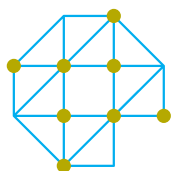


How to make an open textbook

For support staff



Acceleration plan
Educational innovation
with ICT



digital educational resources



How to make an open textbook

For support staff

Acceleration Plan for Educational Innovation with IT –
Towards digital (open) educational resources zone



Acceleration plan
Educational innovation
with ICT

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Stappenplan: Maak je open tekstboek! Zone Digital (open) educational resources Utrecht: Acceleration Plan for Educational Innovation with IT.
www.versnellingsplan.nl/en/Kennisbank/open-tekst-boek

Table of contents

Introduction	5
List of concepts	7
THE PREPARATION PHASE	
Introduction: Open textbooks	9
Project organisation	13
Inspiring examples	17
→	
Offer authors a service package	26
Stay up-to-date	26
Identify scope, purpose and target group	27
Identify topics	28
Choose the language	28
Arrange funding	29
Identify the potential impact	31
→	
Assign roles and editing tasks	33
Create table of contents	35
Timelines and deadlines	35
→	
Integrating the open textbook into teaching	39
Collect authors' own content	40
Make an inventory of external content	41
→	
Determine the modularity	42
Determine the type of content	42
Determine output format	45
→	
Select a platform	46
→	
Arrange permissions	47
Identify publisher contracts	48
Copyright and similarity checks	49
Choose layout and template	50
Assign ownership	51
THE CONTENT PRODUCTION PHASE	
Choose a CC licence	53



Additional open education resources	54
Copyright check	57
→	
Monitor progress	59
→	
Start the writing process	59
→	
Design visual content	60
→	
Collect front matter	60
Collect back matter	61
→	
Copyright check of manuscript	62
Similarity check of manuscript	62
→	
Hire an editor	63
Structure the peer review process	64

THE PUBLICATION PHASE

Final checklist	67
Deliver all output formats	68
Design the cover	68
→	
Organise student feedback	69
Organise peer review	69
→	
Finalise the manuscript	70
→	
Request ISBN & DOI	70
Contact printer	70
→	
Publish on platform	71
Integrate in the virtual learning environment	72
→	
Communication strategy	73
→	
Collect post-publication feedback	74
Revise current edition	75
Monitor adoption	76

Introduction

An open textbook is a textbook that is published online and that is free to download, share, adopt and adapt, according to the user's preferences. The initiators of this book, the members of the Towards digital (open) educational resources zone, have identified a growing interest in making open textbooks in the Netherlands as well as a need for good practices, expertise and skills in open textbook publishing. This book aims to clarify the process of writing and publishing an open textbook for people who support authors, so that this support staff can provide authors in their own and in other institutions with the best possible support.

The book is written in the form of a guide, and each step in the process describes the role of the support staff in creating an open textbook. Note that 'support staff' is a broad concept, and that while the primary supporters are often library staff, the term may also include the educational specialists who are involved in an open textbook project. Other support staff may be student assistants or external professionals such as designers or editors.

Guide

The Towards digital (open) educational resources zone is not unique in deciding to make an open textbook about open textbook publishing. For example, the Rebus Community, which is part of the Canadian Rebus Foundation, has published [The Rebus Guide to Publishing Open Textbooks \(So Far\)](#) which comprehensively brings together all of the knowledge available in the community on making open textbooks. We also recommend the [Open Textbook Publishing Guide](#) by The University of British Columbia (UBC).

Why, then, have we chosen to make an open textbook about the same subject, but in the context of European higher education? The reason is that the education situation in Europe is very different from that in the United States or Canada, and so there is a need among support staff for a guide that is based on the situation in the Netherlands. This is why we have chosen a project-based approach in the form of a guide.



A word of thanks

We have made grateful use of the knowledge and experience of various interviewees to create this guide. We would particularly like to thank:

Myroslava Zhuk, *University of Groningen*

Peter Becker, *The Hague University of Applied Sciences*

Michiel de Jong, *TU Delft*

Sylvia Moes, *VU Amsterdam*

Room for improvement

This open textbook is a work in progress. With this in mind, please email any suggestions that you may have for changes or additions to leermaterialen@versnellingsplan.nl. Please also email us if you have any questions about this guide.

