

CS7CS6: Research and Innovation Methods

2024-2025

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Group Project has 3 deliverables

1. Innovation Plan

- Prepare and submit to blackboard a **group innovation plan** which contains
 - A brief description of your innovation idea and how it relates to your assigned dissertation (max 1 page).
 - An initial business model canvas (BMC) covering at least the value proposition and customer segment components.
 - Supporting text to elaborate on the content included in your BMC including the value proposition, customer segments and any other BMC section you have completed.
 - An ethics canvas relating to your technology based business model.
 - A summary of the hypotheses you plan to test, how you are planning to test these hypotheses (through interviews etc)
 - A short summary of how you have organised your work as a group.

2. Group critique of assigned dissertation

- As a group and using feedback form templates provided contribute to a **critique of the dissertation** assigned to your group. Based on lecture notes, learning from the group assignment processes and marking scheme provided complete the critique feedback form to capture your groups' views on the dissertation and justification for these views.

3. Innovation Presentation

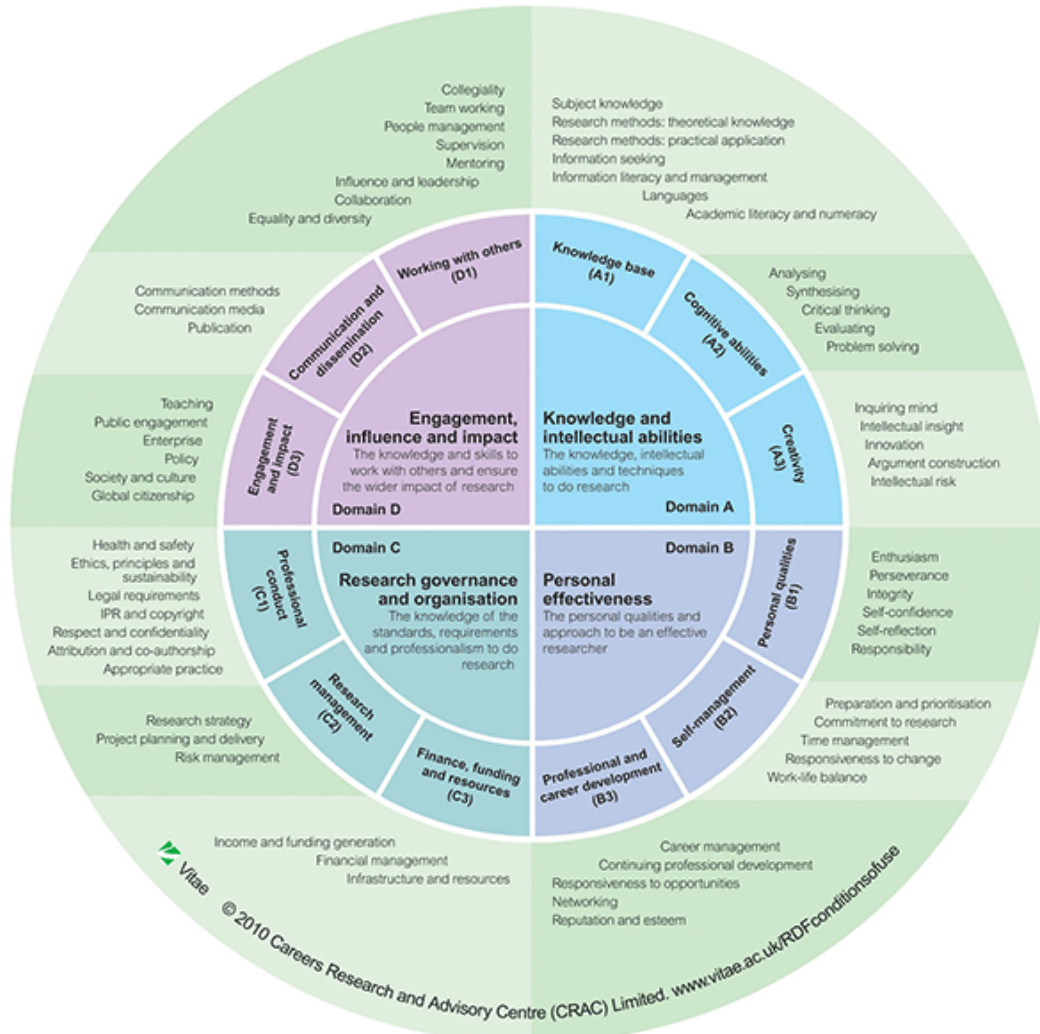
- Contribute to a **group presentation** on your business model development submitted as a 10 min max video. The audience for your video are potential investors. In your video, you should aim to be:
 - **Clear** in the messaging, including on the testing of hypotheses
 - **Convincing** and direct in the presentation of evidence gathered and the persevere/pivot decisions made.
 - **Realistic** in your assessment of the viability of your current business model.

