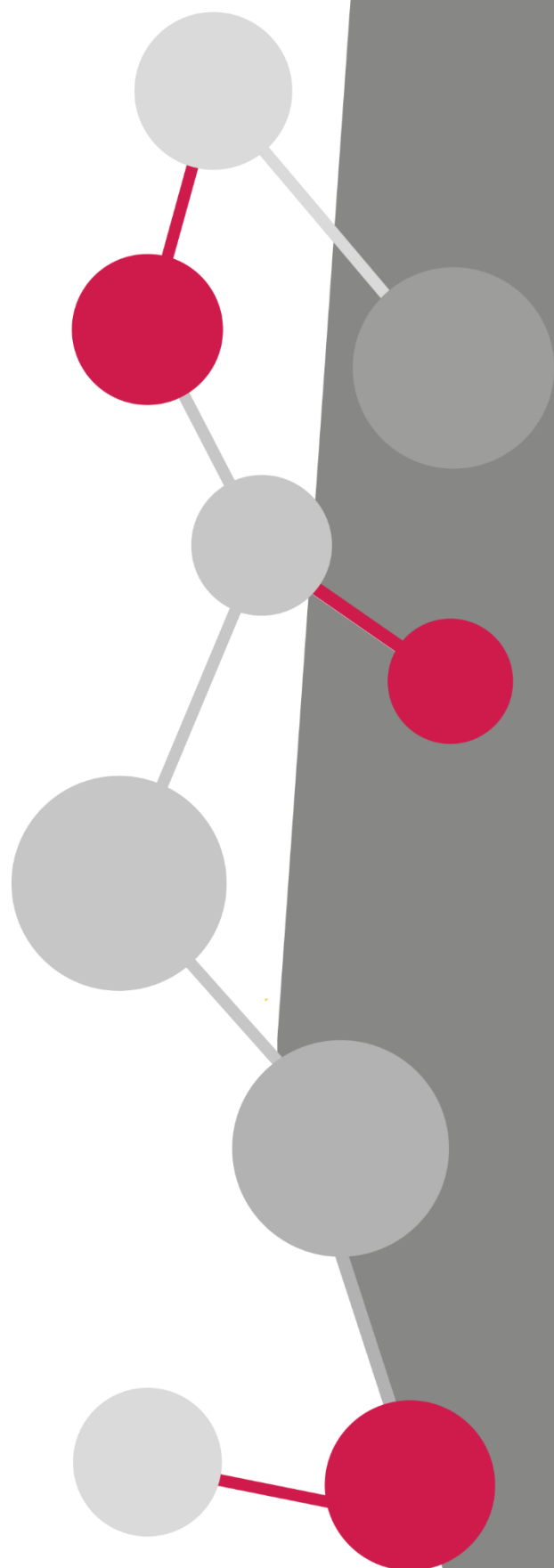
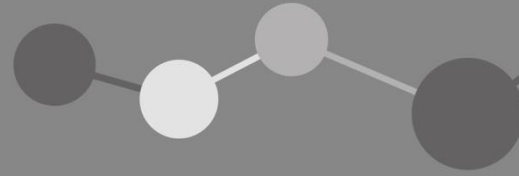




Comparison of Face-to-Face and Remote CPD Delivery: July 2020





Executive Summary

Continuing Professional Development (CPD) facilitators assessed differences in delivery, outcomes and impact of face-to-face (F2F) and remote CPD delivery methods. The findings show that remote delivery can be an effective method of delivering CPD, however it can be less effective than F2F delivery, especially for inexperienced teachers or those with limited subject knowledge (e.g. non-specialists).

Face-to-face delivery methods:

- Offer greater participation opportunities.
- Lead to greater community and individual development.
- Requires less follow up than remote delivery methods.
- Are impactful for all audiences.

Remote delivery methods:

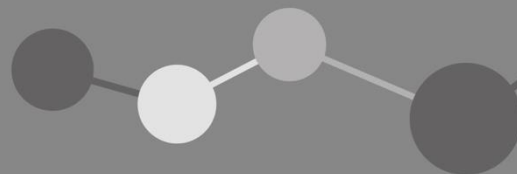
- Offer greater access.
- Have greater efficiency.
- Are more flexible.
- Can be less impactful than face-to-face, but effective for experienced or specialist audiences.

