FEATURE

Organising a conference to facilitate interdisciplinary interaction

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Synopsis

Interdisciplinary research is increasingly valued but most early stage researchers do not have an extensive network or publication list that can be used to leverage interdisciplinary collaborations. Therefore, there is an urgent need for formats that facilitate interdisciplinary interactions amongst early stage researchers. Here we reflect on the usefulness of the conference format for interdisciplinary thinking by using a recently organised conference at the University of Aberdeen as an example. We conclude that the conference format has many benefits for interdisciplinary interactions, but should be seen as integral part of the academic curriculum and not as something "extra".

Keywords: interdisciplinarity, early career activities, conference organisation, conference timing and format, systemic interaction

Introduction

While the practice of interdisciplinarity is increasingly valued, individual researchers, particularly early stage researchers, may perceive they are running a risk if they embark on an interdisciplinary career or when they are involved in too many extracurricular activities. Disciplinary strength is often still required to advance in academia, and too many interdisciplinary and extracurricular activities can spread the researcher's efforts too thinly. This trade-off between focusing on discipline-specific research whilst being encouraged to do

interdisciplinary work highlights a need for activities that foster interdisciplinary interactions while at the same time allowing researchers to build disciplinary strength.

The conference format is a well-established platform for academic interactions and has the potential to foster interdisciplinary collaboration, but it is unclear if conferences actually encourage interdisciplinarity. Most academic conferences are either closely linked to specific academic disciplines, or are organised large scale when on a high-level topic forcing researchers to "dip in and out" of sessions that are relevant to their own research.

We, the authors, were therefore pleasantly surprised with an experience we had at a conference at the University of Dundee in 2015, called *Facing the Future*. This conference was small-scale with about 35 early career researchers attending. Interactions between the participants were facilitated by experts so that many meaningful connections were established.

In fact, we were so positive about our experience that we decided to organise the same conference in Aberdeen in 2016; even though we were not sure what we were signing up for at the time. Despite the perceived benefits for early stage researchers of organising a conference, such as CV building and expanding a network, it was not clear whether organising a conference would actually benefit us or whether it would interfere with our PhD projects.

In this piece, we reflect on two things: firstly, we share some insights that we gathered from organising a conference for an interdisciplinary audience, and secondly, we discuss our personal experiences and the challenges of organising a conference as PhD students.

Facing the Future

Facing the Future 2016 was a two-day postgraduate conference for early career researchers from the sciences, social sciences, and humanities, organised through the Centre for Environmental Change and Human Resilience (CECHR) at the University of Dundee (UoD) and the James Hutton Institute, in collaboration with the University of Aberdeen (UoA). It was organised in 2016 by us, two PhD students affiliated with the Life Course and Population Health Research Group at the Rowett Institute of Nutrition and Health (RINH), the School of Education, as well as the School of Biological Sciences (UoA) and the James Hutton Institute. An average of 35 researchers participated on both days of the conference. Based on our experiences with organising this interdisciplinary conference, we reflect on the following topics: conference theme, timing, format, and outcomes.

Conference Theme

Choosing an appropriate theme for an interdisciplinary conference is of vital importance: a high-level theme that appeals to a broad audience was needed. Facing the Future has "the future" as annual recurrent theme, and this overarching theme is complemented every year by a more specific subtheme. In 2016, we decided on the complementing subtheme

"resilience". Resilience is a high-level topic, but still has the potential to appeal to researchers from psychology (individual resilience) to environmental scientists (resilience of ecological systems) to social scientists (community resilience). Our rationale was that in our rapidly changing world, we need to create and support strong, resilient ecosystems, food systems and human communities. Therefore, this year's Facing the Future conference under the theme "Realising Resilience" focused on understanding community and ecosystem resilience, and equipping participants with the practical tools to foster and maintain community resilience.

Timing

Our Facing the Future conference was organised at the end of May / early June. The exact date was chosen based on the availability of the venue. Despite the fact that we considered different options of when to run the conference, it was not possible to choose a date with no drawbacks. For example, some potential participants from an ecology background could not attend as the conference coincided with their field work season. Also, there are certain internal or discipline-specific conferences where attendance is required for individual researchers. We, therefore, suggest to contact a wide range of potential participants well in advance in order to exclude specific dates.

Format

Our conference consisted of three major parts: keynotes, turbo talks and interactive workshops.

Keynotes

Every morning session started with one or two keynote speakers who set the stage for the day. For instance, on the first day, Professor Ioan Fazey (UoD) discussed the concept of resilience, and gave a brief overview of the academic discourse on resilience. Keynotes helped to give the conference academic rigour and were highly appreciated by participants. In our view, keynotes can serve as an important bridge between the more traditional academic conference and more experimental workshops.

Turbo talks

Participants were encouraged to share their own research during informal 4-minute "Turbo Talks" on the first day of the conference. The concept of "Turbo Talks" is closely related to the so-called 3-minute Thesis (3MT) – a popular competition for PhD students. These presentations gave a good overview of participants' backgrounds and were a useful starting point for further discussions. Participants were able to use PowerPoint presentations, but this was not required. By restricting the time for these Turbo Talks, participants were forced to consolidate their research and it encouraged participants to communicate their research

effectively. In turn, Turbo Talks benefitted interdisciplinary interactions as it forced participants to use non-expert language.

