
Introduction: steps towards writing effective educational text

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Healthcare professionals are regularly involved in creating and commissioning a range of written health education materials including patient information sheets and leaflets promoting health-related behaviours. Increasingly, these materials include electronic formats, including websites. The purpose of such materials may be to inform people about health, medicines, medical products or medical procedures or to persuade people to make healthy choices and help them to change health-related behaviour patterns.

1.1 Are written health education and promotion materials evidence-based?

Research suggests that there is a gap between evidence and practice in the development of health promotion materials: the presentation and message content of health promotion materials do not appear to follow evidence-based best practice. For example, Coulter et al. (1999) found that patient information leaflets do not generally provide the information that patients want and, in a national UK survey, Payne et al. (2000) found that only 40 per cent of the population would be able to understand leaflets produced by UK palliative care units. This lack of correspondence between content and presentation and research findings means that, at best, these materials are *less* likely to: (1) engage their intended audience; (2) meet readers' informational needs; (3) enhance readers' motivation; and (4) provide readers with the skills necessary to act on their motivation. At worst, this may mean that written materials may not be read and, when read, may have no beneficial effects. Ineffective materials are also cost ineffective; they represent a waste of effort and investment for both the authors and the audience. Research has shown that the form and layout of health education materials greatly affect readers' motivation to read, and the ease with which readers engage with and understand, the written materials. Yet many health-promoting written texts fail to employ effective presentation techniques. Educational and persuasive materials are also much more likely to instigate change if their content is carefully matched to the needs and readiness-to-change of their target audience. Achieving this match requires careful planning. Detailed step-by-step guidance on

how to achieve such matching is available. Yet, the content of health promotion materials often does not reflect such advice.

1.2 Aims of this book

This book maps out research-based recommendations for improving educational and persuasive texts so that they impact on readers' attention, comprehension, motivation and behavioural skills. We will summarise current evidence on how to make such materials accessible and effective. Whether you are writing or commissioning health education materials or are otherwise involved in developing persuasive written materials, this book will help you make the right choices to reach your audience and help them change their behaviour.

We have emphasised practical, evidence-based guidance. Consequently, we have not provided complete reference lists but included only references to research essential to understanding points made in each chapter. The research referenced here will guide curious readers towards a wider research literature.

1.3 Reading this book

The chapters in this book are set out so that the early chapters focus on layout and presentation while the later chapters focus on message contents. Each chapter can be read on its own, although we do recommend that you read Chapter 6 before Chapter 7. You may dip into the book, depending on your design goals and questions and the design stage you have reached. Each chapter is carefully structured so, using the book contents page, you can quickly find sections you have read before. *Chapter 11* by Abraham and Kools provides a summary of the key insights and recommendations, so one effective way of using the book is to read Chapter 11 first. This will highlight the key ideas which you can then follow up in detail by reading the preceding chapters.

To make the content accessible, each chapter starts with a short list of 'learning outcomes'. Reading this first you can scan through the chapter headings to understand the structure before you start reading. You may find you want to read the chapter in a different order to that set out by the author, depending on what you really want to know.

1.4 The design process and the book structure

This book has two main areas of focus, corresponding to two essential considerations when designing health promotion materials, namely: 'How should we present the information?' and 'How should the message contents be designed?'. So, both the format and content of the message are discussed. Each chapter sets out the choices you need to make to develop effective materials. We have presented

the chapter content in a practical manner focusing on what you need to do to improve your written materials. Each chapter uses concrete examples and provides guidance and tips on how to effectively incorporate evidence-based features. Throughout the book we stress that the design process is iterative – you as a health promotion specialist make choices related to the content and layout of your materials, involve representatives of your target audience to pre-test and test your designs, and, based on the feedback you receive, adjust your materials, seek further feedback and so on. Specifically, we propose the following design cycle, including several stages in which different questions need to be answered:

Stage 1 Design the basic layout

What constraints do different kinds of leaflets or brochures impose on the text design? In practice, this is often not a real ‘choice’, since many public health organisations responsible for the publication of health promotion materials have their own standard print and website format or house style that health promoters need to use. However, even then, or we would argue *especially* then, we advise you to look critically at this format and discuss the elements you feel need to change to prevent adverse effects on your readers. *Chapter 2* by Hartley describes basic text elements such as page size, line spacing and text margins, and their effects on readers.

Stage 2 Use text structure, graphics and colour to maximise attention, accessibility and impact

Funding may be an important enabling or restricting factor determining choices for additional layout features such as the use of graphics in the form of illustrations, pictures, icons, and the use of colour. Chapters 3–5 focus on these issues from different perspectives. Although these early chapters focus on presentational issues, in fact, these issues may become more important once you have decided on content (the focus of Chapters 6–10). Once a first draft of your health promotion text has been developed, including ideas for supporting graphics, it is important to take a step back and have a critical look at it. Having focused thus far on the contents of your materials, it is now important to make sure that the text will engage readers’ attention and that they will understand it – otherwise carefully planned content may have no effect on readers.

