



A spotlight on...

## Capstone Research and Enquiry Projects

Centre for Innovation in Education

### Overview

Capstone research and enquiry projects afford opportunities for students to learn through active enquiry and research, at every curriculum level (Fung, 2017).

Such projects are often undertaken as a culminating academic and intellectual experience for students (GSP, 2016) towards the end of their studies. They are designed so that students can demonstrate their breadth of learning across a programme by applying knowledge to a project, topic, piece of research or 'real world' issue (Centre for Innovation in Education, 2019).

### Benefits

Capstone projects:

- Enable learners to explore something meaningful to them.
- Foster curiosity and lifelong learning.
- Celebrate the student experience by combining elements such as personal, academic and professional experience (Healey, Lannin, Stibbe and Derounian, 2013).
- Provide opportunities for exploration of students' own deep interests.



### Putting it into practice

Healey et al. (2013) reflect that the primary focus of capstone projects should be on integration, synthesis or application of previously acquired knowledge. They are intended as a way for students during their final year of study to apply knowledge and experiences gained from their whole programme to a project which addresses students' academic disciplinary identities and "considers their purpose in the wider social context of the 'real world'" (Cleaver, Wills, Gormally, Grey, Johnson and Rippingale, 2017, p23).

When designing capstone projects, ask yourself:

- What does a capstone project look like in my subject?
- What examples of good practice can we find in our discipline or similar? How could we use this information to change or enhance what we are doing?
- If we are being challenged to find, draw on and apply learning from across all areas of the programme, what might be useful? Think about what students have done up to now and how this could be incorporated or included into a capstone type project.
- Capstone projects have a connected throughline of enquiry – what do our students do and how does the learning across my program connect? Can we leverage this in a capstone project? (Fung, 2017).

When many people think of capstone projects, they think of a dissertation which is one of many examples of a research-based learning project varying by disciplines.

Some further examples of capstone projects include:

- Research into a subject.
- Event planning.
- Experiments.
- A showcase, performance or exhibition.
- Service learning or volunteering.
- Internships or work-based learning.
- Development of resources.

## A simple way?

A simple way to work towards a capstone project would be to build a core portfolio and/or summative task, through a series of modules, in which students clearly describe the skills and attributes they have developed that are both meaningful to the student personally and authentically linked to subject knowledge (Fung, 2017).

Ideally, the dual intention with a capstone project is to help students successfully negotiate the transition from their studies into their next career stage, whether that is the workplace or future study and to work towards the development of higher levels of intellectual development (Baxter Magolda 2009; Healy et al., 2013).

Research-based learning, such as capstone projects, enable students to participate in research, engaging them actively, rather than simply learning about it in a didactic class (Cleaver et al., 2017). Fung (2017) posits that research-based education provides structured educational opportunities, created for students to learn through active enquiry and research, at every level of the curriculum. There is growing evidence that students benefit from engaging in dialogic collaborative enquiry, whereby prior assumptions are challenged through interaction with others and the object of study (Fung, 2017).

By inviting students to become partners in research and educational development, you are empowering them and giving authentic experiences of collaborative research and enquiry. Engaging collaboratively with ideas and findings can work towards contributing more effectively to the global common good (Fung, 2017).

Fundamentally, a curriculum which integrates students' knowledge and learning from further studies, with engagement with local and global challenging issues, better prepares students for lifelong learning. In a landscape where 'skills for employability' are a growing concern and more integrative approaches to curriculum are being globally explored, capstone projects play a key role in assisting the process of engaging students in contextual, lasting knowledge creation (Healy et al., 2013).

## Challenges

- Learning within capstone research must be visibly relevant to students (Fung, 2017).
- Due to the scale, developing capstone projects can be daunting; however the rewards can be great (Fung, 2017).
- Finding a balance between subject depth, employability and student experience and expectations can be quite tough (Fung, 2017).
- Making coherent connections across disciplines or modules is not always easy. In these cases, consider seeking support from your colleagues who have already introduced capstone projects.

## Additional resources & references

Can you help us improve this resource or suggest a future one? Do you need this resource in an alternative format? Please contact us at:

[cie@liverpool.ac.uk](mailto:cie@liverpool.ac.uk)



[www.liverpool.ac.uk/centre-for-innovation-in-education/resources/all-resources/capstone-projects.html](http://www.liverpool.ac.uk/centre-for-innovation-in-education/resources/all-resources/capstone-projects.html)