

Students always encounter difficulties in studying biochemical pathways. They are especially weak in understanding the relationships between metabolic pathways and their integration because these pathways are always taught one by one in class. This interactive courseware aims at arousing students' interest in learning electron transport chain and oxidative phosphorylation using the Articulate Storyline eLearning authoring software.

In this project, the Powerland was developed as pre-class learning micromodules for students to go through and have some basic idea about electron transport chain and oxidative phosphorylation before class. This micromodules are presented as interactive animations. Besides, the Revision mode was designed as post-class revision micromodules. Students are expected to go through these micromodules during their revision after class. Students can revise what they have learnt in an interactive way by clicking on the metro map to magnify the region of interest. Information of each molecule (metabolite) are shown as metro stations. They can study the chemical structures and functions of metabolites one by one, and to understand how those molecules link multiple pathways together.

This interactive self-learning tool is packaged as a courseware using the Articulate Storyline eLearning authoring software.