Module Evaluation and Marking

Submission	Deadline	% of Marks
Group innovation plan	Friday 18th October 2024	10%
Group dissertation Critique	Friday 1st November 2024	10%
Group Innovation Presentation	Friday 29 th November 2024	30%
Individual dissertation critique	Friday 13 th December 2024	10%
Individual research plan	Friday 13 th December 2024	40%

- Team mark, allocated to each participating team member

CS7CS6 – Researcher Skills and Characteristics



An example Research Development Framework

A. Knowledge and Intellectual abilities

B. Personal Effectiveness

C. Research Governance and Organisation

D. Engagement, Influence and Impact

CS7CS6 – Critiquing papers and dissertations

Some pointers to support the critique of the dissertation assigned to your group. Will also support your critique of papers.

1. Context for the Critique
2. Critiquing preparation and criteria
3. Marking schemes

CS7CS6 – Critiquing papers and dissertations

1. Context for the Critique

CS7CS6 - Dissertations

A Dissertation

Academic document that presents the

Background

Process

Methods

Findings

and motivation

in order to situate and answer a
research question

And thereby demonstrate the writer's
mastery of a topic



CS7CS6 – Asking research questions



<https://en.wikipedia.org/wiki/Plato>

This is not 
something
new

“Good Questioners tend to be aware of, and
be quite comfortable in, their own ignorance”

A more Beautiful question- The power of inquiry to spark breakthrough ideas, Warren
Berger, 2014



Standing on the Shoulders of Giants

and leave behind a good foundation for
others to continue to build.

<http://www.cs.virginia.edu/~robins/YouAndYourResearch.html>

<https://austinstartups.com/standing-on-the-shoulders-of-giants-keeping-austins-future-bright-part-2-5a92d9c4e816>

Website/photo credit: <https://www.garycarmell.com/standing-on-shoulders-of-giants/>

05/09/2024

CS7CS6 — Building on/Recognising others work

Combining ideas from other researchers

Make Sure you use Citations

Using Others' Methods

Testing others' ideas

Look at what others did- see can it be refashioned for a different context

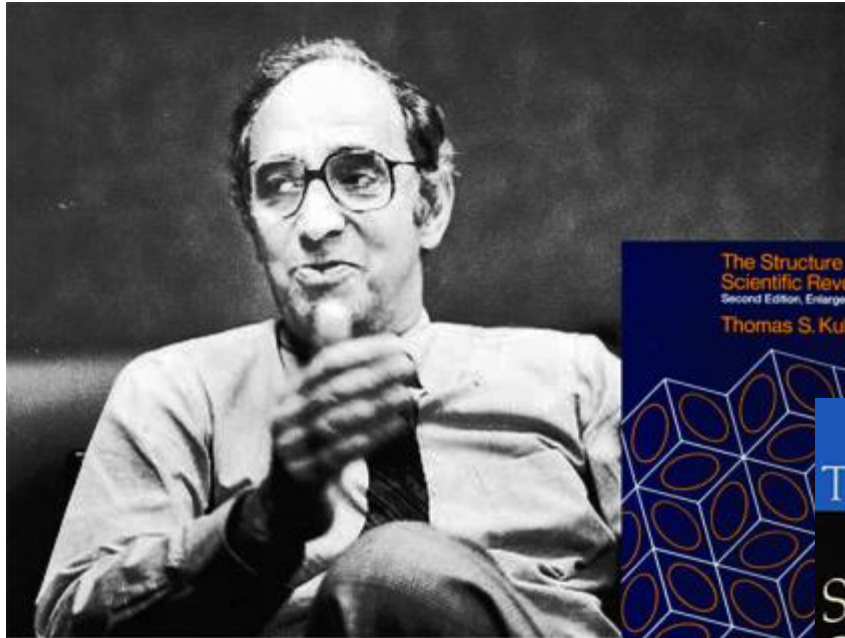
Looking at the teams others have formed around them- are there any new trends?

