

WORKSHOP REPORT

CETL-MSOR 2021 – How did we do it?

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Abstract

In 2021 the Continuing Excellence in Teaching and Learning in Maths, Stats and Operational Research (CETL-MSOR) was hosted as a hybrid event for the first time. The event was attended by delegates from around the world both in-person and virtually through the use of Microsoft Teams live events. Presenters were also able to present from their homes or present with others in different locations, including at the conference venue in Coventry. This article is written by the chair of the organising committee and provides an insight into how the conference was organised and run behind the scenes, giving advice and feedback for future hybrid conference organisers to learn from.

Keywords: Hybrid teaching and learning, Hybrid conferences, CETL-MSOR, Online learning, Conference organisation.

1. Introduction

CETL-MSOR 2021 was the first hybrid version of the conference with delegates able to attend either virtually or in person. Hosted at Coventry University, presenters and delegates from around the world were able to collaborate and discuss issues and research regarding mathematics, statistics, and operational research under the theme of “*celebrating our past, embracing our future*”. Although the main reason for hosting the conference as a hybrid event was the continuation of the Covid-19 pandemic, teaching and learning in the virtual world was increasing when the conference was awarded to Coventry in early 2020, so having an online option for attendance and presentation seemed natural. This article provides readers with an insight into how the conference organisers were able to provide a hybrid experience. It discusses the set-up, challenges, and feedback from delegates so that future conference organisers can learn and improve upon what was offered at CETL-MSOR 2021.

2. The set-up

Having decided to go with a hybrid conference, the choice of online platform to host sessions was vital in order to make it a success. The platform needed to allow for multiple presenters to present whilst being in different locations but also allow for delegates to view the presentations at the same time. It also needed to be a secure system that could not be shared to non-paying delegates. Having considered several systems, it was decided to use Microsoft Teams utilising their live events feature for the majority of presentations. There were several reasons for this choice. Firstly, it was free for delegates to join and therefore they would not need to subsidise the system. Indeed, the university had already paid for a licence for Microsoft Teams for use for teaching prior to the pandemic. Secondly, the host organisation was using Microsoft Teams throughout the pandemic so the staff involved in running the conference were confident and competent in using it. Thirdly, the live events feature meant the presentations were secure and could not be shared. The email addresses of delegates were added to the presentation stream ensuring that only they could get in to view the presentations. Even if the link was shared and clicked on by a non-paying “delegate” they would not be able to access the stream. Finally, having discussed options with several regular delegates, we found many other institutions were using Microsoft Teams also and were therefore used to the system. Trial sessions were used to ensure

that delegates and presenters could access the events before the conference began and any issues found could be resolved.

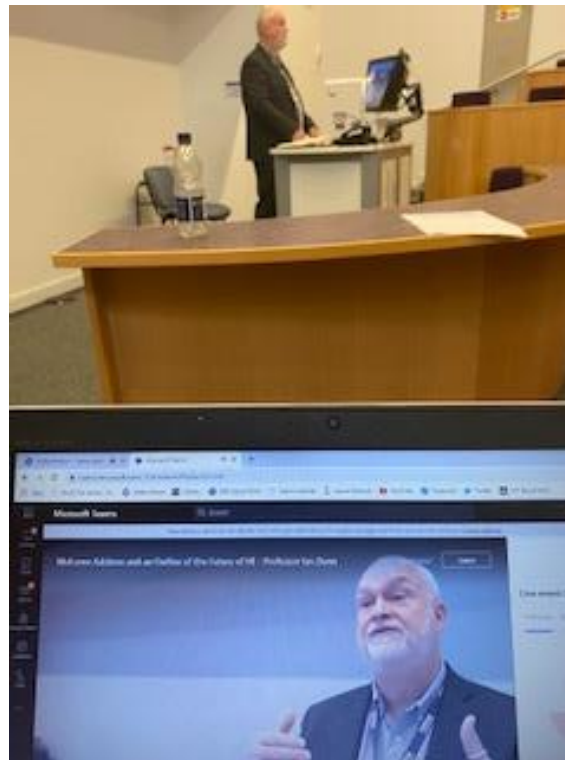


Figure 1: Professor Ian Dunn gives his opening address in-person and live on Microsoft Teams simultaneously.

