PEER REVIEW FORM

Writing task 1A (Introduction chapter)

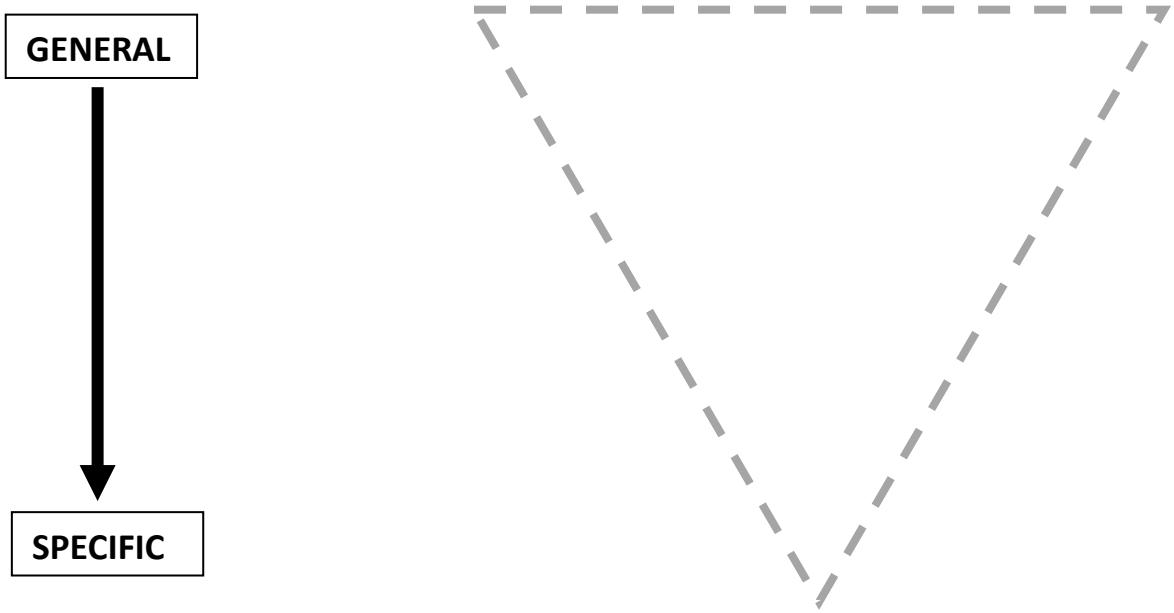
Author's name: ……

Reviewer's name: ……

- Mark in the left margin, find and mark the move-step (e.g., 1-3, 3-1, 2-1) from the MICE Model for that part of the text corresponding to each move-step.
- Was the ordering of the moves effective, or could the ordering be improved by changing the order of certain moves?

1. SITUATION (Why important/relevant? Earlier work?)

Write into the triangle below the **progression of topics** discussed in the introduction. Indicate the paragraph (on the left) where each new topic began:



Answer the following questions by indicating the paragraph corresponding to each question.

1.1. Was the topic area described in the first **opening sentence(s)** too specific?

1.2. Did the text follow a **general-to-specific** progression of topics, eventually leading to the main topic of interest in the thesis?

1.3. Is the information presented **too superficial / too detailed** for a general reader (i.e., *your grandmother!*)

1.4. Were there enough **references** to earlier work or were there places where sources were missing but needed?

1.5. Was the verb tense correctly used to differentiate between (1) commonly accepted knowledge (*Present perfect*), (2) the work of individual researchers (*Past*), and (2) your own comments (*Present*) on this earlier work?

1.6. Were **claims** made without evidence (research), reasons or examples to support them?

2. PROBLEM (Motivation for the thesis)

2.1. Where did the writer introduce the **problem** motivating the need for this thesis?

2.2. Was the problem clearly signaled using a **contrastive connector** (e.g, *however, although, despite*) and **negative language**?

2.3. Was the problem statement correctly presented **immediately before the aim(s)**?

3. SOLUTION (What are you promising?)

3-1 Where did the writer introduce the **aim/purpose/goal** of the thesis?

3-2 Did the **aim** of the thesis emerge as a **logical consequence** of a stated **problem**?

3-3 Is the **aim** of the thesis clearly stated as a **purpose** (*describes the solution that the writer aims to achieve*), rather than a **topic area** (*describes only what the thesis is about*)? [See **Appendix 2**]

3-4 Does the writer briefly outline how the solution will be **developed** and **verified/validated**?

3-5 Has the writer narrowed the **scope** of the thesis by indicating what has been the specific *environment* or *application*, as well as what has been **included** or **excluded** from the area of study?

Other comments:

A! Appendix 3: Master's thesis Introductions

In **engineering**, although the models for **research article** and **master's thesis** introductions are similar in content and problem-solution structure, the model for engineering master's theses (Fig. 1) can require two additional elements: **Move 3** and **4-3 (Thesis scope)**.