List of concepts

Textbook

In this book, the word 'textbook' means a book that is used for study purposes. We have chosen to use the term 'open textbook' as this is now a well-known concept in online education.

Open textbook

An open textbook is a textbook that is published online and that is free to download, share, adopt and adapt, according to the user's preferences. An open textbook is published under a digital licence that describes under which conditions the book may be used.

Commercial textbook

A commercial textbook is a textbook that is published by a publishing company with a commercial interest in selling textbooks.

Author

The author is the writer of the open textbook, and is usually a lecturer. We have therefore chosen to use the terms 'author' and 'lecturer' interchangeably when talking about the writer or writers of the book. The author is responsible for the educational value and level of the book.

Support staff

Various forms of support are involved in creating an open textbook, for example: checking copyright, searching for alternative open source images, making illustrations and designs, attaching metadata and supporting the publishing process. Some of these tasks are carried out by library staff or educational specialists, but other support staff are often involved in open textbook projects such as student assistants, reviewers and external professionals.

Content

The term 'content' includes all of the materials in the textbook, so the text, images, video material and exercises, but also the front and back matter: the title page, the description of the author, the bibliography, the glossary, and so on.



THE PREPARATION PHASE



Introduction: open textbooks

ESSENTIAL STEP

What is an open textbook?

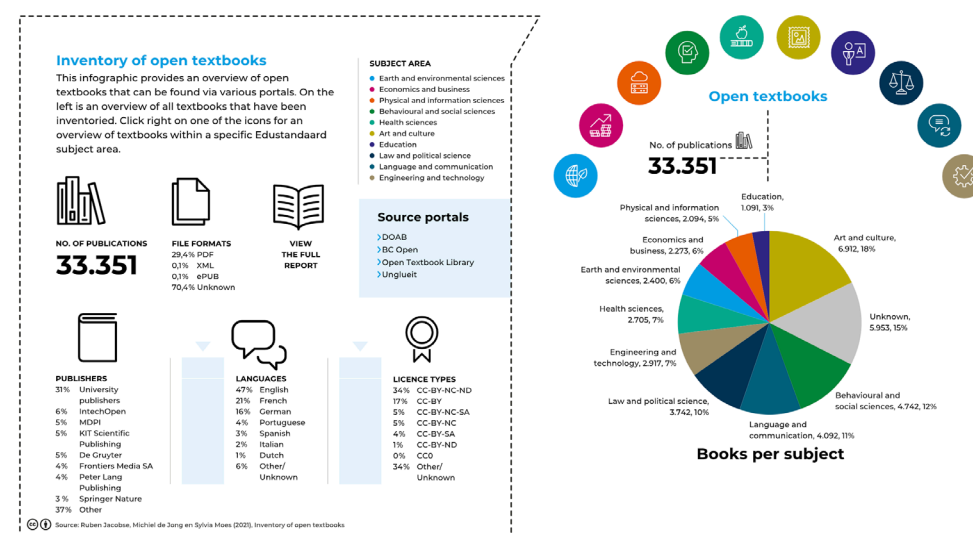
An open textbook is a textbook that is created under an open copyright licence and that is available online. Typical of an open textbook is that it is free to download and share: anyone may adapt it and incorporate parts of it into other teaching materials under certain licence conditions, the most important of which is recognition of the original author. Other than a paper textbook, open textbooks are available online and contain different types of content, such as videos, audio and interactive test questions.

An open textbook is an example of an [open educational resource](#) (OER). Like all other books, an open textbook has an identifier, such as an ISBN (International Standard Book Number) and a DOI (Digital Object Identifier), which is a unique number that ensures that the publication can be found online. An open textbook is therefore a published reference book that can be cited by other authors.

Open textbooks are particularly popular in countries with a high cost of education.

