Call for proposals and guide to submissions

Advance HE STEM Conference 2021:
Rethinking STEM Higher Education

28 January 2021
Hosted on the Advance HE virtual conference platform

Deadline for submissions: midnight 21 September 2020

Submissions should be made online via the following link: https://advance-he.onlinesurveys.ac.uk/stem21-submission-form

Overview:
Rethinking STEM Higher Education

The outbreak of COVID-19 has shaken the world and changed our lives, possibly forever. The STEM disciplines, and their staff, have been in the forefront of leading our national response to the virus: working collaboratively with medical institutions and industry to design and update life-saving equipment for the NHS; undertaking national and international research initiatives to understand the virus and its global spread; exploring all avenues to expedite the creation of a vaccine; and not least in redesigning curricula to ensure STEM students receive a learning experience that meets expectations and learning outcomes despite being in lockdown.

The 2021 STEM conference will provide an opportunity to reflect on, learn from, and further progress our responses to the COVID-19 crisis, to ensure that our approaches to STEM education are more resilient, effective and inclusive and to identify the new opportunities that have arisen from the pandemic.

The virtual conference will allow individuals to share their own experiences or developments in teaching pedagogies and learn from others who share the same commitment to STEM teaching and learning.

Conference outcomes:
The conference will:
• create space for delegates to engage with creative thinking, and rethinking, around STEM teaching and learning issues to enhance the student experience;
• increase knowledge and confidence of delegates to enhance their STEM teaching practice and have a positive impact on the success of their students; and
- engage with leaders and influencers from across the HE sector who share a passion for continuous improvement and enhancement of STEM teaching and learning in HE.

Advance HE has acted as a nexus for thought leadership and research into learning and teaching policy and practice in HE. The underpinning evidence base has been built up by and for the sector and is used to inform the work of policymakers and practitioners. With an ever-growing global community of member institutions, a portfolio of thematic and subject-based communities with global membership and a global network of experts and teaching-focused activities, this virtual conference seeks to promote learning between global individuals with a passion for transforming teaching and growing excellence.

**Themes:**
Under the overarching theme of *Rethinking STEM Higher Education*, we invite submissions that address one or more of the following themes/questions:

1. **Rethinking practice-based education:** Social distancing requirements will limit the ability to access the physical course delivery locations – the laboratories, computer suites and maker spaces that are critical to the student experience. **How have you ensured that students have the opportunity to develop the practical and creative skills required for STEM disciplines?**

2. **Rethinking assessment:** Cancellation of the traditional three-hour summative examination assessments triggered a rapid rethink in how to change assessment instruments whilst ensuring they remained valid, verifiable and equitable. But the ‘learn-assess-forget’ approach to learning ‘encouraged’ by closed book examinations never provided authentic assessment of skills, competencies and behaviours that students need for lifelong employability. **What changes to formative or summative assessment practices have you implemented that have promoted meaningful learning and positive learning behaviours?**

3. **Re-Connecting:** The pandemic has encouraged us to think about the importance of presence and the value for all students and staff to be connected to their discipline and learning community. **What effective collaborative practices – amongst and between staff and students have you developed within and beyond your discipline or institutions?**

4. **Renewed:** The requirement to work differently has provided an opportunity to reimagine who, what, when and how we teach. To ensure that we do not go backwards in terms of EDI and social mobility success cannot be dependent on access to WiFi and technology, a secure home environment, good mental and physical health or financial security. **How are we providing access to learning to all students regardless of health or wealth? How can we prevent the pandemic compounding current inequalities? What changes have you made to ensure that STEM education emerges more equitable and inclusive for staff and students?**
Conference structure and strands:
The conference will take place over a single day, delivered via our virtual conference platform. It will feature a programme of live keynote speakers and panel sessions, plus live parallel workshops and interactive breakout sessions, an extensive programme of on-demand oral presentations and a virtual poster exhibition. The above themes will feature throughout the conference and across all STEM disciplines. The conference platform will also feature a social networking area for delegates and presenters to connect virtually and discuss current issues affecting STEM education today and into the future, and virtual information and exhibitor stands to browse at leisure.

All live sessions will be recorded and made available for delegates to access after delivery. On-demand sessions are pre-recorded by the presenters and will be available to view throughout the day at delegates’ leisure. All recorded live sessions, on-demand sessions and posters will be available to delegates and presenters for 14 days following the conference.

Proposals/session type options:
Proposals are sought against any of the four themes/questions above, across all STEM disciplines. Submissions can be discipline focused, interdisciplinary or multi-disciplinary in nature.