Advancing others' ideas

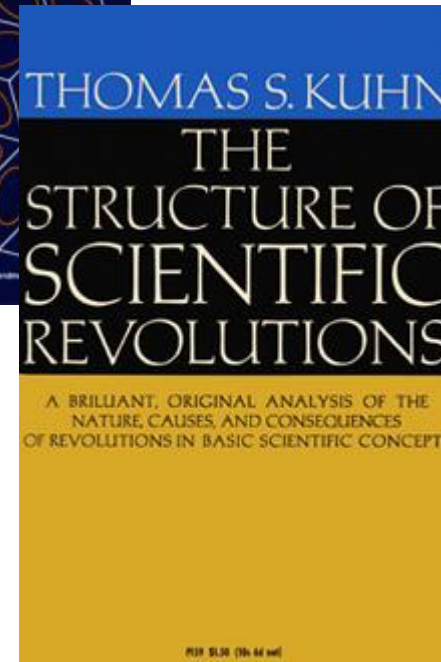
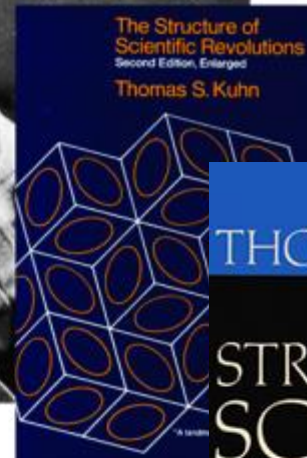
**Understand
and avoid
plagiarism**



CS7CS6 – Thomas Kuhn(1922-1996)- Paradigm Shifts



Thomas S. Kuhn, historian and philosopher of science
author of *The Structure of Scientific Revolutions*



CS7CS6– Thomas Kuhn- Paradigm Shifts

“Kuhn's central claim is that a careful study of the history of science reveals that **development in any scientific field happens via a series of phases**. The first he christened "normal science" – **business as usual**, if you like. In this phase, a community of researchers who share a common intellectual framework – called a paradigm or a "disciplinary matrix" – engage in **solving puzzles thrown up by discrepancies (anomalies) between what the paradigm predicts and what is revealed by observation or experiment**. Most of the time, the anomalies are resolved either by incremental changes to the paradigm or by uncovering observational or experimental error. As philosopher Ian Hacking puts it in his terrific preface to the [new edition](#) of *Structure*: "Normal science does not aim at novelty but at clearing up the status quo. **It tends to discover what it expects to discover.**"

.....

The trouble is that **over longer periods unresolved anomalies accumulate** and eventually get to the point where **some scientists begin to question the paradigm** itself. At this point, the discipline enters a **period of crisis** characterised by, in Kuhn's words, "a proliferation of compelling articulations, the willingness to try anything, the expression of explicit discontent, the recourse to philosophy and to debate over fundamentals". In the end, the crisis is resolved by a revolutionary change in world-view in which the now-deficient paradigm is replaced by a newer one. **This is the paradigm shift** of modern parlance and after it has happened the **scientific field returns to normal science**, based on the new framework. And so it goes on.”

Thomas Kuhn: the man who changed the way the world looked at science

<https://www.theguardian.com/science/2012/aug/19/thomas-kuhn-structure-scientific-revolutions>

CS7CS6– Thomas Kuhn- Paradigm Shifts

- “The most intriguing idea, however, is to use Kuhn's thinking to interpret his own achievement. In his quiet way, he brought about a conceptual revolution by triggering a shift in our understanding of science from a Whiggish paradigm to a Kuhnian one, and much of what is now done in the history and philosophy of science might be regarded as "normal" science within the new paradigm.

.....But already the anomalies are beginning to accumulate. Kuhn, like Popper, thought that science was mainly about theory, but an increasing amount of cutting-edge scientific research is [data- rather than theory-driven](#). And while physics was undoubtedly the Queen of the Sciences when *Structure...* was being written, that role has now passed to molecular genetics and biotechnology. Does Kuhn's analysis hold good for these new areas of science? And if not, isn't it time for a paradigm shift?”

Thomas Kuhn: the man who changed the way the world looked at science

<https://www.theguardian.com/science/2012/aug/19/thomas-kuhn-structure-scientific-revolutions>

CS7CS6 – Answering questions- How

Building Prototypes

Data Collection

Analysing Data Sets

Focus Groups

Subject Area
Analysis

Interviews

Comparisons

Literature Review on
Subject Area

Evaluation

**The Research Question dictates
the methods to be used!**

Check the literature to see how other
researchers have answered similar
questions

CS7CS6 – Research Rigour

“Rigorous (“trustworthy”) research is research that applies the appropriate research tools to meet the stated objectives of the investigation.”

<http://journals.sagepub.com/doi/full/10.1177/2158244014548178>

Research rigour concerns trustworthiness of the research. For us to trust research it should

Have....

Clarity in all aspects (Area(previous work, state of the art), Question, Method, Resources, potential contribution, limitations). The different aspects of the work should link up in a clear way (demonstrate this in the lines of the research workflow diagram)

Be....

Valid- The ability of your method to answer your question with your constraints.