Interactive workshops

Thirdly, the most important part of our conference were the interactive workshops. The rationale for organising interactive workshops is that meaningful connections are quickly established in face-to-face interactions, while engaging with real-world problems. We did not organise these workshops ourselves, but the International Futures Forum (IFF) agreed to design the conference workshops in conversation with us. The design and facilitation was carried out by Dr Anthony Hodgson, who is a founding member of IFF and Honorary Research Fellow of the University of Dundee, together with his research colleague from H3Uni, Dr David Beatty.

In conversation with IFF, we decided to address the United Nations 2030 Agenda for Sustainable Development and how resilience-thinking can benefit the achievement of the 17 Sustainable Development Goals (SDGs) (UN, 2016). The SDGs are another good example of high-level themes that facilitate interactive collaborations. Moreover, it is anticipated that these goals will significantly drive future research funding streams.

Although the UN agenda affirms equality of priority of all the SDGs and emphasises the importance of partnership, it does not explicitly recognise the highly interactive and systemic nature of global development challenges. A review published by the International Council for Science points out that the approach suffers from a 'silo' mentality that has not taken a systems science approach (ISCU, ISSC, 2015). As a contribution to filling this silo gap in the UN agenda, the workshop sessions demonstrated a method through which an interdisciplinary research group could rapidly investigate and gain insight into some of the crucial patterns of interaction implicit in combinations of development goals.

Outcomes

Finally, choosing an appropriate format to report the outcomes of the conference will strengthen further collaboration. Based on our experiences with the 2015 and 2016 Facing the Future conferences, our ideal future collaboration consists of creating a well-known and respected alumni network. This network can be used to share, for example research proposals and job opportunities. So far, we have set up a LinkedIn group and it is hoped that future alumni will join this network, hereby expanding the reach and relevance of the network. The more immediate outcome of our 2016 conference is the compilation of a report on the outcomes of the workshops organised by IFF. The idea behind creating a report is that it is a relatively straightforward, low-cost option. We have also filmed and taken photographs throughout our conference, and it is hoped that a short production will show the highlights of the conference, hereby attracting future participants.

Personal reflection

We both enjoyed organising a conference. It strengthened our organisational skills and broadened our network, and as such we would highly recommend other PhD students to do the same. Organising the conference, and seeing the outcomes made us realise that conferences like this can create a space in which researchers can interact outside their immediate research field. Using the sustainable development framework in the interactive workshops led to focused discussions that were at the same time broad enough to accommodate a wide range of different disciplines. Moreover, since the workshops were facilitated by experts and aimed at highlighting systemic interactions between the goals, all participants were involved with interdisciplinarity *in practice*, not just in theory. We feel that this was a major strength of the conference.

Content versus organisation

We would like to highlight the challenge of being involved with both the organisation of the conference as well as with the content of the conference. As researchers, it was very interesting to be involved in the choice of topic, design of the workshops and discussing the themes with the keynote speakers. At the same time, we were sometimes wearing two hats which caused some tensions. For instance, the workshops needed a very flexible approach, but for many organisational aspects it was important to make decisions early (e.g. choice of location / timing of catering / accommodation of participants).

For larger conferences, there are often different teams responsible for organisational issues (catering, evening entertainment, welcome packs etc.) and for the thematic content. This makes sense, but it could be more difficult to motivate early stage researchers to engage in the organisational aspects as it might not be of immediate relevance for one's own research. At the same time, many early career researchers do not hold very established positions in their respective research field, so it could be more difficult for them to attract participants and key note speakers.

Seniority

We were helped tremendously by several senior researchers, including Professor Ioan Fazey. This was an enormous help in asking keynote speakers and the IFF to contribute to the conference. It is therefore highly recommended to have at least one senior researcher in the organising team to establish linkages, and to affirm early stage researchers in their decisions along the way.

Completing a PhD and developing "transferable skills"

Organising a conference is a significant time investment and this can hamper the progress of a PhD project. We needed to keep in touch with potential participants, organise all the locations and catering, and run errands during the conference. There is no formal recognition

of this time investment within the wider academic curriculum for PhD students. We had supervisors who were happy for us to engage in extracurricular activities, and many participants mentioned the same. But we also learned from other PhD students that they struggled with balancing to "focus on their research". We would therefore argue that, if academic institutions value interdisciplinary activities, there needs to be some form of recognition of PhD students' initiatives and engagement, so that being able to engage is not dependent, for example, on students' individual supervisors. For instance, institutions may want to give credits, like with courses, to organising scientific activities, or develop some form of highly respected certificate.

Conclusions

We conclude that organising a conference can be helpful in developing an interdisciplinary career and we have given some insights from our own experience. Finally, we would like to argue that academic institutions should encourage individual researchers to organise interdisciplinary activities by giving these types of activities a more formal recognition. This will legitimise spending time as an early career researcher on interdisciplinary interactions, hereby fostering potential future collaborations that are needed in order to tackle complex societal challenges.

References

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The Facing the Future 2016 Report 'Octasynthesis as a Systems approach to the U.N. Sustainable Development Goals' compiled by Poskitt et al. is available via https://issuu.com/cechr/docs/ftf_2016_report