The downside of Microsoft Teams live events is that there is less interaction with participants watching the stream. Only text-based questions could be asked by online participants and these had to be moderated by our student proctors who were directing the streaming of the event. This did mean a solution had to be found where in-person delegates and online delegates could interact. In workshops, where interaction is key, Microsoft Teams meetings were used. These events allow anyone to present and speak although they are not secure. This meant that if the link was shared, anyone could access these sessions even if they were not a delegate of the conference. Outside of this, we used Big Blue Button to stimulate interactions between delegates. Big Blue Button is a separate conferencing platform designed for educational purposes. Coventry University purchased licences for Big Blue Button to deliver their online degree programs. The platform was also used by Coventry University's mathematics and statistics support service throughout the pandemic to provide online support and is still being used at the start of the 2021-22 academic year. Big Blue Button allows the creation of breakout rooms and, more importantly, anyone can control who goes in and out of them. Microsoft Teams has a breakout room feature but, at the time of writing, does not allow attendees to choose who goes in and out of each room. The breakout rooms were important to have if delegates felt they wanted a private chat with other delegates.

Links to each session were provided on the conference website so that online delegates could easily jump between sessions. The links corresponded to the physical rooms that presentations were taking place in and were colour coded to match the conference timetable. Within the physical rooms, a webcam and microphone and speakers, which were inbuilt into the design of the room, were provided. Student proctors, as mentioned previously, provided the directorship of the streams within the rooms,

and were paid for their time throughout the conference. The proctors were able to control who was presenting, which webcam was streaming, and were able to mute microphones if necessary.

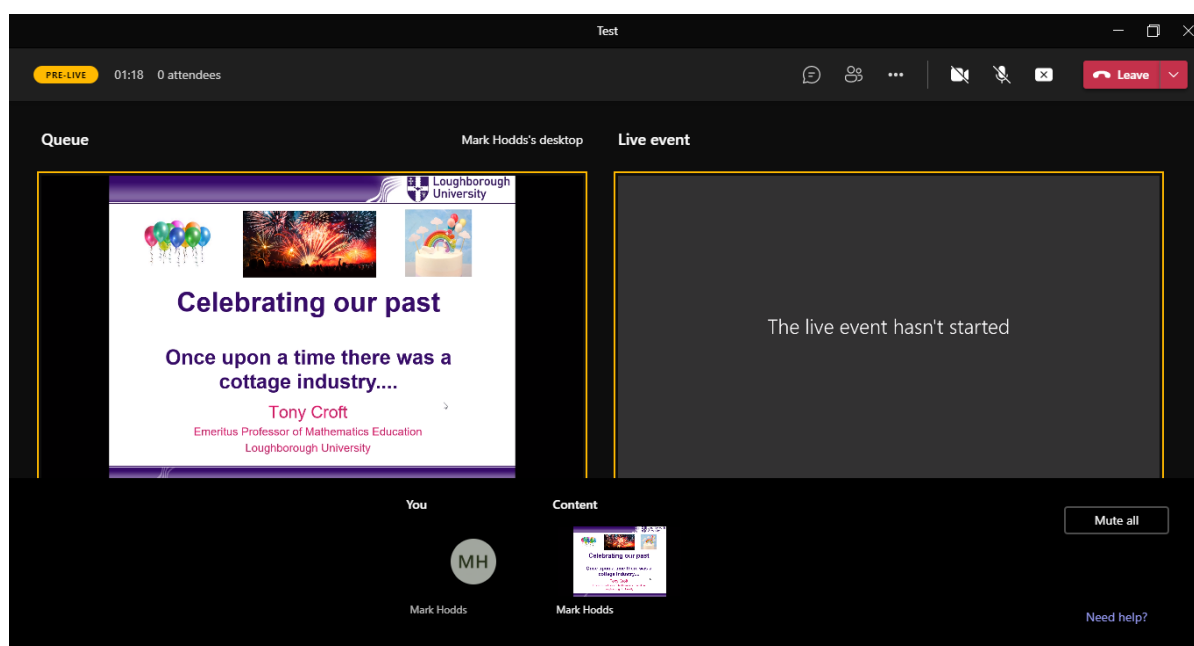


Figure 2: An example of the director screen in Microsoft Teams, controlled by the student proctors during the conference

We learnt quickly that the room microphone, for example, needed to be muted to prevent feedback if a presenter was presenting online. At this point it is worth expressing our gratitude to the proctors for the excellent job they did. They received one hour of training with only one external presenter to work with so to learn as quickly as they did and engage with the conference in the positive manner that they did was fantastic and really helped the organisers.