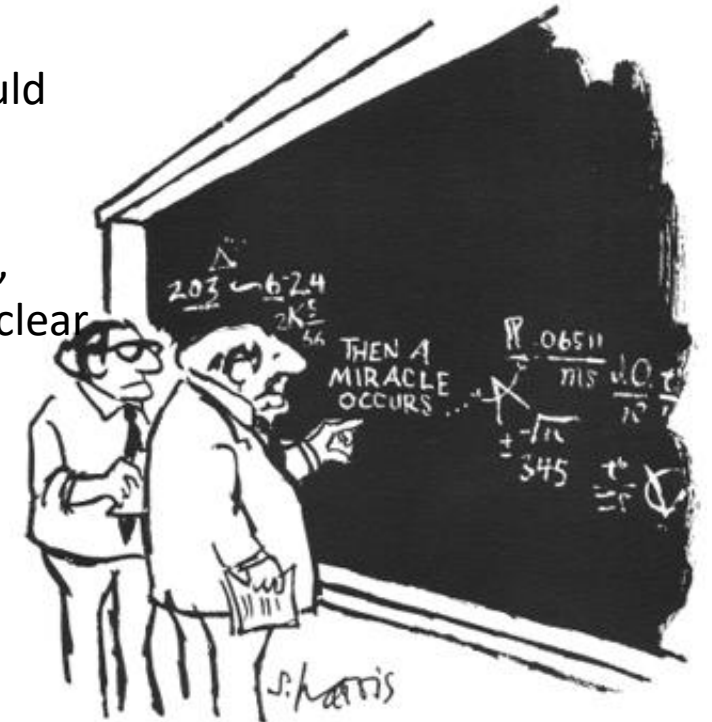
Verifiable- The work can be checked by you and others

Repeatable- leading to generalizability(if appropriate)

Explicit and transparent

Follow....

an appropriate research **philosophy**, approach and method



"I THINK YOU SHOULD BE MORE EXPLICIT HERE IN STEP TWO."

CS7CS6 – Where is the Evidence?



<http://evidencebasedliving.human.cornell.edu/2011/12/14/more-evidence-supporting-the-systematic-review/>

CS7CS6 – Critiquing papers and dissertations

1. Critiquing preparation and criteria

CS7CS6 – Taking Notes on Papers/Dissertations

Read purposefully Have an agenda when you are reading.

Create an entry in your reference manager, place the paper in an appropriate group. This will provide the opportunity for you to record, the title, authors, full citation, keywords, full text of the paper, year

- The topic of the paper
- Concepts and definitions
- The aim
- The objectives
- The scope of the work
- Try to identify any assumptions made by the authors
- Try to identify any biases – e.g. funding, data set used
- Are limitations to the work presented?
- Have they used particular data sets in their work?
- What references have they based their work on?
- What is the most important thing you learnt from the paper
- Where does it fit into your research project?
- Is it relevant/important/significant for your field of work?
- How many citations does the work have?

These notes may prove very useful when you come to deciding what papers to refer to in your proposal/dissertation/assignment.

Create a legend with symbols to mark the papers- e.g. a star for references to follow up on, a circle to mark important sections etc.

CS7CS6 – Critiquing Papers/Dissertations

A critique of a paper is **NOT** a summary

A summary describes the paper whereas a critique provides a **reflection from a variety of viewpoints**. The reflection concerns analyses, interpretation, evaluation of the what, why and how of the paper.

When critiquing try not to follow the way the paper is organised as this will probably lead to a summary. Organise your writing according to your reflections on the paper. So, have an initial idea of what you want to reflect on before you read.

Your reflections can be positive and/or negative. A good critique includes your reflections and backs up your impressions with evidence from the paper.

To critique the paper you may need to read it a number of times so that you have a full understanding of it, can reflect on it, consider how it relates to the topic you are studying and other papers you have read and to identify its strengths and weaknesses.

When reflecting on the papers, it can be useful to create a table to capture your thoughts. This can be a useful way of grouping papers and of comparing them which you may need to do in your proposal/dissertation

To guide your discussion, writing, presentation

CS7CS6 – Reflecting on the Dissertation

Source

Rigour

Style

Data Management

Findings and

Conclusions

References

CS7CS6 – Reflecting on the Paper/dissertation

Consider the paper from the point of view of its **source**

- Peer reviewed paper
- Non-peer reviewed
- Website
- Conference paper
- Policy paper
- Professional body documents
- Standards authorities
- Governmental documents
- Academic report – for what level/what course
- State agencies
- Commercial groups
- Lobbying/pressure groups
- Year of publication
- Authors/collaborators and their affiliations, stakeholder mix
- Funding agencies.
- Is the source a national/regional/international

What is your evaluation of the source?

CS7CS6 – Reflecting on the Paper/dissertation

Consider the paper from the point of view of its **Rigour**

Is the research presented a valid piece of work? i.e. Is the research design appropriate for the aims of the work?