Proposals are welcomed from individuals or teams from across a single institution, or involving multiple institutions, employers and other partners. Proposals are also welcomed from students, student unions or other student bodies. Creative collaborations between academic teams and students are welcomed. The conference aims to showcase a wide and diverse range of work, activities and creative practice. Individuals may submit against more than one session type or theme.

Submissions can be for any of the following session formats:

1. **Live interactive breakout sessions** (60 minutes)
   Interactive breakout sessions engage participants with peer-learning activities and discussions in numerous possible formats, including round-table learning cafés, debates, crowdsourcing sessions and ‘unconference’ gatherings. This is your opportunity to be inventive in this virtual space to achieve optimum engagement and learning with delegates. Live interactive breakout sessions will be scheduled into the programme in parallel sessions alongside other interactive sessions and workshops.

2. **On-demand oral presentation** (20 minutes)
   Oral presentations should aim to give a brief summary of a piece of research or a project, either completed or still in progress. Oral presentations should be pre-recorded by presenters and are offered as on-demand sessions available for delegates to watch throughout the day and for 14 days after the conference. Each recorded presentation should last for 20 minutes. Delegates are able to contact presenters directly with questions about their sessions, but live chat is not available. A live networking session will be scheduled into the
live programme to allow presenters to engage with delegates and discuss their sessions.

3. **Live workshop session** (60 minutes)
Workshops are for one hour and attempts should be made to deliver an activity-based session within the confines of the virtual platform. They should involve participation and exploration with delegates about the outcomes of the activity or activities. Live workshop sessions will be scheduled into the programme in parallel sessions alongside other workshops and interactive sessions.

4. **Virtual poster presentation**
Posters give an alternative approach for the presentation of current research or new work. Posters should be an eye-catching visual representation of a topic, potentially including graphics, tables, charts, text, and images (additional details can be shared via virtual ‘handouts’). Posters will be displayed throughout the conference for informal browsing, but contributors will be asked to be available for discussion at a dedicated time within the live programme. Posters should be created as PDFs to be submitted in advance of the conference.

**Submission guidelines:**
Submissions should be made online via the following link: https://advance-he.onlinesurveys.ac.uk/stem21-submission-form

**Deadline for submissions:** midnight 21 September 2020

The following provides an outline of the information required in your submission.

**Privacy statement:**
Before commencing your submission, please ensure that you understand how we will store and use any personal data provided on the submission form by reading our privacy statement.

**Contact details:**
Please include details for the lead presenter (and main person for correspondence), as well as contact details for all contributors who intend to co-present at the conference. Short biographies should be provided which will be added to the conference platform and made available for all conference delegates to view. Biographies should be no longer than 100 words and should be written in the third person singular.

**Title of session:**
Please give your session a name that describes your session concisely and attractively to audiences. On request, the title of your session can be changed ahead of publishing the programme, but as standard, this will be the title used for the programme and in all publicity of your session.
Theme:
Please indicate which of the four themes your submission is aligned to. On-demand presentations will be searchable by theme to enable delegates to easily search for their specialist areas or interests. These will also assist us in the scheduling process to avoid timetabling clashes of complementary work. To assist with the review and scheduling processes we kindly ask that you select the one theme that most closely aligns to your session.

Session type:
Please select the session type that most closely relates to the session that you wish to deliver. Please be aware of the differing lengths of the sessions available. You may select more than one session type if you wish and our reviewers will decide which session type is most appropriate for our programme. Please see above for further clarification of the session types. You can select from:

- Live interactive breakout session (60 mins);
- On-demand oral presentation (20 mins);
- Live workshops (60 mins);
- Virtual poster presentation.

Promotional abstract:
The abstract will be used for publicity purposes only to promote your session via the Advance HE website, the virtual platform, Advance HE Connect and on social media. This should set out the aims and objectives of the session and be written in a way that will attract delegates to your session. Abstracts should be no longer than 100 words.

Session outline:
Please specify details of your session, how it will be run, how you will engage participants, and how the proposal links to the overall theme of the conference and the chosen theme(s). You should also include information on the intended audience and the impact your session will have on that audience, such as why delegates will be interested in the session; how delegates will be able to implement the findings in their own practice; and how the session demonstrates originality/innovation. If proposing a live workshop or live interactive session, please indicate how you intend to include delegate participation and whether breakout room facilities will be required to accommodate these. Outlines should be no longer than 500 words.

This information will be used by our reviewers to select sessions for inclusion in the programme.

Conditions:
In submitting a proposal for the Advance HE STEM Conference, please be aware that you are agreeing to:

- attend the virtual conference as a presenter-delegate to present your live session, or engage in discussion with delegates as an on-demand or poster presenter should it be accepted into the conference programme. Please note, presenter places are not free of charge, but are offered at a discounted rate;
• the collection and storage of personal data, as outlined in Advance HE's privacy policy;
• information about yourself, your co-presenters, your institution and your session details being promoted externally on the web-based conference programme;
• your session being recorded on the conference platform and shared with delegates during and after the conference;
• your details and those of your co-presenters (name, email address, institution, biography and Twitter name) being shared on the Advance HE conference platform.