A wide range of English-language books is available on the following platforms:

[Open Stax](#), [Open Textbook Library](#), [Unglue.it](#) and [Pressbooks Directory](#).



Infographic of the [inventory of open textbooks](#).



Advantages for students include cost savings, ease of access and interaction, while advantages for lecturers include the opportunity to collaborate in a community, prestige and reuse.

The advantages of open textbooks

Advantages for students

Cost savings

Open textbooks are cheaper for students as they do not have to pay to use the online version of an open textbook. In many cases, they can also print a paper copy for just the price of the printing.

Accessibility

Open textbooks are available from day one of the academic year, whereas textbooks that are ordered from publishers can often take a long time to arrive, due to delivery times, lack of stock and late orders. Nobody benefits from students starting a course without the required textbook, and while there are often various versions of a commercial textbook in circulation, every student will usually have the most recent version of an open textbook.

Didactics and interaction

Other than paper textbooks, online open textbooks provide more opportunities for interaction. They are also updated regularly, which makes it easier to keep them up-to-date in rapidly changing fields.

Advantages for institutions

Calling card

Institutions benefit from being able to advertise the fact that the textbooks that they use in their courses are available free of charge, and a high-quality open textbook acts as a calling card for the institution concerned. It also promotes the course to potential students, who have full insight into the teaching materials that they will be using. By publishing open textbooks, institutions can also increase their number of high-quality international publications.

Advantages for lecturers

Collaboration in a community

Lecturers write textbooks to improve their teaching and keep their teaching materials up-to-date and abreast of new developments in the field. Working together with other colleagues on a textbook is inspiring and has several additional benefits, such as community formation. Working in a community helps lecturers to expand and hone their knowledge.

Prestige

Writing a textbook ensures that the author is recognised as knowledgeable in a particular field. The book therefore places the authors in the position of experts in the field, which also reflects on the institution concerned in the form of prestige.

Didactics

Publishing an open textbook has didactic benefits, such as the possibility to include videos and formative types of assessment. Another didactic benefit is that students can contribute to an open textbook as part of the learning process. For example, students can provide feedback on existing books and make suggestions for new content. Some lecturers even get students to write a textbook.

[Research](#) conducted by BCcampus found that students improved their learning if they had to write information in their own words in an open textbook, compared to learning the same information from memory for a test. Furthermore, the students who took part found it to be a useful exercise. The Rebus Community has produced a [guide](#) on how to make open textbooks together with students.

Dynamics

Online open textbooks are more dynamic than paper books, as sections can be quickly updated in response to current events or developments in the field. Of course, this means that the authors need to continue to update the textbook, and you could say that an open textbook is never actually finished.

Reuse

Another benefit for lecturers is that they can adopt parts of existing open textbooks that have been written by other authors. Open textbooks have a publisher and a [Creative Commons \(CC\) licence](#), which states that the reuser must give credit to the original authors. This removes the necessity of having to request permission for every form of reuse.

Sharing work with others

Partly as a result of the coronavirus pandemic, lecturers have gained a lot of experience in developing digital educational resources in a very short time. Open textbooks make it possible to do more with these materials, and in this guide we describe how lecturers can turn existing digital educational resources into an open textbook.



Dissemination of knowledge

Publishing an open textbook contributes to the development and dissemination of knowledge. Lecturers are able to publish their educational vision and so improve the quality of education. After all, the open textbook will most likely have a much larger reach than the lecturer's own course and institution. Open textbooks are not only used by other institutions, but also by the rest of the field, for example for lifelong learning (LLL). They therefore represent a relatively easy way of communicating knowledge, expanding the reach and network of the author and creating new connections.



How effective is the use of an open textbook compared with a traditional textbook? Very effective, according to a [large study](#) into the quality of open textbooks involving 46,000 students.

For niche subjects too

Commercial publishers are not always interested in publishing a textbook for a very small market. For niche subjects, therefore, publishing an open textbook can be a good way of creating relevant content.