Is enough information, clarity, transparency given so that the work could be repeated by others?

Is the work carried out in a reliable way? Do spot checks on the calculations.

Trace the logic of the argument presented and determine if the evidence leads to the conclusions drawn. Pay attention to sentences that indicate that conclusions are being drawn- e.g. therefore, it follows that...

Cross check with other papers of a similar type. Does it vary from the other literature in the area? Try to see why?

Is there evidence to support claims?

Are the limitations and assumptions expressed?

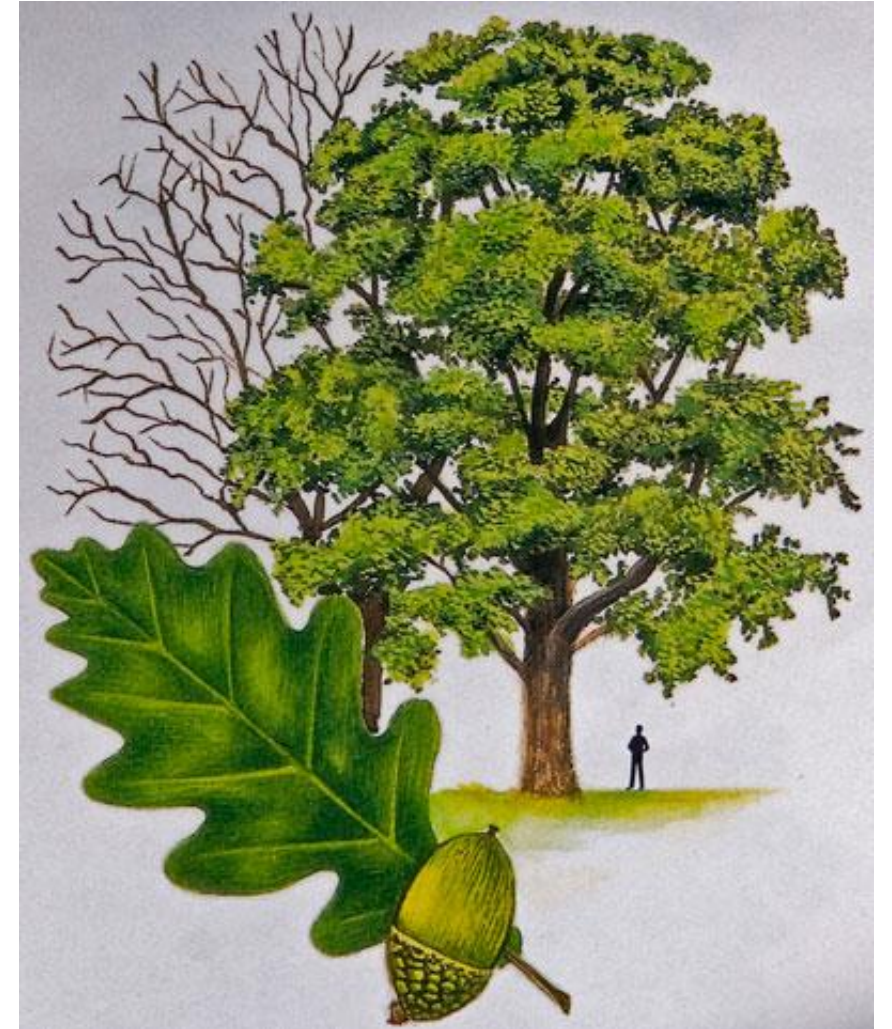
What is your evaluation of the rigour?

CS7CS6 – Oak Trees take time to Grow

Knowing where to plant acorns?

Dr. Richard W. Hamming

<http://www.cs.virginia.edu/~robins/YouAndYourResearch.html>



CS7CS6 - Reflecting on the Paper

Consider the paper from the point of view of its **Style**

- Is the work engaging
- How well is it written
- Have both the subject of interest and the method been introduced clearly?
- How is it organised- do the titles of sections match the content of the sections, Is there repetition?
- Are all stages of the method explained clearly
- Is the text appropriate for the intended audience
- Have the important terms been defined clearly
- Is the title of the article appropriate, clear and relevant?
- Does the abstract describe what the rest of the paper is about.
- Is there any ambiguity in the paper e.g. in terms used.
- Have the findings been presented clearly?
- Are all diagrams, tables, figures clear and referred to from the text.

What is your evaluation of the style?

CS7CS6 – Reflecting on the Paper/dissertation

Consider the paper from the point of view of its **Data management**

The data for a research project could be a dataset and/or it could be data collected from participants in a study. Consider both types of data.