A key question for designers at this stage is: ‘Will my target audience understand my messages?’ Whereas in the previous stages of the design cycle, you kept your target audience in mind regarding *what* messages will persuade them, now you need to consider *how* to best put those messages across. *Chapter 3* by Kools draws upon research in cognitive psychology to explain how people generally process information, and what implications this has for health promotion text design. The chapter invites you to adopt specific design approaches to text elements you want readers to pay most attention to, those which only need to be understood and those that need to be remembered, or acted upon.

Chapter 4 by Kools takes a further step and, applying a cognitive ergonomical perspective, describes how to design and evaluate for maximal usability. The chapter discusses how to make your materials optimally accessible for different readers with different goals. This ergonomical approach introduces a new, helpful way of thinking about designing health promotion texts. *Chapter 5* by Wright focuses on the use of graphics and provides a guide as to how to maximise the impact and utility of graphics for readers. This chapter highlights challenges involved in using graphics and provides an evidence-based approach to avoiding pitfalls. Note that *Chapter 3* also provides additional insights that may help you choose the best supporting graphics and evaluate both textual and graphical elements in relation to how easily they can be understood by readers. Again these chapters emphasise the importance of pre-testing materials with small groups of target readers.

Stage 3 Get the message right

Most designers of health promotion texts begin with a clear view of what they want to communicate to their audience. For example, if the problem is transmission of infection, the solution may be to tell readers to wash their hands. Alternatively, if the problem is that young people drink too much alcohol, the solution is to tell them how to drink less. It may appear that 'getting the message right' is just a matter of common sense. Designers may conclude that the main work is to ensure good presentation and layout (as covered in Chapters 2–5). In fact, getting the message right is not easy. Recently we watched a research presentation by Joanne Smith of Exeter University, UK (Smith et al., in preparation) that illustrates this point clearly. Joanne tested the effects of a campaign designed to reduce binge drinking among students. Using an experimental design in laboratory conditions, she found that, compared to students who were not exposed to the campaign, those who saw the campaign had stronger intentions to binge drink. These results imply that the campaign, which had already been launched, was encouraging binge drinking. Although the campaign advised against binge drinking, it also gave the impression that most students were binge drinking and enjoying it. These implicit messages motivated other students to binge drink. So common-sense approaches do not necessarily generate effective health promotion. Fortunately, there is a substantial and informative body of research on how to design messages that effectively change motivation and behaviour. Chapters 6–10 present this research in an accessible and practical format.

Chapter 6 by Abraham uses two integrative theoretical frameworks based on a wide range of studies to identify key change targets when trying to promote motivation and behaviour change. This chapter illustrates how the designer can select evidence-based change targets and can precisely match message content to those targets. *Chapter 6* also emphasises how important it is know what the target audience believe and, in general, how ready they are to change. *Chapter 7* by Abraham builds on the ideas presented in *Chapter 6*. Drawing on a wider body of research, this chapter considers the new change targets that are important when seeking to change motivation and behaviour. The chapter shows how for

each change target, a variety of change techniques can be employed – and again emphasises how knowing the target audience can help select the most appropriate technique. A menu of 40 behaviour change techniques is presented and discussed. As in other chapters the role of planning and evaluation is emphasised.

Chapter 8 by Ruiter and Kok considers in detail one particular approach to behaviour change, namely emphasising the severity of consequences following from risky behaviour patterns, and frightening people regarding their own actions. This chapter acknowledges such fear arousal is popular among health promoters but also draws upon a large body of research to show that fear arousal may have counter-productive effects because people defend themselves against frightening messages. The chapter explains how to design effective fear appeals but also recommends that designers consider other behaviour change techniques.

Chapter 9 by Werrij, Ruiter, van 't Riet and de Vries demonstrates that even when the content of health promotion messages has been carefully considered, the exact formulation – or framing – of those messages can determine their effectiveness. Different target behaviours may require different message wording. These subtle but important effects are often overlooked by health promoters. This chapter explains the evidence and makes clear recommendations for practice.

Chapter 10 by Brug and Oenema acknowledges the opportunities that electronic media offer health promoters. The chapter discusses the construction and evaluation of computer-tailored interventions. Such interventions have the capacity to shape – or tailor – messages – not to the target group – but to the individual reader. While construction of these systems is more time-consuming and expensive, they may be more cost effective if shown to be more effective than paper-based messages. This chapter considers the relevant evidence and guides designers through the construction of computer-tailored interventions.

Stage 4 Test the effectiveness of the intervention

This design stage may be the most crucial and at the same time most neglected. A designer may have made good choices and implemented appropriate behaviour change techniques in a manner that optimises comprehension and usability, yet it remains an empirical question as to whether the final product is effective. Throughout this book we illustrate how evaluations can feed back into good design. Involving members of the target audience is crucial: only then can valid predictions regarding the effects of your interventions can be made. We would like to stress here that a focus on contents as well as layout in this testing phase is important to give you a complete picture of both these aspects of effective health promotion design. Designers need to discover how people use their materials, i.e., what information they are looking for, what will stand out for them, what they will understand and remember and what effect reading the materials will have on their motivation and behaviour. Findings from pre-tests and full evaluations can be used to make well-founded changes to original designs, thus continuing an iterative process that is likely to maximise effectiveness. Evaluations also provide invaluable guidance for the development of future materials.

Note

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