

# Help students communicate science to a wider audience: Use infographic posters

## Perceptions of using infographics for physiology poster projects – a comparison between cohorts.

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### INTRO

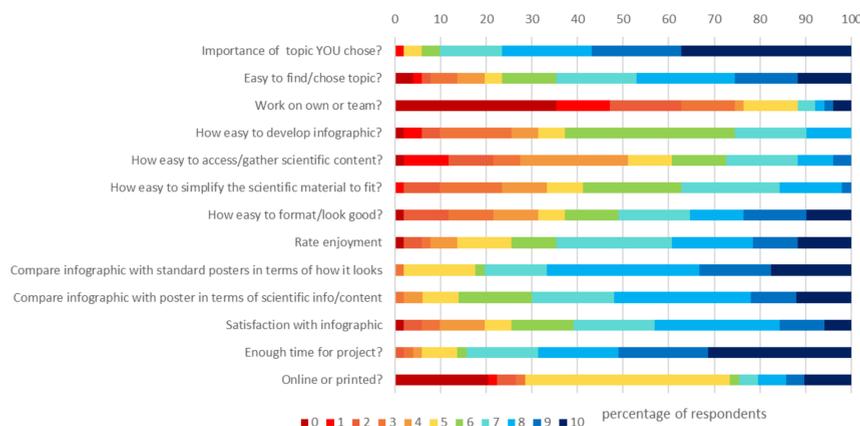
- Infographics are progressively being used to demonstrate key scientific concepts in simple graphical form.
- Teaching students to effectively communicate with both a scientific audience and the general public is increasingly important within an academic curriculum.

### PROJECT OUTLINE

- Students developed an infographic over 10 weeks on a topic and with tools of their choice.
- Students had to submit an abstract at the end of the project and present their final infographic poster at a research symposium as if they were attending a Physiological Society conference.
- Students were invited to complete an anonymous questionnaire on the delivery and outcomes of the exercise.
- We compared the opinions of two cohorts in different years regarding infographic poster projects.

### RESULTS

- 95.6% of the 2016-17 students, and 82.4% of the 2018-19 students rated infographic posters more aesthetically appealing than standard scientific posters.
- 86% of students in the 2018-19 cohort, compared to 91.3% of students in the 2016-17 cohort, rated the scientific content of infographics better.



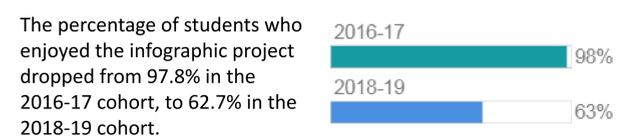
### DISCUSSION

- Both cohorts felt that infographics could communicate complex scientific concepts more effectively than traditional scientific posters.
- Throughout this project students appeared to give more thought as to how information should be presented and delivered to different audiences and became more critical of their own work.

## Extra Tables & Figures

| Question  | Mean response |         | Likert Score descriptors |                  |
|---|---------------|---------|--------------------------|------------------|
|   | 2016-17       | 2018-19 | Score of 0               | Score of 10      |
| Importance of topic YOU chose?                                      | 8.65          | 8.47    | Not at all               | Very             |
| Easy to find/choose topic?  | 6.63          | 6.74    | Very hard                | Very easy        |
| Work on own or team?  | 2.36          | 2.45    | On my own                | Part of a team   |
| How easy to develop infographic?                                    | 4.3           | 5.23    | Very easy                | Very hard        |
| How easy to access/gather scientific content?                       | 4.5           | 4.68    | Very easy                | Very hard        |
| How easy to simplify scientific material to fit?                    | 5.17          | 5.45    | Very easy                | Very hard        |
| How easy to format/look good?                                       | 4.72          | 6.14    | Very easy                | Very hard        |
| Rate enjoyment  | 8.07          | 6.8     | Not at all               | Very much        |
| Compare infographic with standard poster in terms of how it looks   | 8.83          | 7.76    | Much worse               | Much better      |
| Compare infographic with poster in terms of scientific info/content | 8.13          | 7.34    | Much worse               | Much better      |
| Satisfaction with infographic                                       | 7.77          | 6.61    | Not at all               | Very satisfied   |
| Enough time for project?  | 8.52          | 8.1     | Not enough               | More than enough |
| Online or printed?  | 3.13          | 4.69    | Online                   | Printed          |

Mean responses from students in the 2016-17 and 2018-19 cohort (n=46, n=50, respectively) regarding their opinions of the various aspects of the infographic project.



The software packages most popular with the students in the 2018-19 cohort were Piktochart (61%), Microsoft (12%) and BioRender (12%).

Students were able to express their creativity, however felt the free versions of various software's limited this

Students struggled to condense info found in scientific papers

Themes from free text comments

Students enjoyed the freedom and flexibility this project allowed them

Infographics allow complex info/data to be summarised and can bring concepts together- thus should be utilised as a revision tool