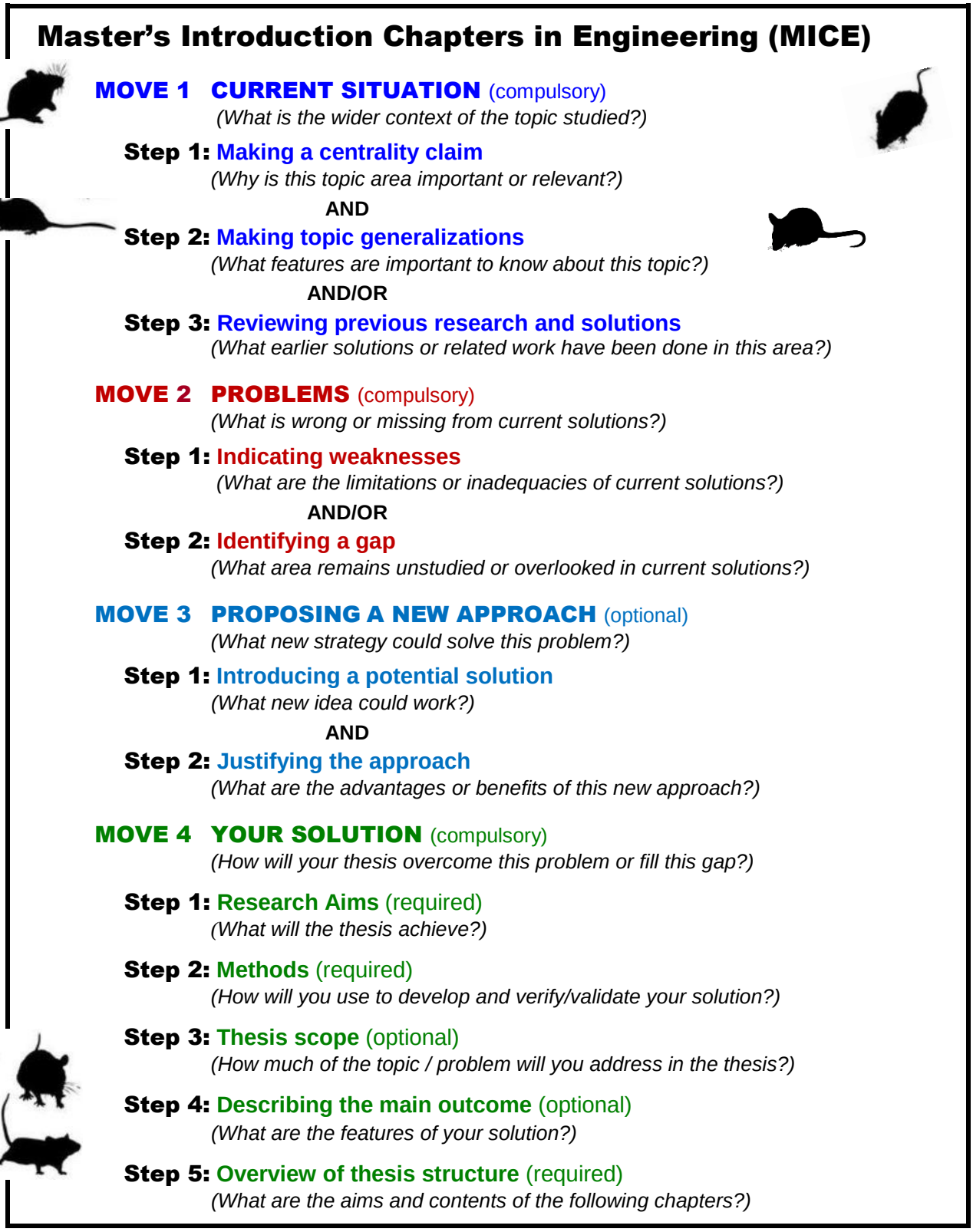


Figure 1 Model for master's thesis introductions in engineering (Pennington, unpublished), adapted from the CaRS Model for research articles (John Swals, 1994).

A! Appendix 2: Stating your Purpose

It is important that the purpose statement come towards the end of your introduction, after explaining the relevance/importance of the topic, current research in the field, and the specific problem motivating your study. The purpose statement should not only be presented as providing an answer to this problem but should also arise as the only logical conclusion that can be drawn based on the problem. Therefore, the wording of your purpose statement is important in guiding the content that you will present before the purpose statement in your introduction.