A worthwhile investment of time

Making an open textbook is an investment of time that pays itself back within the field – for everyone who worked on the open textbook and possibly even for other colleagues. This is because once an open textbook has been published, the lecturer has a book that is completely relevant to the field and that can continue to be updated, either by the lecturer or by colleagues. It therefore costs time, but it also saves time.

Support

One possible disadvantage of publishing an open textbook is that publication of a commercial textbook with a well-known publisher is regarded as more prestigious. A good publisher will provide support in the form of an editor, and the final proofreading, design and publication process are all taken care of. However, as you will see in this book, a lecturer who makes an open textbook does not have to do it alone. In the next chapter, we show what you can do to support authors of open textbooks.

Project organisation

ESSENTIAL STEP

This guide describes how support staff can help authors to make an open textbook. Authors require support, for example with project organisation, copyright issues and enlisting the help of students and other support staff to take care of the more time-consuming tasks.

We recommend that creating an open textbook is organised as a project, as experts in the writing and publishing of open textbooks in the Netherlands consider this to be an effective organisational form. This project-based approach is presented in the form of a flow diagram, which is divided into three primary process steps: preparation, content production and publication.

→ Arrows are placed between the steps, and the group of steps between the arrows may be carried out **simultaneously**, independently of the chronological order.

For each paragraph, it is also indicated whether the steps are **essential** or **optional**, which depend on the institutions involved and the requirements of and choices made by the authors.

We distinguish between two different types of project organisation: a single author (see 1.A.) / small project group (see 1.B.) and a large (intra-institutional) project group (see 2.). These two main forms are described in more detail below.



1.A Single author

A lecturer may decide to write a book as the only or main author. This has various advantages and disadvantages, which you can discuss with the lecturer at the intake meeting.

Advantages of making an open textbook as a single author:

- The author has full control of the content.
- There is little dependency on others; the author is fully responsible for the planning and timing.
- The book can be made relatively quickly, as the author works at their own speed and when it suits them.

Disadvantages:

- The author is responsible for gathering and writing or making all of the content.
- The author can only share their work with others for review at a late stage in the process.
- The author must motivate themselves to meet deadlines, for example by agreeing with a reviewer when certain chapters will be ready for review.



Inspiration

Medical textbooks

At VU Amsterdam, 26 short medical textbooks were made in a short time for use as an educational resource in a course's virtual learning environment. The project was coordinated by neurologist [Ilse van Straaten](#) at Amsterdam UMC (VUmc location), who made the open textbooks based on existing lecture notes. She searched for open source materials herself, and the university library carried out the copyright check, added metadata and helped with the publishing. For a small project like this, the library staff can also help to structure the content in modules, which is useful if the author wants to make it easier for other people to reuse parts of the book.

From lecture notes to open textbook

The [TU Delft Open Textbook Project](#) started with a suggestion to the lecturers at TU Delft that they could professionalise the lecture notes that they have developed for the various courses and publish them as an open textbook. The idea was to help new lecturers, who could then start with a comprehensive collection of teaching materials. The project focused not so much on writing a book as on making existing content suitable for publication as an open textbook.

1.B Small project group within the institution

Many lecturers have good experiences with writing an open textbook as a group of up to four authors. You can discuss the following advantages and disadvantages of this at the intake meeting:

Advantages of creating an open textbook in a small project group:

- Assigning different chapters to different authors makes the workload easier to manage.
- Authors motivate each other to meet deadlines.
- You know more as a group.
- Together, you often have more material already available to include in the open textbook.
- A group of authors can provide feedback on each other's chapters, which improves the quality of the book.

Disadvantages:

- Making an open textbook as a group of authors means that someone needs to coordinate the project. A schedule needs to be made with realistic deadlines and it is important to come to agreements that are supported by all of the authors. This guide and the supporters can help in this, but it is important to be aware of the issues in advance, especially if the authors have little experience in project organisation.