- Is the data collected by the researcher– how is it collected (survey, experiment, interview, case study, focus group).
- Is the data collection method valid, i.e. is it correct/useful for the intended use of the data, has ethics been mentioned?
- If the data is not collected by the researcher, Where did the data come from?
- Is the data used/managed correctly?
- Is the data presented clearly and in a useful way?

What is your evaluation of the data management?

CS7CS6 – Reflecting on the Paper/dissertation

Consider the paper from the point of view of its **Findings and conclusions**

- Identify the findings(from literature, surveys, experimentation), limitations and any future work.
- Follow the research design and see if the conclusions drawn from the findings are appropriate.
- Use any assumptions you noted earlier and see do they have an effect on the findings and conclusions.
- Does the conclusions section link to the findings from the literature and the findings from the data? Are new ideas brought into the conclusions.
- What is the significance of the findings to the field of work?
- How can these findings and conclusions be of use to you?

What is your evaluation of the findings and conclusions?

CS7CS6 – Marking Schemes

- Consider the 2 marking schemes on the following slides.
 - What observations can you make about them?
 - How will your assignments and dissertation be assessed?

Example Marking scheme for dissertations

Default weightings : Problem statement, motivation, and analysis: 10%, Background Research & Literature Review (15%), Technical content and project execution (50%), Testing, evaluation, critical analysis & conclusions (15%), Report presentation and writing (10%)

Scope and Aims	Comments
Mention whether the research was part of a larger body of work, such as a group or continuation research, or was carried out in collaboration with industry.	
Challenges	Comments
What were the major difficulties encountered (technical or other)? Comment on the appropriateness of the solutions, if any, offered. Mention any difficulties you are aware of that may have adversely affected the research in a significant way. Include both difficulties beyond the students control such as equipment unavailability, and other factors in the students work, etc	

Background Research & Literature Review			
Excellent (70+%)	Pass (60-70%)	Pass (50-60%)	Fail (<50%)
Work of high quality, thorough review of the literature demonstrating extensive knowledge of past/current work/authors in the field. Critical and analytical perspective, data collection & analysis. Exceptional ability to relate theoretical knowledge to project work.	Work of good quality, demonstrating a good knowledge of past/current work/authors in the field. Evidence of a depth of analysis and breadth of viewpoint reaching conclusions of critical and analytical perceptive insight at MSc level. Above average ability to relate theoretical knowledge to project work.	Work of fair quality showing knowledge, understanding and application of relevant writing in the field. More descriptive than critical/analytical. May fall short of applying theoretical principles to project work.	Work of poor quality with inadequate exploration on literature expected for this level of study. Does not link with other chapters.

Problem statement, motivation, and analysis			
Excellent (70+%)	Pass (60-70%)	Pass (50-60%)	Fail (<50%)
Demonstrates an excellent understanding of the research problem. The work is clearly motivated, with deep critical analysis of the problem. The research objectives are clearly stated and given an insightful and critical analysis.	Demonstrates a good understanding of the research problem, motivates the work very well. The research objectives are clearly stated and analysed.	Demonstrates a reasonable understanding of the research problem, though motivation may be lacking. Objectives may be somewhat unclear, and analysis of the problem may be lacking.	Poor demonstration of understanding of the research problem, with unclear motivation. No, or poor, analysis of the problem with unclear research objectives.

Technical content and project execution			
Excellent (70+%)	Pass (60-70%)	Pass (50-60%)	Fail (<50%)
Appropriate choice of strategy and approach. Clear and logical design. Detailed explanation showing evidence of reading and understanding of methods. Methodology executed rigorously. Limitations recognised. An ambitious project executed well. Work at the higher end of this category may be suitable for publication in a conference of journal venue.	Appropriate choice of methodology. Clear and logical design. Reasonable explanation showing evidence of understanding of methods. Methodology executed well. A suitably scoped project executed well, or ambitious project with some weaknesses in execution which are acknowledged.	Appropriate choice without explanation. Methods clear and suitable for topic area. Some evidence of reading and understanding of methodology. Justification and limitations not fully explored. Methodology followed but lacking rigour.	Unexplained methodology applied. No reference to reading on methodology or data collection. Poor research design, or poorly executed.

Testing, evaluation, critical analysis & conclusions			
Excellent (70+%)	Pass (60-70%)	Pass (50-60%)	Fail (<50%)
Work of exceptional quality, demonstrating a clear link with all chapters in keeping with research questions/objectives. Evidence of critical and well supported analysis. Limitations/future research areas clearly defined.	Work of very good quality. Demonstrating links with chapters in keeping with research questions/objectives. Evidence of well supported analysis. Limitations/future research areas defined. May fall short of applying theoretical principles to this project.	Work of reasonable quality. At times may be unclear in its link with methodology / research questions/objectives. Lacking a critical approach to analysis. May fall short on defining limitations/future areas of research and in applying theoretical principles to this work.	Work of poor quality. Unclear in its link with the chapters in the dissertation. Poor/limited analysis of findings. Fails to outline limitations/future areas for research and in applying theoretical principles to this work.