The majority of facilitators will be including remote delivery options alongside the face-to-face in future programmes and activities, however while some would be happy to offer blended courses, some are only considering a blended programme, for example if a course is remote, then it is fully remote.

All interviewees felt that remote has a place in future CPD but is not suitable to replace all face-to-face activities.

Recommendations

1. **Remote CPD should continue to form part of the STEM Learning CPD offer**, but only where participant backgrounds make it a feasible option.
2. If fully F2F courses are not a possibility, blended delivery should ensure **F2F is used at the start and end of the course, and for any practical activities**.
3. A blended programme within the Science Learning Partnerships and across the network could provide **opportunities for greater engagement and wider spread of specialities**.
4. There is potential for courses to be delivered remotely on a national level, but participants should **attend local or national facilities for F2F aspects** as part of a blended course.
5. F2F courses could potentially benefit from an **online community group** as well as remote courses.



Overview

Interviews have taken place to assess the differences in delivery, outcomes and impact of face-to-face and remote CPD delivery methods from the point of view of people delivering the CPD.

Methodology

Semi-structured interviews were conducted with nine CPD facilitators who have each used face-to-face and remote methods to teach the same content. Interviews were conducted using remote methods, either on Microsoft Teams or over the phone.

There have been a total of 42 facilitators that have delivered both remote and face-to-face courses on behalf of STEM Learning. The nine facilitators interviewed represent a sample size of 21% of the possible population which satisfies standard expectations for research validity.

The nine facilitators' comments represent twelve different courses of which eight attract secondary teachers, two attract primary teachers and two attract both primary and secondary teachers.

The questions used for each interview can be found at the end of this report.

Overall Findings

Face-to-face delivery methods offered greater participation opportunities during the course, greater community and individual development and requires less follow up than remote delivery methods.

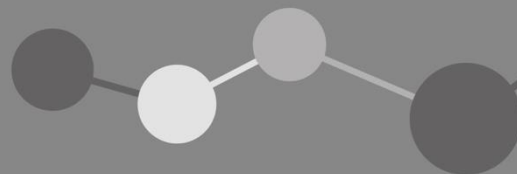
Remote delivery offers greater access, greater efficiency, more flexibility and while the impact is reduced, it is not significant enough to make remote delivery options undesirable.

The majority of facilitators will be including remote delivery options alongside the face-to-face in future programmes and activities, however while some would be happy to offer blended courses, some are only considering a blended programme for example if a course is remote, then it is fully remote.

"What online [remote] would do is lengthen the timescale that you could feasibly run CPD. We all know that doing CPD over a longer timescale is going to have more impact and be of greater value"

The consensus amongst interviewees is that if a course is aimed at less experienced teachers, teachers with low or no subject knowledge (the subject of the CPD) or for teachers to develop a deep understanding of the concepts being taught, then face-to-face CPD, either as the only option or high levels incorporated into a blended model, is essential.

"When you really want to engage and motivate people and inspire them for a particular reason I don't think you can beat that face-to-face experience"



All interviewees felt that remote has a place in future CPD but is not suitable to replace all face-to-face activities.

Figures 1 and 2 provide a visual representation of the need for face-to-face and remote delivery methods. Figure 1 shows an approximate relationship between subject knowledge and teaching experience of participants. Figure 2 breaks down the overall picture into more specific elements of the participants or the subject being taught.

