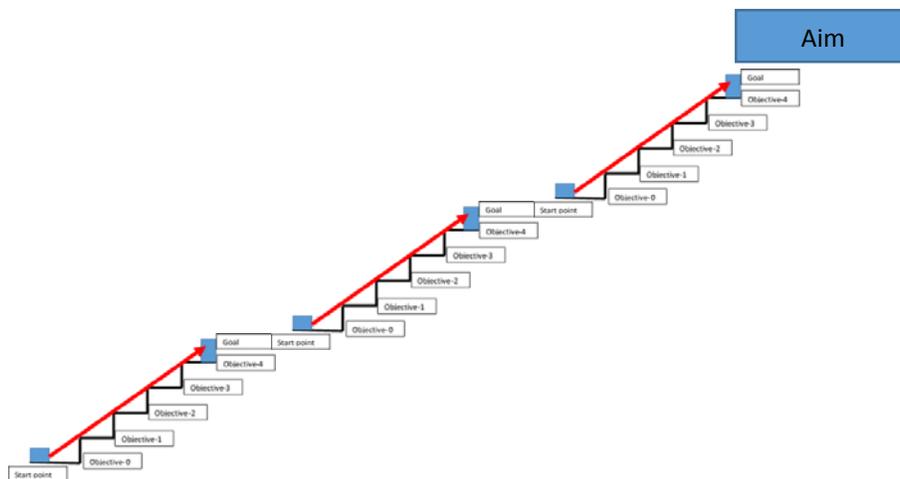## Writing Aims and Objectives

In our day to day academic work, we are involved in supervising student projects, theses, writing grant proposals and many such documents. Writing such a document demands the author to state clearly the aim, goal and objectives of the work that he/she would like to undertake. Hence, let me dwell on my understanding about these terms.

There are three important terms: Aim, Goal and Objectives. An objective is a measurable and observable, more narrowly defined and distinct from each other. A goal is the outcome of a series of successfully completed objectives and aim is an expression of a long-term purpose.

To illustrate this, let us assume that our **aim** is to **win a football tournament**. To win the tournament, we need to win number of games- **winning each game** is achieving **a goal** towards the aim. We need to hit **goals** to win each game –they are **objectives.** This idea can be used to define any problem as per the context. This has been illustrated in the following figure.

Hence, writing a proposal is similar to taking a part in a tournament.

Now, let me introduce you to an example to illustrate how to write research aim and objectives and the term goal is not often used in a proposal, hence the term is dropped in proposal writing.

[http://mycourse.solent.ac.uk/mod/book/view.php?id=2744&chapterid=1293]

Aim: To investigate the relationship between tectonic-plate movement and the gravitational effect of the alignment of the major planets

Objectives:

- Data sets will be extracted from the known historical record of tectonic-plate movement
- Data sets will be extracted from astronomical tables detailing the various alignments of the major planets covering the same period as data from the geological record.
- The data from both sets will be synthesised to establish if correlation points exist between major geological events and planetary alignments.

Now, one can describe what methods and techniques are used to achieve each objective.

The **primary focus of your research project** is usually expressed in terms of aims and objectives. Here let me introduce specific definitions of the terms.

Aim

- An intention or aspiration; what you hope to achieve.
- Aims are statements of intent, written in broad terms.
- Aims set out what you hope to achieve at the end of the project.

Objective

- A goal or a step on the way to meeting the aim; how you will achieve it.
- Objectives use specific statements which define measurable outcomes. For example: *what steps will you take to achieve the desired outcome?*

Objectives should be S.M.A.R.T.:

- **Specific** – be precise about what you are going to do
- **Measureable** –you will know when you have reached your goal
- **Achievable** – Don't attempt too much. A less ambitious but completed objective is better than an over-ambitious one that you cannot possible achieve
- **Realistic** – do you have the necessary resources to achieve the objective? For example: time, money, skills, etc.?
- **Time constrained** – determine when each stage needs to be completed. Is there time in your schedule to allow for unexpected delays?

Remember:

Use strong positive statements which use strong verbs. Avoid weaker verbs.

Strong verbs: *collect, construct, classify, develop, devise, measure, produce, revise, select, synthesise*

Weak verbs: *appreciate, consider, enquire, learn, know, understand, be aware of, appreciate, listen, perceive*

How many aims or objectives should there be?

- There are no fixed number of aims or objectives
- Some tutors are happy with one clear strong aim, whilst others like to see a main aim supported by at least two subsidiary aims
- You will be required to produce sufficient objectives to be able to measure progress towards meeting the aim/s

Hope this is useful to most of our students and younger members of faculty. More details are provided in the accompanying document.

Prof. S.R. Shankapal

Dissertation Proposals & Writing Dissertations

Dissertation proposals

What are the essential elements to a good dissertation proposal?

- Title
- Introduction
- Aims and objectives
- Methodology
- Literature review
- Scope and constraints
- Resources
- Outline of sections/chapters
- Timetable
- References

Title

You need a working title to focus on throughout your research. It may be that you will improve on the wording later but make sure the title you begin with means something.

Introduction

Set out your reasons for undertaking this particular study in your Introduction. Set your ideas into a theoretical/academic context.

Your statement should:

- Outline the problem – what is the key issue?
- Explain why you think this is worth investigating
- Describe the nature and purpose of your research
- Indicate what you hope to achieve.

Aims and objectives

The **primary focus of your research project** is usually expressed in terms of aims and objectives.

What is the difference between an aim and an objective in an academic context?

Aim

- An intention or aspiration; what you hope to achieve.
- Aims are statements of intent, written in broad terms.
- Aims set out what you hope to achieve at the end of the project.

Objective

- A goal or a step on the way to meeting the aim; how you will achieve it.
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- **Time constrained** – determine when each stage needs to be completed. Is there time in your schedule to allow for unexpected delays?

Methodology

Remember to do the following when writing your Methodology:

- explain what methods you intend to use when researching and developing your report.

- use a descriptive writing approach. It is important to explain what research methods you used to collect your info.

- Do not include your questionnaires, interview transcripts, etc. -these go in the dissertation's appendices.

- Discuss with your project supervisor the extent and level of detail required; original research will obviously require a more detailed description than a project based solely on secondary research.

Example of a methodology statement

The following sample statements are intended to give a flavour of the approach one could take but they are not to be assumed to represent a complete methodology.

Literature survey

Secondary data will be reviewed initially through the university library using a range of information sources such as the OPAC system, academic and commercial abstracts, bibliographic databases, and Internet search engines.

To aid the search, a table of key terms will be constructed and the sources located will be correlated with this. A secondary cross-reference table will be developed so that data can be viewed from different perspectives.

Data collection and sampling

To test current practice against the historical record an on-line survey will be conducted to gather primary source data from companies currently engaged in the export of goods related to heavy engineering projects.

The survey will collect quantitative data on the range of goods requiring an end-user licence. A systematic yet random sample of companies will be drawn from members of the British Business Register.

Data analysis

As the number of companies, engaged in the defined activity, has yet to be established the data analysis method has not yet been decided. However, it is anticipated that a commercial spreadsheet package such as MS Excel would be suitable, although more sophisticated analysis software such as SPSS is available within the university's IT centre should this be required.

Literature survey

The Literature survey (also known as a Literature Review):

- uses a descriptive writing approach

- describes the existing and established theory and research in your report area by providing a context for your work.

- can show where you are filling a perceived gap in the existing theory or knowledge

- can propose something that goes against or is controversial to existing ideas.

- accurately references all sources mentioned in the survey and gives a full citation in the Reference List.

Scope and constraints

Set the boundaries clearly in this section.

For example:

- you may have too much material to cover so you will need to put some limits in place on the project

- you may not be able to conduct some research due to constraints imposed by time, cost or availability of materials.

Examples of boundary setting:

1. The literature survey will be as thorough as possible and will be complete by the time the dissertation is written up in full. However, one key area will require a number of visits to the British Library as some materials are not available on inter-library loan. This section will be researched over the summer break as time permits.

2. Whilst it is hoped to conduct some primary research in the USA during the summer of 2010, current restrictions on visa applications is causing some concern. Should the USA research prove impossible to achieve, secondary research will be extended in order to provide an alternative means of analysis.

3. Whilst every endeavour will be made to present a global perspective, many original documents are written in languages other than English. Obtaining technical translation of

these documents may prove difficult due to financial constraints. Electronic translation software is not sufficiently advanced as to guarantee reliable results with this type of material and will not be employed.

Resources

List resources that you will need to complete your study in the Resources section.

Example:

The university's library and IT facilities should prove adequate for the majority of the research and analysis required by this study.

However, graphical representation of some of the data may require the use of specialist software such as Pro-graph, which is not currently available in university's IT suite.

This will not affect publication of the results, however, as this service is provided locally by a commercial printing facility.

For more details visit

http://mycourse.solent.ac.uk/mod/book/view.php?id=2744