Please confirm that you accept these conditions, or select ‘other’ and provide an explanation for your reason. If you select ‘other’ we will contact you directly to discuss this.

Review criteria:
Each proposal is subject to review by a panel of peer reviewers against the following criteria:

• anticipated interest;
• clarity of the proposal;
• implications of the findings for the learning and teaching community;
• originality/innovation of the mode of presentation;
• relevance to the conference theme and sub themes;
• potential for delegates to be actively engaged.

Peer reviewing:
A panel of National Teaching Fellows (NTFs) and Senior Fellows (SFHEA) will act as peer reviewers for all conference submissions. If you are an NTF or SFHEA and are interested in being a reviewer for STEM2021, please e-mail us at conference@advance-he.ac.uk.

Additional information:
Important dates:

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<th>Date</th>
<th>Milestone</th>
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<tbody>
<tr>
<td>23 July 2020</td>
<td>Call opens</td>
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<tr>
<td>21 September 2020</td>
<td>Deadline for submissions (midnight)</td>
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<tr>
<td>22 October 2020</td>
<td>Lead presenters informed of submission outcome</td>
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<tr>
<td>23 October 2020</td>
<td>Draft conference programme published online</td>
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<td>20 November 2020</td>
<td>Lead presenter acceptance of session place</td>
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<tr>
<td>27 November 2020</td>
<td>Deadline for presenters to have booked onto the conference</td>
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<tr>
<td>18 January 2021</td>
<td>Recordings/PPTs/Posters to be submitted</td>
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<tr>
<td>27 January 2020</td>
<td>Conference bookings close</td>
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Conference prices:
Early bird rates are open until 30 September 2020
Presenters are eligible for a 10% discount.
To book your place at the conference, please visit: https://www.advance-he.ac.uk/programmes-events/calendar/stem-conference-2021

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<thead>
<tr>
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<th>Member institutions</th>
<th>Non-members</th>
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<tr>
<td>Early Bird/Presenter rate</td>
<td>£157</td>
<td>£211</td>
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<tr>
<td>Standard rate</td>
<td>£175</td>
<td>£235</td>
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**Pre-conference:**
Following the review process, presenters will be informed of the decision and will be asked to confirm acceptance of the offer to present at the conference. On confirmation of acceptance, workshop and interactive presenters will be allocated a specific time within the live conference schedule. Poster presenters will also be informed of the scheduled time for live chat with delegates. All presenters (including poster presenters) will need to register and pay for their place at the conference by 27 November 2020.

Contributors will be required to send presentation slides, MP4 recordings or PDFs of posters to the conference team by 18 January 2021. These resources and details of the presentation, drawing on information supplied on the submission form, will be made available to all delegates and may be published on the Advance HE website. Please ensure that permission has been sought for the use of any copyrighted images.

You may also be invited to blog about your session before the conference to assist with promotion of the event.

**Post-conference:**
Some resources may be added to the conference web page for wider dissemination at Advance HE’s discretion. Please ensure that permission has been sought for the use of any copyrighted images. You may also be invited to blog about your session or conference experience.

**Presenter availability:**
The live conference programme will be delivered on 28 January 2021. Live presenters will be made aware of the time of their session no later than 22 October 2020. All presenters are required to attend the conference either to present their live session or to engage with delegates on the day via networking and chat facilities.

**Co-presenters and responsibilities:**
Please include all co-presenters on the submission form. All presenters listed on the form should attend the conference and each will be expected to register for the conference if the session is accepted. Please note:
- All presenters, including co-presenters, need to have booked onto the conference by 27 November 2020.
- It is the responsibility of the lead presenter to pass on all relevant details to any co-presenters, as correspondence in the first instance will be sent only to the lead presenter.
- It is the responsibility of the lead presenter to inform Advance HE at the earliest opportunity of any changes to the session title or content, or of any
circumstances that prevent presenters attending the conference that could lead to the session being withdrawn.

**Materials and handouts:**
Presenters are encouraged to provide PDFs of handouts or supporting resources to accompany their sessions (for all session types). These can be uploaded to the conference platform for delegates to download. Any accompanying resources should be sent along with your recording, PPT or poster by 18 January 2021.

**Attendee numbers:**
We are unable to guarantee exact audience numbers at any single session and this may result in delegates’ attendance being uneven between sessions that are running in parallel.

**Contact us:**
If you have any queries about your submission for the conference, please contact us at conference@advance-he.ac.uk