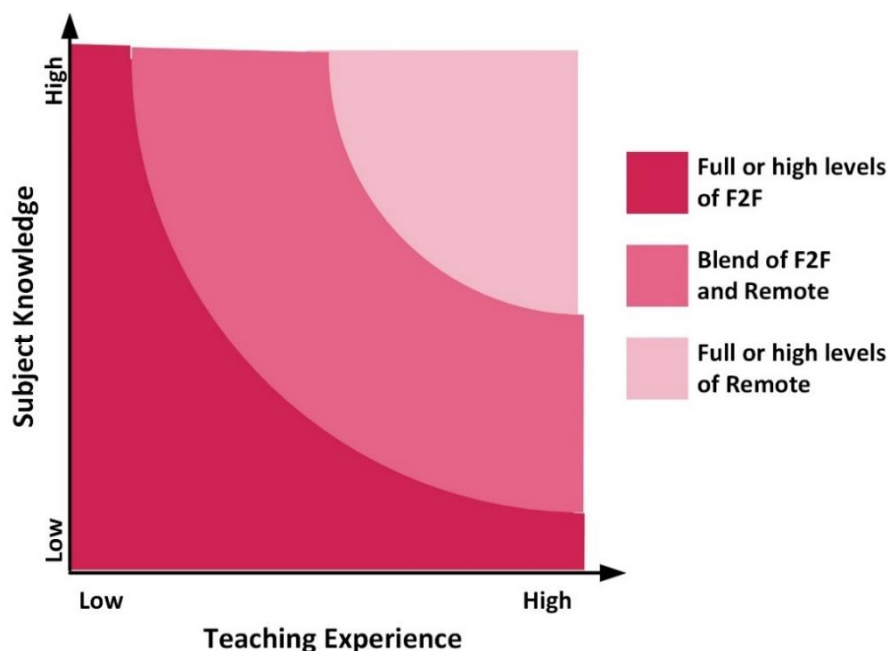


Figure 1: Delivery needs for participants prior subject knowledge and teaching experience

Participants

A number of the courses have been attended by newer and less experienced teachers, whether this is due to it being free, or due to them having time due to the situation no one is sure, but most courses have seen a change in participant background when compared to standard face-to-face courses.

There was some suggestion from facilitators that due to the remote delivery method, their available time and/or the fact that the courses are free there is less of a commitment from the participant to take part. This means they are more willing to sign up for something that may not be quite the right fit for their needs because there is no loss to them if it's not.

Considered to be less of a professional attitude from participants doing remote than F2F. Roughly 30% of registered participants are not attending the courses but they do not offer apologies or cancel their place. Not sure if this is due to remote or the fact that the CPD is currently free.

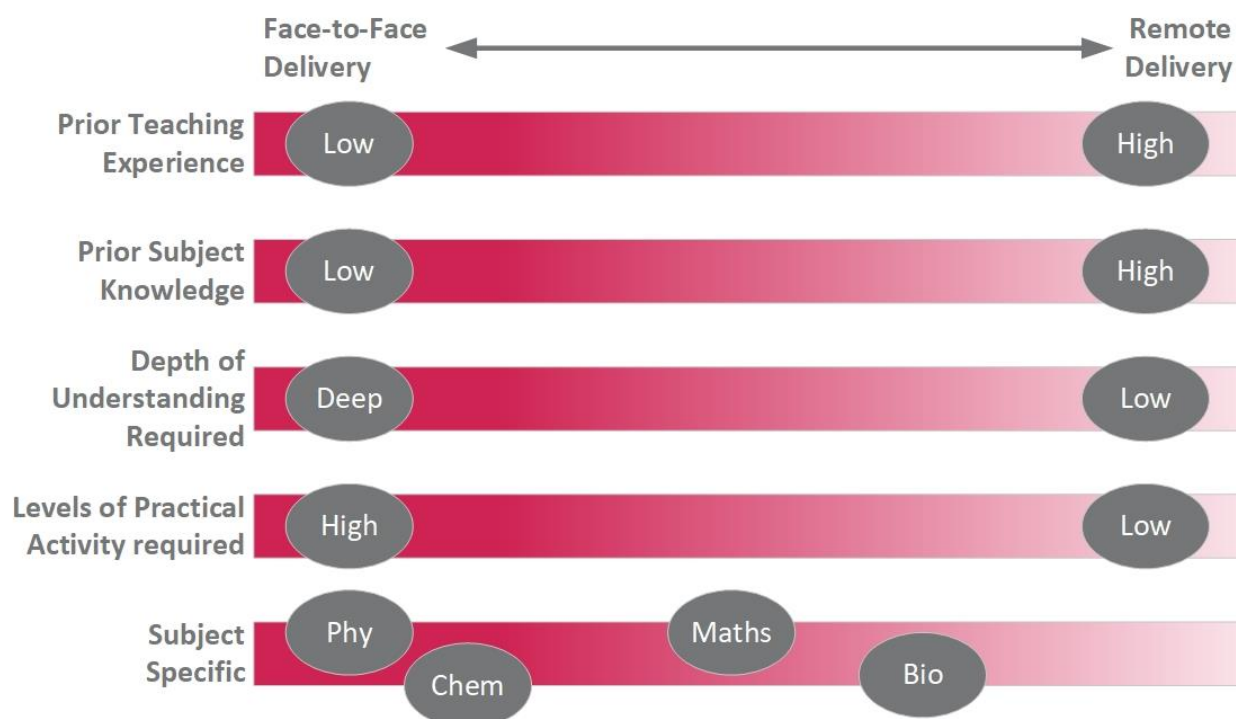
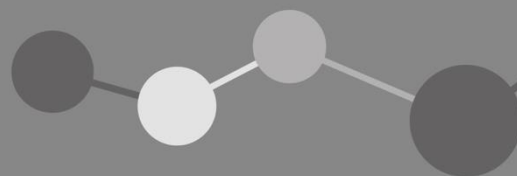