Inspiration

Discussing definitions

Lecturer Peter Becker at The Hague University of Applied Sciences wrote the open textbook [Maak het vindbaar](#) together with three colleagues. He says: *"It is inspiring to work with colleagues who have been in the same field for so long. We assigned chapters to each author based on their expertise and interests and we provided each other with a lot of peer feedback. We also had long discussions about terms and definitions, and if anyone from outside our field had heard us talking, they probably would have wondered what we were making such a fuss about."*



Street Law

The open textbook on Street Law is a good example of a small project group at VU Amsterdam. Street Law is a programme in which law students give lessons on law in secondary schools. The open textbook is available on Wikiwijs in [Wikiwijs Maken](#) and in [edusources](#). It contains various items, such as forms and instructions, which can be found separately in the [SURFsharekit](#). As with the medical books, the project mainly concerned existing information that was bundled together to make an open textbook. The book was created by two authors and one support staff.

2. Large (intra-institutional) project group

More than four authors working together on an open textbook is a large project group. The group members may also come from different institutions, which requires additional choices to be made, as we explain in this guide. You can discuss the following advantages and disadvantages of this organisational form in the intake meeting:

Advantages of making an open textbook in a large (intra-institutional) project group:

- An intra-institutional project group increases the reach of an open textbook as each author uses the book in their own courses and promotes it through their own network.
- For many lecturers, the network benefits of an intra-institutional project are large and result in invitations to give guest lectures and presentations.
- It is inspiring to work together with lots of experts in the field.
- The quality of the open textbook is high as the experts can review each other's chapters.

Disadvantages:

- Working with lots of authors requires good project organisation. This is, however, not necessarily a disadvantage if the project group appoints an experienced project coordinator.
- If lecturers from different institutions work together on a book, copyright agreements will need to be drawn up. The project group needs to determine which institution or community owns the copyright to the book.



Inspiration

Toxicology

Ecotoxicology is a rapidly changing field, which is why a number of experts decided to create and maintain an open textbook of peer-reviewed publications. The open textbook [Toxicology](#) was created by 65 authors from all over Europe and represents a collaborative project between six institutions. It was made as part of the [Open and Online Education Incentive Scheme](#).

The project team consisted of 12 team members, six of whom were responsible for most of the work. They started by making an inventory of what to include in the open textbook, and decided on seven chapters, each consisting of several modules. A review panel of colleagues monitored the process and provided ideas for the project team. For each module, they decided who was the best person to write the text: a member of the project team or a colleague from the Netherlands or elsewhere. Reviewers were also found for each module. In total, about 100 modules were created by 67 authors and 96 reviewers.

The VU Amsterdam university library supported the project, for example by looking for an online platform that was suitable for making a book with multiple authors, and eventually chose [Wikiwijs Maken](#). The library also carried out the copyright check, searched for open source images (the authors selected the final images to be used) and liaised with an illustrator and the university's audiovisual centre for the production of video materials. The project team was responsible for the editing and proofreading of the chapters, while the lecturers organised the peer review process by collaborating with other toxicologists in the European professional society SETAC.

Inspiring examples

OPTIONAL STEP

Be inspired by interviews with support staff at TU Delft, VU Amsterdam and the University of Groningen and with an author who took part in an intra-institutional project.



Good practice: TU Delft

'We make existing material suitable for open publication'

In 2018, the [TU Delft Library](#) started a publication service for lecturers who want to make open textbooks based on existing lecture notes. About 13 open textbooks have now been published, mostly made from existing materials, and one new book has been written. Michiel de Jong is a researcher and open education project manager at TU Delft and one of the support staff involved in the project: "We started with a one-day workshop, which received a lot of positive reactions. We now have a stand at education events and give presentations, and we continue to regularly visit our own faculties to look for lecturers who might be interested."

Make it open

"Our method is to make existing materials suitable for open publication from the very start. The main focus is copyright issues: our copyright team goes through all of the content delivered by the authors: is it original text? How does the author reference other people's work? This is the copyright and similarity check. The copyright expert then advises the authors on how to deal with any copyright issues."

The library also arranges for authors to hire a student assistant to go through the content and adapt it to make it suitable for open publication. "We usually hire two students to prepare the material so it can be used in the open textbook, but if you're lucky you can find someone who is both well acquainted with the topic and a good designer."