2.1 Topic ≠ Purpose

Avoid the following verbs, since they only announce the **topic** area of the thesis and do not reveal the **purpose** or real **aim** of what your thesis intends to accomplish:

*The aim of this thesis is **to study**…*
*This thesis **studies**…*

analyze	~~concentrate on~~	discuss	~~find out about~~	~~investigate~~	make clear
be about	consider	~~elucidate~~	~~focus on~~	involve	research
be related to	deal with	~~examine~~	handle	look at	shed light on
clarify	~~delve into~~	explore	have to do with	~~look into~~	study

2.2 Knowledge ≠ Purpose

Similarly, avoid purpose statements that simply claim to create deeper knowledge /understanding of a topic. Not only does this make it sound like the writer really had no idea why they did their study, but it also does nothing more than states the obvious. Doesn't all research create new, deeper knowledge? Well, by default they should create new knowledge:

~~improves the **understanding** of…~~	offers ***knowledge*** of /***insights*** ~~into…~~
contributes to the ***understanding*** ~~of…~~	~~provides **information** about…~~
gains ***understanding*** ~~of…~~	gives an ***overview*** ~~of…~~

2.3 What is your contribution?

Instead of simply describing your topic area or making a knowledge claim, your purpose statement should emphasize the **contribution** of you work by highlighting the main **outcome** or **product** of your study. To accomplish this, you need to identify the concrete outcome(s) of your study. What specifically is it that your work will offer to the reader?

A. Will you offer your readers a new *theory*, *framework* or *model* to **describe** a phenomenon or system, which you will then *test* and *validate* using pre-defined criteria or requirements?

B. Are you going to **create** a new tool, such as a *device*, *method*, *protocol*, or *process* to carry out specific tasks or functions?

C. Will you **improve** a current solution by adapting or applying a new technology, followed by *evaluation* and *comparison* to the existing solution.

D. Will you evaluate and test a new technology to determine the **feasibility** (i.e., possibility) of implementing the technology in a specific context?

E. Or will your contribution be a **recommendation** based on identifying relevant options and then evaluating and comparing these options in order to find the best alternative for a particular context?

2.4 Verbs highlighting the contribution

You should aim to use verbs that describe your contribution or what you either did to achieve your outcome. In engineering, only a small number of verbs are typically used to introduce the goals of master's theses:

Develop **Design** **Construct**	**Determine** **Identify**	**Implement** **Apply**	**Evaluate** **Assess** **Test**	**Propose** **Present**

2.5 Elements of Purpose statements

Effective purpose statements can consist of four elements:

1. The **deliverable** (What contribution, outcome or product?)
2. The **rationale/motivation** (Why?)
3. The **method** (How?)
4. The **scope** (Where? In what context, system or environment?)

Note in the examples below how much clearer the purpose is when the focus is shifted from a focus on the writer's problem to that of the contribution of the study.

Weak:

[what?]
The aim of this thesis is **to find out** how interpolating scaling functions can be used
[why?]
to solve optimal control problems.

Better:

[What contribution?] **[why?]**
The aim of this thesis is **to develop** computational algorithms **for solving** optimal control problems
[How?]
using interpolating scaling functions.

Weak:

[what?] **[how?]**
The aim of this thesis is **to find out** whether geothermal production is sustainable **by developing**
[why?]
sustainability indicators and to **apply** these to a geothermal system under production **in order to**

test their effectiveness.

Better:

[What contribution?]
The aim of this thesis is **to develop** sustainability indicators and to **test** their effectiveness
[**how?]** **[where?]**
by applying the indicators **in** a geothermal production system.

Weak:

[what?]
The aim of this thesis is **to study** an injectable delivery system based on 5- ethylene ketal ε-caprolactone
[why?]
in order to find out whether it can deliver vascular endothelial growth factor (VEGF) and hepatocyte growth
[Where?]
factor (HGF) **for treating** critical limb ischemia.

Better:

[What contribution?]
The aim of this thesis is **to determine** the feasibility of an injectable delivery system based on 5- ethylene
[why?]
ketal ε-caprolactone **for** local **delivery of** vascular endothelial growth factor (VEGF) and hepatocyte
[Where?]
growth factor (HGF) **in treating** critical limb ischemia.

2.6 Sentence Structure

Unlike research articles, master's theses tend to favor the following two sentence structures for expressing purpose statements. Note also that English has many synonyms for both "purpose" and "thesis":

The	**purpose** **aim** **goal** **objective**	of **this**	**thesis** **study** **work**	is **to**	develop determine identify model optimize	[your contribution]	**in order to** …[why?] **for –ing** …[why?] **that /which can**… **by –ing**… [how?] **using**… [how?] **in** … [where?]

Therefore, **In order to….,**	**this**	**thesis** **study** **work**	develops models	[your contribution]	**for –ing** …[why?] **in** … [where?]
			determines assesses evaluates	the feasibility of the potential of the suitability of	us**ing** [what?] **in** [where?] adopt**ing** [what?] **to** [where?] implement**ing** [what?] **in** [where?]