Figure 2: Delivery needs for specific participant backgrounds or subjects

Delivery

The change from F2F to remote required changes to all courses being delivered. Even if the course was not “practical” in the sense of experiments or lab work, all courses are designed with practical elements such as card matching, post-it notes on walls etc., all of which had to be removed for remote delivery methods. For some facilitators finding another way to do something similar was achievable while for others they encouraged the participants to do the activity (as it would have originally been done) with their colleagues when back in school.

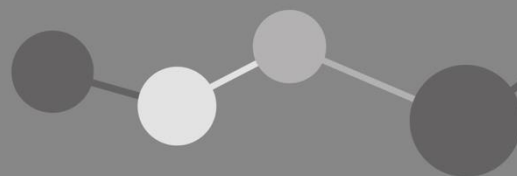
Facilitators mostly found the delivery less interactive and more like giving a lecture but no one said it wasn’t worth doing.

“It was a bit of a shock, not getting that feedback, not being able to read people’s body language and having the facial expressions”

Some facilitators were nervous and pessimistic about remote delivery but on trying it found it to be better than they imagined and easier and more effective than they originally thought.

Facilitators are unable to assess the room and bring the collective ideas together as easily in remote delivery as it is F2F. While breakout rooms are possible and are used, and facilitators can access each one, many spoke of being unable to listen in to discussions in other groups with remote delivery as they would normally do with F2F methods.

Timing of remote delivery has mostly been within standard working hours and due to Covid-19 has not caused an issue in registrations. Unlikely to be the same once schools are back. However most facilitators feel 60 or 90 minutes



sessions starting at 4 or 5pm would be achievable even once people are back in schools. Some happy to consider later evening and weekend delivery but administration at these times may be an issue.

Software

A few facilitators have noted the inability to see participants' faces while they deliver their sessions which is not ideal and that Adobe Connect is more likely to drop out if participants aren't using the app and are instead using web based versions.

Some facilitators have supplemented their delivery with other software (Padlett, Socrative, Desmos for example) and some would be interested in using alternative delivery software e.g. Zoom

Subject/Topic

Difficult, new or deeper subject matter is harder to deliver and convey with remote delivery methods, partly due to not being able to gauge participants' understanding due to lack of visibility of facial expressions, body language etc.

While the impact of remote CPD was generally felt to be lower than F2F and more suited to more experienced teachers, or people already knowledgeable in the subject it was felt that in some cases it was still of benefit to deliver remote CPD to new teachers around new topics if there was a great need for teachers of these topics. For example, training more teachers to be able to teach physics, even if the impact of the training is 70% of F2F (example number) it is worth it if it means more people are able to teach physics.

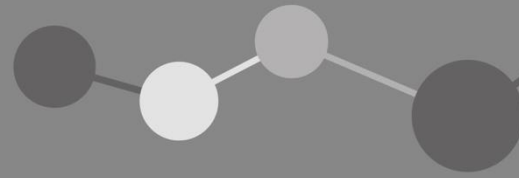
While videos of practical activities (chemical reactions, physics experiments etc.) can be found and added to the delivery, they present issues for the facilitator if they have not been produced specifically for teaching as they often give away the learning outcomes within the video. Also some concerns that participants learning from the videos may use these videos in their own teaching and not get the pupils to do the experiment themselves. This is due to lack of confidence in undertaking practical activities because they have not practised in the safe environment of the SLP or NSLC.

