



UCL Education Conference 2018

Challenges and opportunities in choosing a research topic and carrying out a dissertation project:

Drawing on alumni's experiences



Cosette Crisan
UCL Institute of Education
c.crisan@ucl.ac.uk

The context: *MA in Mathematics Education programme*

- ❑ The *Mathematics Education MA* is for teachers, tutors and others interested in how mathematics is taught and learnt.
- ❑ The programme gives students the opportunity to explore issues in mathematics teaching, to consider the theoretical underpinnings, and to carry out a rigorous study of mathematical learning.
- ❑ 180 credits@ M level, of which Dissertation = 60 M-level credits

<http://www.ucl.ac.uk/ioe/courses/graduate-taught/mathematics-education-ma>

Dissertation in Mathematics Education + Integrated Research Methods module

Description of the module

Part 1: The Integrated Research Methods (Autumn term) aimed at supporting students develop the research skills and understanding required for carrying out a piece of research

- Submission of research proposal at the end of Autumn term
- Allocation of supervisor in January

Part 2: Carrying out the research (Spring & Summer Term)

- Individual supervision session (equivalent of face-to-face support from their supervisor and an additional 5 hours of support in the form of reading and providing feedback on your drafts)
- Submission deadline 1st September

Dissertation in Mathematics Education + Integrated Research Methods module

Part 1: The Integrated Research Methods

- 10 online weekly self study units (each unit equivalent of 9 hours of study time)

These include:

- related reading
- individual activities
- contributions to online group discussions
- some tutor support in completing the activities and contributing towards forum discussions and monitoring

On Moodle: <https://moodle.ucl.ac.uk/course/view.php?id=43181> (e.g. Unit 3)

- Asynchronously delivered

This part of the course is delivered **online**, with learning resources to facilitate information sharing outside the constraints of time and place among the group of participants

The on-line self study units

Unit 1	Induction	
Unit 2	Starting out in research: designs, expertise and ethics	
Unit 3	Formulating your research question(s), reading critically and writing your literature review	
Choose from the additional units covering various research methods and approaches: <i>For a dissertation - complete at least 3 of these units</i>	Unit 4	Surveys and questionnaires
	Unit 5	Interviews and focus groups
	Unit 6	Observational research
	Unit 7	Documentary research
	Unit 8	Video research
	Unit 9	Action research
Unit 10	Preparing a research proposal & completing an ethics application	

About Part 1: *Integrated Research Methods*

GEMS cluster

- ❖ MA in Geography Education
- ❖ MA in Mathematics Education
- ❖ MA in Science Education

What the students said:

- they value the peer-support and the advice of the module tutor
- they question the learning on-line (collaboration ?)
- they would *welcome input and opportunities from more knowledgeable others (alumni)* also who studied this module and already completed their dissertation

CC Collab application

- ❑ **CC Collab** is a scheme to support innovative collaborations across departments and faculties for advancing the UCL Connected Curriculum (CC)
- ❑ In other second call for proposal, colleagues from more than one department were invited to work with their students on addressing **either the third or the sixth dimension** of the CC
 - Students make connections across subjects and out to the world (3rd dimension), *or*
 - Students connect with each other across phases and with alumni (6th dimension)

CC Collab application

- ❑ **CC Collab** is a scheme to support innovative collaborations across departments and faculties for advancing the UCL Connected Curriculum (CC)
- ❑ In other second call for proposal, colleagues from more than one department were invited to work with their students on addressing **either the third or the sixth dimension** of the CC
 - Students make connections across subjects and out to the world (3rd dimension), *or*
 - **Students connect with each other across phases and with alumni (6th dimension)**

Our project

CC Collab application addressing 6th dimension: **Students connect with each other across phases and with alumni**

Rational of our project:

To create opportunities for students to learn from **alumni** through:

- accessing **short videos** where alumni talk about their own experiences of conceptualising a coherent research proposal and carrying out their research investigation *and*
- participation in a **synchronous mentoring session** (a live forum discussion), where students have the opportunity to enquire further into alumni's experiences and ask more specific questions

What we have done so far:

Project team

- Academic leads in GEMS:

Dr Mary Fargher – Programme leader MA in Geography Education

Dr Cosette Crisan – Programme leader MA in Mathematics Education

Jo Nicholls – Programme leader MA in Science Education

- Lead Students:

One current **Student Academic Representative** in each programme

- ✓ Designed a survey of current cohort of students enrolled on the Dissertation module
- ✓ Launched the survey
- ✓ Contacted alumni on the three programmes from 2014/15, 2015/16, 2016/17 cohorts

About your CHOICE OF THE REPORT/RESEARCH TOPIC

Use this Likert scale in order to answer the questions below:

1 = not at all influential 2 = slightly influential 3 = somewhat influential 4 = very influential 5 = extremely influential 6 = did not even consider it

How much EACH OF THE FOLLOWING influenced you in the selection of your report/dissertation topic?

	Average rank ↓						
	1	2	3	4	5	6	
Talking to other students on the course	■						1.0
Talking to academics	■						1.0
Talking to the supervisor				■			4.0
Looking at dissertations of previous students in your department	■						1.0
My own personal interests				■			4.0
My topic or related topic was covered in my studies of previous masters level modules	■						1.0
My topic of interest had not been covered in my studies of previous masters level modules	■						1.0



How much influence did EACH OF THE FOLLOWING have on your choice of research topic and design of your study?

	Average rank ↓						
	1	2	3	4	5	6	
the time requirement			█				3.0
necessary travelling	█						1.0
access to equipment or room space	█						1.0
access to the population of interest				█			4.0
possible costs	█						1.0
methods of collecting data			█				3.0
generalising the findings	█						1.0
originality				█			4.0

Responses	1	2	3	4	5	6	Total
the time requirement	0	0	1 (100%)	0	0	0	1

What next?

- Feedback analysed by the project team to inform drafting of the interview schedule with the alumni, leading to recording a short video (7 min);
- Each student lead will carry out a focus interview with a group of max 5 students in their subject specific programme area, for a further informing the interview protocol;
- Student Leads in the three programmes to come together and further sharpen the interview schedule.
- 12 alumni selected; interview protocol emailed to them; responses to interview questions drafted in writing by alumni and emailed to the project team;
- project team to support alumni in refining their responses and finalising the scripts for the videos
- Alumni invited to UCL Institute of Education to record the videos;
- Autumn 2018 : Videos uploaded to Moodle area and made available to GEMS students;
- November 2018: A synchronous mentoring meeting to take place through Moodle, led by each of the Student Leads.

Outputs of the project

- ❖ improved provision of resources through creation of 12 video cases of alumni sharing their experiences that led to successful completion of their dissertations/reports;
- ❖ creating a database of case-studies of 'best-practice' in supporting PGT students gain an insight into implications of the choice of and use of a variety of methodological approaches;
- ❖ we expect our recommendations to be relevant beyond the MA in the GEMS cluster and hence be of potential benefit to future students on the full range of taught postgraduate MA in Education programmes, irrespective of their subject specialism.