The in-person experience at the conference was effectively unchanged to that of previous CETL-MSOR conferences. Dedicated rooms were provided for the different parallel sessions with a main room for the keynote sessions. In each room however, large screens and speakers ensured that virtual presenters were seen and heard clearly. The rooms used were brand new and had not been used for teaching at the time of the conference due to the pandemic.

3. What did we learn?

The most important thing we learnt was it is possible to hold a successful hybrid event. We had presentations where a presenter was in the room in Coventry and their co-presenter was in Australia whilst someone in Ireland was watching, for example. In a scenario like this, a presenter in Australia was timetabled to be in the early sessions due to the time difference. We showed that collaboration around the world at the same time is possible and it can be done to a high standard of quality.

We also learnt that you cannot predict every eventuality. There are events that will happen on the day that no-one could foresee. However, delegates are understanding and as technology improves, as we learn and as we improve, the experience will improve. The way to deal with unforeseen events is to think about the situation and quickly provide the best solution given the circumstances. One example of this was a presenter who was unable to log in to their presentation session on Microsoft Teams

despite being able to log in during the trial session and throughout the conference. Quickly we had to find a solution and that was to stream the session in Big Blue Button and share the webpage through the live event stream.

The workload and preparation of a hybrid event is much larger than a purely in-person or purely online event as you would expect. Research, testing, training, and trials of the systems need to be considered in advance. Furthermore, there is a lot of administration to go through at each stage. Having our own website which we could edit ourselves really helped as we were not relying on others or support from IT to update things when we needed it. A dedicated conference website which is editable by the organising committee is a must.

Something that required more consideration was how to get delegates to interact more. Indeed, having dedicated time to encourage in-person delegates to interact with online delegates would have improved the conference experience for many, particularly those online. There is however a balance to be considered as having a dedicated time for interactions reduces the number of presentations that can be delivered.

Finally, a list of instructions for chairs of each session needs to be provided. We did provide this set of instructions and a quick two-minute training session/introduction was given to some of the chairs who arrived early at the conference. Going forward, more emphasis would be needed on reminding chairs to repeat the questions of delegates in the room as often the microphone did not pick up those questions. We also found the student proctors provided more of the warnings regarding timings of presentations than the chairs did. This was because from the producer role of the live event, the proctors were able to text chat directly to the presenters and therefore this reduced the interruptions to the flow of the presentations.

4. Feedback from delegates

A survey was conducted to obtain feedback from delegates from the conference. Although the survey was sent to all delegates, only 26 delegates responded and all of whom attended virtually. It is perhaps that those who attended in-person felt the experience was similar to previous CETL-MSOR conferences and did not feel the need to comment, although this is unknown. The results of the general feedback questions are provided below:

Table 1: Survey results from delegates on general feedback questions

	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree
CETL-MSOR 2021 was a successful event	21	3	2	0	0
CETL-MSOR 2021 was better than past versions of the conference for being a hybrid event	5	6	14	1	0
CETL-MSOR 2021 was well organised	21	5	0	0	0
CETL-MSOR 2021 utilised technology in the best possible way	12	10	4	0	0

I would not have been able to attend CETL-MSOR 2021 if it had been in-person only	18	3	1	4	0
Being able to view the recordings of talks at CETL-MSOR 2021 is useful	18	6	2	0	0
Knowing there were online and in-person delegates at CETL-MSOR 2021 made the conference experience richer	6	5	12	3	0
Microsoft Teams Live Events was the right choice to host online sessions at CETL-MSOR 2021	4	10	7	4	1
Big Blue Button was the right choice to host the discussions with other delegates at CETL-MSOR 2021	1	1	18	5	1

This feedback suggests that delegates thought the conference was well ran and provided the best experience given the constraints of the technology used. Despite this, delegates were mixed on the use of Microsoft Teams and Big Blue Button however some of this may be down to personal preference. The majority of delegates thought being able to see the recordings of the talks after was useful with several commenting on how at previous CETL-MSOR conferences you only get to see one talk in a parallel session when you may have wanted to see several. The recordings allow for delegates to see as many talks as they want after the event but watch live the presentation they most wanted to see.

