Training PhD students

Session: Poster presentation

Skills and competencies
poster design, critical thinking, analysis, knowledge translation, giving feedback, multidisciplinarity, technical depth, science communication

Duration and scheduling
Background sessions:

Qualitative data coding in NVivo or similar (7.5 hours)

Presenting mixed methods data journal club

Qualitative data visualisation

Designing posters

90-minute session

Individual and group work

45-minute review and critique session

Mode of delivery
Blended learning (some content online, other sessions in-person)

Video: https://youtu.be/RIHG_kA2kJ4

Outline
As the culmination of a series of sessions, students synthesise complex data from both quantitative and qualitative research to produce a conference-quality poster.

Objectives
- To engage with science communication
- To learn to create a conference-quality poster
- To give and receive feedback

Preparation
Coordinator/ facilitator

Ensure that students in small, multidisciplinary groups (about four members in each) complete the background sessions before designing posters, including working with the chosen datasets

In earlier sessions, each group analyses quantitative and qualitative data and learns about reporting of mixed methods

Identify, brief and engage experienced facilitator/s to lead the poster-design session and support students

Facilitators

Prepare PowerPoint poster template and send it to all students

Share "Trips and Tricks" electronic handout

Collect and display examples of good and bad posters

Prepare score sheets and print enough copies for all students and facilitators, multiplied by the number of groups (so that each person has a score sheet for each poster)

Organise to print group's completed posters

Students in multidisciplinary groups

Bring the data sets they have already analysed

Set aside time to work on their poster

Steps
1. Introduction (20 minutes)

Discuss the general concept of communicating research findings and then scientific posters in particular. For example:

> As researchers, one of our responsibilities is to communicate our research findings effectively to funders, study populations, other researchers and the public. Scientific posters are one way to communicate our findings. During this session, we will explore how to construct a scientific poster, what goes into a good poster and how to create an effective poster using PowerPoint.

2. What makes a good (or bad) poster (30 minutes)

Using prepared examples, invite students to discuss what makes a good poster and what makes a bad poster.

3. PowerPoint poster template (10 minutes)

Show the students how PowerPoint can be used to create a poster.

4. Group brainstorming (30 minutes)

In groups, students brainstorm how they to go about constructing their poster. They allocate tasks between themselves and a timeline to meet the deadline.

5. Poster design

Between sessions, each group designs a poster. They submit the pdf to the coordinator / facilitator before the allocated deadline.

6. Poster critique (45 minutes)

The next day or as scheduled, display the printed posters. Allow enough space for people to view easily. Explain the process and distribute score sheets to the students and all available faculty members. Once everyone has viewed and recorded their votes on the score sheets, the lead facilitator leads the full group from one poster to the next, inviting constructive comments and pointing out any features that others have not remarked on. At the same time, a coordinator or facilitator tallies up the scores and announces the winning team at the end of the session.

Outcomes

By the end of this assignment, students should be able to:

1. Critically evaluate poster designs
2. Use Microsoft PowerPoint to create a poster

Assessment

All students as well as facilitators assess the posters. The coordinator calculates the final scores. The poster will be assessed by peers as well as facilitators on the following criteria:

Criterion	Explanation	Maximum mark
Title	Title reflects the study focus and design	5
Background	Background is clear and focused. Based on evidence.	10
Aim & objectives	Study's research question, aim and/or objectives clearly defined	10
Methodology	Both quantitative and qualitative methods described with sufficient detail	10 (5/method)
Data management & analysis	Both methods covered as well as mixed-methods considerations explained	15 (5/method)
Results	Key results aligned presented, aligned with study aim	20
Use of tables & visuals	At least one quantitative and qualitative visual incorporated into presentation; quality of the visuals	10
Conclusions		10
Overall presentation	Poster demonstrates good use of colours, layout, font and visuals for an overall look	10