Participant Engagement

Harder for facilitators to spot those that are not engaging or who are having difficulties with the topics being discussed. Overall though you still get the heavy participators and the more reserved participants in remote CPD as with F2F.

F2F offers more sense of community, networking and the ability to build trust amongst participants, this often means learning outcomes are embedded and more likely to be incorporated into future teaching as networking and trust increases confidence which is then used in the classroom. Although this aspect is hard to quantify it should not be ignored.

Participants are more reluctant to come off mute and interact audibly than to use the chat function in remote delivery methods. F2F methods allow facilitators to engage more with quieter, more reserved individuals and pull them into the conversation.



The chat function is useful and helps to create a community feeling but beyond 25 participants it becomes difficult to monitor and follow the engagement/answer all questions.

"As soon as you go to 25/30/40 people you're not getting that engagement"

Post CPD Activities

Remote CPD generally requires more post-CPD facilitator time as the chat from the course is copied to the community group online and participants post their gap tasks and ask questions. Some facilitators felt this offered an opportunity that F2F participants do not get while others felt that this may indicate participants learning from the CPD has not been as effective as they have more questions to ask, need more after care.

Participants own post-CPD activities may be more easily achieved after remote CPD as they can immediately action some of their learning (updating plans or reviewing activities etc.) as soon as the CPD is finished due to not having to travel home.

Remote CPD delivered every two or three days enables the momentum of the course/learning to be kept up. Gap tasks more often completed on time and easier to review and share amongst the group due to online community platform.

Costs

Remote CPD offers significant opportunities for cost reduction in terms of delivery costs in terms of facilitator time, travel costs and venue hire etc. However, the pre and post CPD activities are increased in remote delivery and therefore incur an additional cost which can be significant if the remote course is delivered in smaller, more frequent sessions.

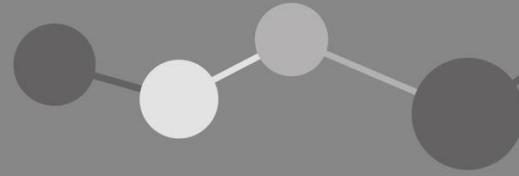
"The remote delivery does take more time than you anticipate because the 'rooms' have to be set up and there's the follow up and the engagement with the participant groups"

Pre and post CPD activities include gap task review which includes, downloading, reviewing and commenting on each individual submission one at a time – this is often achieved as a group, "off the cuff" activity in face-to-face delivery methods. Reviewing and loading up the chat from remote delivery to the community group also takes time though it should be noted that the amount of time each facilitator gives to this aspect is different.

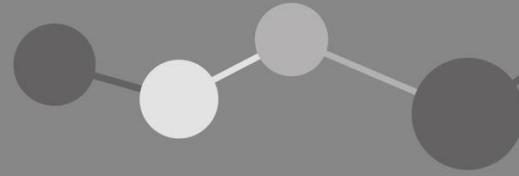
Costs also increase where multiple courses are running at the same time due to the need for individual admin to support each remote course, whereas multiple F2F CPD courses could be supported by one admin in the office.

Recommendations

1. Remote CPD should continue to form part of the STEM Learning CPD offer, but only where participant backgrounds make it a feasible option.



2. If fully F2F courses are not a possibility, blended delivery should ensure **F2F is used at the start and end of the course, and for any practical activities.**
3. A blended programme within the Science Learning Partnerships and across the network could provide **opportunities for greater engagement and wider spread of specialities.**
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5. F2F courses could potentially benefit from an **online community group** as well as remote courses.



Appendix

Questions Facilitators Responded to:

- What course have you previously delivered face to face that you are now delivering remotely?
- What are the objectives of the course?
- What type of teachers usually sign up to the course?
- To deliver it remotely, what changes did you have to make to the course?
- Are there differences in your teaching methods when delivering remote or face-to-face CPD?
- Are there any differences in post-CPD activities?
- In your opinion what are the differences in impact of the two methods?
- Are there any differences in costs?
- In your opinion do any changes in cost make any changes in impact acceptable?
- Post lockdown, post social distancing, what delivery type or types would you use?
- Is there anything else you would like to share about remote and/or face to face CPD delivery?