We also asked about the experience as an online delegate specifically and the feedback is provided in Table 2 below.

Table 2: Survey results from delegates on being an online delegate

	Very Easy	Fairly Easy	Neither Easy or Difficult	Fairly Difficult	Very Difficult
How easy did you find it to ask questions and get answers?	8	11	6	0	1
How easy did you find it to listen and follow the presentations and talks?	17	8	0	1	0
Once connected to Microsoft Teams, how easy did you find it to use the technology and the conference website to navigate between sessions?	14	6	2	3	1

Here we can see the majority of delegates found the online experience easy to follow. However, when asked whether delegates felt they were part of the conference community when compared to attending

in-person, 76% of respondents said they felt less a part of the community than in-person. This is perhaps due to in-person delegates not utilising Big Blue Button to connect with online delegates and there not being a scheduled time for interactions as discussed previously.

Finally, we asked presenters to provide feedback. Of the 26 respondents to the questionnaire, 15 were presenters. Their responses to our questions are provided below in Table 3.

Table 3: Survey results from presenters on their experiences

	Very Easy	Fairly Easy	Neither Easy or Difficult	Fairly Difficult	Very Difficult
How easy was it to interact with the in-person audience?	2	4	5	3	1
How easy was it to interact with the online audience?	2	2	4	6	1
How easy did you find it to present with your colleagues? (9/15 presenters had other presenters)	3	4	0	2	0

We can see that from the presentation side, generally it was a smooth experience but the lack of interactions certainly unnerved many people. One presenter commented that they did not like not knowing how many people were watching and that it felt like they may have been presenting to no-one. However, some presenters said they were used to this as it was similar to how it felt during the pandemic when teaching to students who did not put their cameras on. The student proctors were able to see how many people were in the virtual room but the presenters were not so perhaps we could have put a text comment to let presenters know how many people were watching. Going forward, although Microsoft Teams has many useful advantages including the needed functionality of only allowing delegates to attend, an alternative solution maybe needed where the presenter can see how many people are in the virtual room and be able to interact with them more.

5. Conclusions

Putting on the first hybrid version of CETL-MSOR was no easy feat but the outcome shows that it was possible. Right up to the night before, different scenarios and issues with the technology were being considered. As mentioned however, you cannot predict everything that may happen. Having some ideas regarding back-ups is helpful but remaining calm is the most important thing to obtain a logical conclusion. Hybrid conferences are going to be more and more common as many institutions will no longer be able to afford to send staff to conferences due to the pinch of the pandemic, environmental concerns, and Brexit. The technology will improve and we will improve as we learn to work with online systems in better and more efficient ways.

My advice to future hybrid conference organisers is to get as many people on board to help before and during the conference as possible. Utilise expertise to make sure you have a smooth online experience whilst providing the traditional in-person experience at the same time. Find a system that allows protection for paying delegates but allows for greater interactions. If the conference is free and hybrid,

Microsoft Teams meetings will do a good job but the live events feature could certainly be better for paying delegates.

I hope this short article has provided an insight into how we hosted CETL-MSOR 2021. The hybrid world will be with us for years to come so future conferences need to be prepared to hold them as hybrid events. I would be very happy to discuss and share further ideas and thoughts with anyone planning to host a hybrid conference in the future.

6. Acknowledgements

Thanks to the conference supporters and sponsors for making the event happen, to the internal and external organising committees for all their support, and to **sigma** Coventry staff and student proctors for all their help on the two days and in the lead up to the conference.

7. Links

The conference website is available at <http://sigma.coventry.ac.uk/cetlmsor2021> and those who were delegates are able to access the recordings of the sessions through the links on that page.