Help

The team does not attempt to take the place of the content expert and is only concerned with helping the authors through the publishing process. Together with the authors, the team puts together a plan. One option is advice on the choice of writing platform, but there is little interest in this. What most authors need is copyright advice, and once the draft manuscript is ready, a second copyright and similarity check is carried out. The manuscript then goes to the editor, who corresponds directly with the author.

Publication model

"Once the author has finalised the text, it goes into the publication model," says De Jong. "To make sure that the book can be found online, we send the author a checklist in which they are asked to provide a summary, metadata and keywords. We also need a photo and description of the author and we ask the author to provide a photo for the cover. We have a standard cover template so that we create a recognisable brand."

Paper version

Every TU Delft open textbook is available online on the platform and as a free downloadable PDF. The books are also available as print-on-demand, but the popularity of this really depends on the subject, says De Jong. "If the book might be useful in the future as a reference book, Master's students often like to have it on paper. For example, 120 of the 150 students bought the Coastal Dynamics open textbook. However, we also have an open textbook for a Bachelor's course that costs €14 but is only bought by 5 - 10% of the students."

Publicity

Distribution of the open textbooks takes place through the faculty concerned, while the author's network is mainly used to raise awareness of the book outside the university. "There are various ways of generating interest. For example, we place interviews with authors on the TU Delft Teaching Academy website and on our own Open Science website, but there is no pre-determined communication strategy from the communication department, so there's room for improvement."

Selection and reuse

Until now, every application to the TU Library publication service has been accepted, but they are reaching a point where there is not enough capacity available to publish everything. The team is therefore working on a checklist to determine the potential impact of new applications.

The team is also trying to encourage authors to use what is already available as open source materials, but this is not easy. The supporters see that open source materials published by other authors tends to serve only as inspiration, and so they try to encourage authors not to blindly copy other open source material but to 'add their personal touch' to materials that are 90% suitable. This seems to be having an effect, and considerably reducing the authors' resistance to reuse.



Good practice: VU Amsterdam

'Finding good, alternative images is the responsibility of the library'

Sylvia Moes is innovation manager in education at the University Library (UB) at VU Amsterdam. Her responsibilities include providing support for lecturers who are writing an open textbook. She has experience in both large team projects and open textbooks written by a single author.

Up-to-date textbook

Moes explains: "Things change quickly in the field of ecotoxicology, which is why several experts decided to make and maintain an open textbook of peer-reviewed publications. A total of six institutions and 65 authors worked together on the project. The first thing we did as a project team was to make a list of topics to include in the open textbook. Next to each topic, we added the name of an expert, who we then approached to ask if they wanted to take part."

Search for platform

"We then looked for the best platform on which to make the book. Many platforms require knowledge of HTML, which most lecturers don't have, while others charge a fee or only provide a single author's account – which is not very handy when 65 authors are involved. We finally decided on Wikiwijs Maken. Although the platform is a Dutch-language platform and some of the authors were not from the Netherlands, Wikiwijs is so simple to use that this was not a problem. For example, you can add images and sound by pasting in a URL, and Wikiwijs also offers lots of interactive test options."

Open source content

"As a library, one of the things that we do is carry out a copyright check. If we discover that a particular image is copyrighted, we look for similar open source content which we then send to the author. Looking for good open source alternatives is therefore the responsibility of the library. For some copyrighted images, we may ask an illustrator to make an alternative."

Modular publishing

"We published the Toxicology open textbook chapter by chapter on [edusources](#) and [MERLOT](#). Furthermore, the portals of both platforms provide information on the adoption of individual chapters. The editors on the project team coordinated the chapter by chapter publication, once a final edit had been applied to ensure a consistent style between the chapters. The lecturers organised the peer review process themselves and found external reviewers to read and provide feedback on some chapters.

Each chapter has a separate URL and the content can be adapted. It is also easy to incorporate a chapter into Canvas, our virtual learning environment. