Tool 11: Reporting

<u>1. Introduction</u>

A report consists of the following components at least:
* cover
* title page
* preface
* summary
* table of contents
* introduction (as the **first** chapter)
* main text (numbered chapters, from 2)
* conclusions (also a numbered chapter)
* recommendations (also a numbered chapter)
* bibliography (sources used)
* appendices

Possible additions:
* list of symbols
* explanatory list of words
* recommendations
* notes
* register or index

Below you will find the sequence, in which the components mentioned above have to be placed:
* cover
* title page
* preface
* table of contents
* summary
* list of symbols
* explanatory list of words
* introduction (is chapter 1)
* further numbered chapters
* conclusions (as a numbered chapter)
* recommendations (as a numbered chapter)
* notes
* bibliography
* register
* appendices

Within SLM we use the order described in this tool, but in the future you might see a slightly different design when you do a work placement or when graduating outside the Academy SLM in the working field. Otherwise, there is not much room to tackle these components in an original manner, as the reader has a fairly concrete expectation on what he will find in each component: this produces certain conventions with regard to the components in a report as well as their sequence.

<u>2. Title page and cover</u>

The **title page** is the first page of the report. The information on this page constitutes the point of departure in making the **title description**. This page should contain all the information which is necessary to refer to the report:
* creative, attractive title and businesslike subtitle
* name and initials of the author(s)
* place
* year
* institution

The **cover** serves to protect the report. The cover does not need to contain information as extensively as on the title page: usually the (sub)title suffices, together with the name of the author of the report.

3. Special types of text in a report

3.1 The preface

The preface contains no substantive information about the report, but information about the author(s) , the 'textual history' and what it has meant for the "authors" to write this report. In fact it is a personal 'note'. It is the only piece of text in a report that may contain the 'I' or 'you' or 'we'-form. (Outside the preface the passive form will always be used).
The following items may be presented in a preface:
* information about the author(s); (for example name, study programme, study year)
* information about the purpose for which the report was made: assignment, project, placement, series, etc;
* word of thanks (to interviewees, colleagues in a company, supervisors, etc.)
* indication of the target group for which the report is intended;
* indication of the function of the report (for example, to describe a study, to offer a number of alternatives, to convince a certain approach) and the way in which it can be used.

3.2 The introduction

The introduction should be the reader's key to the report. Based on reading the introduction (possibly also the summary and the conclusions) the reader decides whether studying the report, either fully or partially, is worthwhile. The structure of the introduction is not suitable for creativity: the reader expects a range of fixed components in a fixed order.
The introduction begins with an opening, in which the author explains the relation between the problem and the environment: what makes the problem societally relevant, topical or worth studying for another reason. The opening will have to captivate the reader: this sets high requirements to its attractiveness (and the writing skills of the author of the report).
This opening leads to an indication of the problem and the objective and the relation between them. Next comes the research method, obviously in relation to the problem and the research questions. The structure of the report, also mentioned in the introduction, should logically link up to the research method followed. (The techniques you have used to answer the research questions, such as literature study or interview).
Only in the preface you may use the 'I' or 'you' or 'we'-form. In the introduction (Chapter 1) and all subsequent chapters there is no room for the 'I' or 'you' or 'we'-form.

3.3 The summary

A **summary** is a very important part of most reports. For a number of readers, the summary presents an orientation, based on which they decide to read the report or not. For others, only the broad outlines of the report are important: they read only the summary. A third category of readers uses the summary as an instrument in skimming the text: when reading further, they have a heading under which the detailed information can be placed. To make these functions of the summary possible, it needs to comply with a number of **requirements**: it has to be comprehensible, concise, informative and complete. These four requirements will be explained briefly below.

> **Comprehensible**: In the summary, you should avoid terms which are explained in the report itself (or explain them in the summary too). Be watchful for terms which were given a specific meaning in the report. In the summary, make the report's subject clear straight away. The author in example A did not succeed in doing so (the alternative (B) can be found below A):

(A) Very briefly, this report can be described in three aspects:
* technological, economic and societal side
* phasing of the design
* related works
The phasing will be described first and then a few ….

(B) The lock complex in de Vliet in Leidschendam is too small to cope with traffic flows on land and water. Expansion of the capacity of the lock complex from 400 to 1000 tons turns out to be desirable. This report presents a design of the new complex…

Concise: A summary of four pages is too long for a report consisting of fifty pages: three quarters of a page should suffice.

Informative: In the summary, don't mention **that** certain matters will be discussed (after all, this is what you do in the introduction), but especially **what** the report communicates about these matters such as the results and recommendations. Compare the summaries below:
(A) This report discusses several control systems for lorries in order to arrive at an automated transport of materials in the factory. The advantages and disadvantages of the systems are separately discussed in the evaluation.
(B) For the control of lorries, in the automated transport of materials in the factory, one may choose an optical system, apart from the traditional conductor rails or grooves. This works by means of a white reflecting line on the floor and an optical sensor in the lorry. The traditional systems have the advantage that, because of their construction, they are already accurately positioned. The route with an optical system, on the other hand, is….

Complete: A summary is a concise representation of <u>all</u> components of the work and therefore also of the introduction. The description of the subject and the problem certainly belong in the summary too: never confine yourself to giving only concise conclusions in the summary. <u>But new elements (such as conclusions not mentioned earlier) do **NOT** belong in a summary</u>.

3.4   Conclusions and recommendations

Just like the summary, the conclusions should be comprehensible to someone who hasn't read the rest of the work. Compare the two conclusions below.

(A) The counterflow aeration system combines the advantages of bubble aeration mentioned in chapter 2 with the objectives, as discussed in chapter 1, with the exception of the investment costs.

(B) Similar to bubble aeration, the counterflow aeration system has the advantage of flexibility and of a minor cooling down of the water. Moreover, it answers the objectives such as minor noise nuisance and a high return. The investment costs, however, are high.

The substantiation of the conclusions should be mentioned elsewhere in the report. In a section or chapter on conclusions, no new elements may be introduced. Conclusions should be formulated in a compact manner. There needs to be a great emphasis on the structure.
What's ideal for a reader, is an overview of answers to the questions which were mentioned in the introduction. This overview provides more information than just a small table or a list of bullet points and thus again contains full sentences in correct English.

Recommendations are advice given to the reader to take certain actions. They can be placed after the conclusions, if necessary in a separate chapter. These recommendations should also be comprehensible in themselves and clearly arranged: pay close attention to the structure.

You are not supposed to use conclusions and recommendations to replace the summary: they are only briefly mentioned in the summary.

<u>4. Overviews</u>

The **table of contents** contains all components of the work, numbered and unnumbered, which come <u>after</u> the table of contents. The titles in the table of contents should be equal to those in the report. By indenting the (sub)sections, you make the table of contents clearer.

When **numbering pages** you begin with the title page: page 1. You can start **applying** numbers on the pages (thus making <u>visible</u> the numbering of the physical report) on the page that follows the table of contents.

A **list of symbols** is required when the report contains many symbols, which are also used more than once. Symbols are arranged alphabetically.

An **explanatory list of words** may be useful to the reader when the report contains many technical terms. Such a list is also advisable when words from everyday language are used in a specific meaning in the report.

Footnotes contain comments, which would interrupt the text too much. Don't use them to refer to literature. The notes can be presented at the bottom of the page; many word processing programs feature this option. It is also possible to place the notes at the end of a chapter or at the end of the report as a whole. In the text, footnotes are referred to by means of superscript numbers.

A **bibliography** is not a means to demonstrate that the author is person of wide reading. The list contains title descriptions of works (alphabetised by the names of the authors), which the report refers to: these works were used in the research and/or the writing of the report. Consulting a source therefore leads to a better understanding or offers the possibility to check (parts of) the report.

A **register** or **index** is mainly practical in substantial or instructive texts for readers who quickly want to find certain details or instructions. It also enables the reader to quickly check out everything that was written about a certain aspect.

5. Justification in a report

5.1. Introduction

To an important degree, writing a report on a research means justifying to the reader.
The difference between 'problems that require searching' and 'problems that require sorting out' plays an important role in this justification. Problems of the second category require research, you especially need to justify the method used in this process (the next section roughly describes the matters to be considered in this respect). Problems of the first category require browsing through literature. All findings which may be important to your research, need to be included in the report. This is possible by quoting or paraphrasing, in which you refer to the sources you used in the appropriate manner (something which is also covered in a separate section).
Please note that that you do not use the 'I' or 'you' or 'we'-form in the introduction (Chapter 1) or further chapters; it is only allowed in the preface (see section 3.1).

5.2. Your own research

What makes or breaks a research, is the way in which you look for answers to the research questions (the way in which you **operationalised** these questions, what means the way you made certain concepts 'measurable'). If you use an existing method, you should:
- [ ] justify the choice for the method: why is this method the most suitable one;
- [ ] indicate, in a very concrete manner, how the method works: which steps need to be taken;
- [ ] present the results of the steps taken;
- [ ] mention the interpretation of these results (possibly compared to expectations formulated earlier);
- [ ] (following from the previous) formulate the answers to your research questions.

When you use an entirely new (self-invented) method, the steps mentioned above should obviously also be taken. Before you can start, however, you should tell your reader why you are convinced that the method you invented will really produce results.
That makes a 'problem that requires sorting out' also partially a 'problem that requires searching': to introduce a new method (in whatever discipline) you usually need a solid theoretical foundation. The choice for an existing method and the description of how this method works should also be justified based on existing sources.

5.3. Literature research

Taking over ideas from other authors/researchers is not a disgrace, sometimes it is even necessary (like in the description of an existing method as referred to in the previous section). In this process, you should indicate precisely what you take over and where you found it: presenting ideas as your

own when they have in fact been derived from another source is called plagiarism. There are two ways to do it right: quoting and paraphrasing.

Quoting is literally taking over text fragments from other authors. You should pay attention to the following:

- ☐ truly <u>literal</u> quotations. Make a copy of the source from which you quote and use it when writing your report. You even have to take over errors (by means of 'sic' between brackets behind the error, you can indicate that you know better);
- ☐ indicating <u>connections between sentences</u>. When you don't take over an entire sentence, you place the following behind or before the fragment: (...);
- ☐ the use of <u>quotation marks</u>. In quotations, use double quotation marks: ". Reserve the use of single quotation marks for words used 'ironically'.

You use quotations when it concerns short, pithy statements, the purport of which is essentially important for the effect of your report.

Paraphrasing is taking over (partially) or summarising ideas of another author. You should mention precisely what is derived from this other author and how you paraphrased (selection, summary, etc.). You can only quote or paraphrase from a **printed source**. By this we also mean so-called <u>internal publications</u>, provided that these publications are archived by the institute in question. This is because a reader has to be able to retrace this source, and this is something that should not depend on coincidences. Retracing the publication is possible via a reference to the source in combination with a description of this source.
A publication is commonly **referred to** in the following manner:

e.g. *Communication Works!* (Whitman,A. and K. Demarest, 2000)
(name of author or institute, year of publication)

and it is incorporated after a quotation or a paraphrase. When several publications by one author from the same year are used, this can be indicated by means of a, b, c, etc., corresponding with the same indication in the bibliography, directly behind the year.

<u>6. Finally</u>
A number of important points:
• Use correct English..
• If you use pictures or images, give them a number and name, so you can easily refer to them in the text.
• Avoid using abbreviations like eg or ie.