Report presentation and writing			
Excellent (70+%)	Pass (60-70%)	Pass (50-60%)	Fail (<50%)
Dissertation is excellently written, coherent, internally consistent, well organized and exceptionally argued. The report adheres throughout to academic conventions with respect to formatting and referencing and is carefully and effectively presented. Excellent use of figures, tables, and diagrams where appropriate.	The dissertation is coherent, internally consistent, well organized and lucidly argued. Generally adheres to academic conventions and is overall carefully and effectively presented. Suitable use of figures, diagrams, and tables is made.	Dissertation is less than secure in its through line of argument and organization, and in its integration of different sections. Presents some unsupported assertions. Displays some discrepancies in language and academic convention usage. Some use of figures, diagrams, and tables.	Dissertation presents incomplete and flawed explanations, evidence and argumentation. Writing is of a poor standard. Has a lack of internal consistency. Makes insufficient or incorrect use of figures, diagrams, and tables.

SE4 Science/Maths Education Project - Mark Sheet

Student: _____

Assessor: _____

Total mark: _____

Marking Criteria	Mark	
Development of proposal [5]		Has the student you developed a valid, interesting research question? Is the methodology proposed consistent with and appropriate to the research question?
Presentation [15]		Has the student given a well-organised, comprehensive account of the most important aspects of their project? Are the visual/aural/software presentation aids clear and comprehensible? Did the student deal well with questions?
Scientific merit of project [45]		Has the student carried out an interesting and insightful piece of work that furthers our knowledge of maths/science education or contributes usefully to the field? Is the rationale for the work clear and are the research questions clearly stated? Are the aims and objectives clearly stated and valid – can they be assessed? Have appropriate research methodologies been used? Are your conclusions supported by the work that you carried out? Is the mathematical/scientific content of your project correct? Are your reviews or other data collection and data analysis methods valid and appropriate?
Literature review [15]		Has previous work on the topic been properly integrated into the project and report? Does this include a broad range of sources on the topic? Have these been read and interpreted in detail and have the most important results and ideas that are in the published literature been identified?
Clarity of structure and content [10]		Is your report clear, comprehensible and well-written? Are diagrams, figures and tables clear and appropriately positioned in your report? Do the different parts of the project link appropriately with one another?
Spelling and grammar [5]		Has due care been taken with spelling and grammar which are crucial components of effective communication? Have the student carefully reviewed their work before submitting it?
Citations and references [5]		Are all sources cited properly in accordance with the Harvard system?
Plagiarism [negative marking applies]		Have the student made sure that they are not presenting someone else's work as their own?
Comments:		

MA Professional Design Practice Thesis Marking Scheme

Student	Thesis Title				
Component	Excellent	Good	Reasonable	Poor	Very poor
Aims and Objectives 5	Aims and specific objectives are clearly and coherently stated and worded in a way that makes it clear how they relate and their suitability for a thesis.	Specific objectives are stated with a level of clarity that indicates achievability, but still without a clear link to an overall plan. OR ELSE: The Aim may be clear, but the objectives lack precision or clarity.	Specific objectives stated, but rather too many (more than five) or too few (only one), and no clear relationship to an overall aim but can be found or inferred somewhere in the thesis.	There is a weak link between the stated aims and objectives with no supporting text linking them throughout the thesis.	There are no specific aims and/or objectives. OR ELSE: There are aims and objectives but they are not clearly stated, leaving the reader very unclear as to what the project is about.
	5 to 4.1	4 to 3.1	3 to 2.1	2 to 1.1	1 to 0
Background 5	Clear and concise description of the overall hypotheses, clear description of the professional design practice context and why the hypotheses matters to the stakeholders within that context.	Clear description of the overall hypotheses within the professional design practice context, with a basic (adequate) description of the organisational context and identification of stakeholders.	Description of the hypotheses within the professional design practice context, but only some limited discussion of different stakeholders and how the hypotheses relates to them.	The hypotheses may be stated, but no coherent account of the professional design practice context and no reference to stakeholders.	The hypotheses has not been described nor has any reference been made as to its context within the report.
	5 to 4.1	4 to 3.1	3 to 2.1	2 to 1.1	1 to 0
Literature review 20	Comprehensive analysis and synthesis of critical points of knowledge, ideas and theories, resulting in themes that are concise, unbiased, and relevant to the thesis topic. Clear and logical flow of ideas.	Reasonable analysis and synthesis of critical points of knowledge, ideas and theories. Themes mostly concise, unbiased, and relevant to the thesis topic. Mostly clear with a logical flow of ideas.	Some analysis and synthesis of critical points of knowledge, ideas and theories. Themes not always concise, unbiased, or relevant to the thesis topic. May lack clarity and a logical flow of ideas.	Descriptive summaries of published documents with some importance or relevance indicated but not fully explained.	Published documents summarised, but not linked in any effective way to the aims or objectives of the project under investigation.
	20 to 16.1	16 to 12.1	12 to 8.1	8 to 4.1	4 to 0
Data collection and methods 20	Choice of data and methods of collection clearly described, including extent of data gathering. Methods well handled and convincingly justified against the project aims and objectives, including discussion of access issues. Some discussion of inappropriateness of other data collection approaches. Full relevant background material supplied as appendices.	Choice of data and methods of collection clearly described, including extent of data gathering. Methods adequately handled and justified against the project aims and objectives, including some discussion of access issues. Full relevant background material supplied in appendices.	Choice of data and methods for collecting them described, but with some gaps, there may be some doubt about how well methods have been handled, or how relevant they are to the aims and objectives. Some background material on methods supplied in appendices.	Choice of data and methods of collection somewhat vague and with some gaps in the material. Methods of collection are mixed up but are partially related to the aims and objectives.	Poor choice of data and methods, handled incompletely, with little evidence of link to aims and objectives.
	20 to 16.1	16 to 12.1	12 to 8.1	8 to 4.1	4 to 0

