



THE UNIVERSITY *of* EDINBURGH

Edinburgh Research Explorer

“And now for the science bit”: Using examples from biology to engage students in transferable skills development

Citation for published version:

Smith, PJW 2022, "And now for the science bit": Using examples from biology to engage students in transferable skills development', International Association of Medical Science Educators Annual Meeting 2022, Denver, United States, 4/06/22 - 7/06/22.

Link:

[Link to publication record in Edinburgh Research Explorer](#)

Document Version:

Peer reviewed version

General rights

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.



“And now for the science bit”: Using examples from biology to engage students in transferable skills development

Dr Paula Smith, Edinburgh Medical School: Deanery of Clinical Sciences, University of Edinburgh, Scotland, UK. EH16 4SB

PURPOSE Reflective ePortfolios are being increasingly utilised in medical school curricula to capture students’ experiential learning and to monitor longitudinal development. However, far fewer undergraduate science programmes formally incorporate reflective practice, and oftentimes it is met with scepticism from students (and staff). This study describes the author’s attempt to enhance student engagement with portfolios by relating skills content to underpinning science.

METHODS The 2021 iteration of the Edinburgh Undergraduate Biological Sciences ePortfolio includes transferable skills guides focused around key themes (e.g. team-working, communication, resilience, critical thinking), in which students are prompted to reflect upon their personal development. A concerted effort was made to include examples from biology in order to increase the perceived relevance to students, such as the neurobiology of resilience, and biological feedback and the stress response underpinning emotional intelligence. Biological Sciences students were asked to provide anonymous feedback on the transferable skills guides following a live portfolio-related webinar.

RESULTS Thirty-five students submitted feedback. In response to the question ‘*Do you think inclusion of biological examples helps to improve your engagement with the themes?*’ the majority of students answered ‘Yes’ (66%). The most popular biology-related example was circadian rhythms for the time management theme (38%), followed by the stress response and impact of cortisol on learning and memory for the emotional intelligence theme (28%). Sample of students’ free-text comments: “*Circadian rhythms was useful to me in many other aspects of my life, not just time management*”; “*The inclusion of biological examples was a brilliant way to demonstrate how all of these attributes are directly transferrable to our course at large*”; “*Makes the themes feel more relevant and personalised*”.

CONCLUSION Incorporating examples which relate to students’ primary subject area promotes student engagement with Reflective ePortfolios. These findings have the potential to inform any programme which intends to formally integrate graduate skills development into its curriculum.

[Excerpts of the transferable skills portfolio: <https://tinyurl.com/4h7shr5z>]