**Exploring student perception of laboratory workbooks: authentic learning or missed opportunity?**

Lorraine:

Hello, our project is about exploring student perception of laboratory workbooks, is this authentic learning or a missed opportunity? I'm now going to hand over to Karen.

Karen:

In STEM, use of laboratory books is standard and indeed in some instances compulsory practice. Accurate and precise records of experimental procedures

demonstrate ethical integrity and good practice, as well as compliance with industry standards. Whilst a large body of research exists which demonstrates that workbooks enhance student learning in compulsory education, there is limited research into the use of workbooks in distance Higher Education. We chose to

investigate student perception of workbooks used in three modules in the school of Life, Health and Chemical Sciences. Over to you Sarah.

Sarah:

On the module SK190, which explores human biology, the workbooks were designed to be multi-use, acting as a personalised revision tool for stage one study, as well as introducing laboratory record keeping. The workbooks on our stage two modules S290, which investigates human health and disease, and S296, which teaches cell and molecular biology, both focus on record keeping for investigations. There are differences in the format of these existing workbooks, they're online, PDF and Word

formats. And back to you Lorraine.

Lorraine:

Although all three modules explain the importance of record keeping in the practical workbook, there is some uncertainty as to whether students recognise

the importance of this skill and the role of workbooks in their studies. In this project, we intend to use questionnaires and focus groups to explore student perception of workbooks. We also intend to explore perception of staff involved in the production of workbooks through roundtable discussions. In such a way, the project aims to inform the design and implementation of workbooks more widely within STEM.