Data Analysis and results 20	Approach to analysis clearly explained and applied coherently and convincingly. Relevant results clearly set out and compellingly supported by appropriate evidence – qualitative and/or quantitative.	Approach to analysis explained and applied clearly, although not completely convincingly. However, results are clearly set out and clearly supported by appropriate evidence – qualitative and/or quantitative.	Explanation of analysis is basic, definite linking of results to evidence. However, application of analysis and validity of results and evidence are indicated.	Explanation of analysis is basic, with some indication of linking results to evidence. However, application of analysis and validity of results and evidence are indicated.	Approach to analysis not clear, inappropriate to the aims and objectives, or its application incomplete or inappropriate. Findings bear little or no relation to evidence.	Mark
	20 to 16.1	16 to 12.1	12 to 8.1	8 to 4.1	4 to 0	
Learning and reflection 10	Key strengths and weaknesses of thesis/research process identified and critically discussed, including what happened that was different from the plan and assumptions that needed to be questioned. Clear and convincing summary of learning gained with particular emphasis on implications for future research practice.	Some strengths and weaknesses identified, with good attempt to reflect on them and learning gained from the research. Implications for future research practice or learning needs identified. Not as comprehensive as "excellent" category.	Some strengths and weaknesses of the project identified, but not completely convincing. Reasonable attempt to identify implications for future practice or learning needs.	Little evidence of learning and a limited attempt to identify implications for future practice or learning needs.	Demonstrates little or no ability to self-evaluate and identify future implications for learning or professional practice needs.	Mark
	10 to 8.1	8 to 6.1	6 to 4.1	4 to 2.1	2 to 0	
Conclusions 10	Conclusions clearly stated, relevant to aims and objectives, linked to results and to course perspectives. Discussion of what can be strongly concluded and what is more speculative. Clear and realistic proposals for action based on new insights, generally informed by the forefront of a field of learning.	Conclusions stated, which are relevant to aims and objectives and linked to results. Realistic proposals for action follow from conclusions based on new insights, generally informed by the forefront of a field of learning.	Attempts to draw conclusions from results are not entirely convincing. Recommendations are incomplete, but there is still a basic link to the conclusions and results and basic feasibility.	Conclusions are weak and do not really follow from data and results. Recommendations appear neither suitable nor feasible.	No detectable conclusions or recommendations.	Mark
	10 to 8.1	8 to 6.1	6 to 4.1	4 to 2.1	2 to 0	
Presentation 10	Structure and style of the thesis makes its flow easy to take in and follow. Clearly written and well argued throughout. Fully and correctly referenced. Appropriate use of graphics and diagrams	Structure and style of the thesis makes its flow easy to take in and follow. Mostly clearly written and well argued. Correctly referenced.	Structure and style are adequate in terms of making it possible to take in the overall flow. Writing and argument not always clear or convincing. Referencing may be incomplete.	Poorly written and structured, with arguments that are difficult to follow, dense text, poor referencing. Typographical errors so prevalent as to obstruct understanding. Possibly seriously over length.	No discernible logical structure or argument within the thesis.	Mark
	10 to 8.1	8 to 6.1	6 to 4.1	4 to 2.1	2 to 0	
Comments						Total Marks

That's All Folks
Thank You for
Listening

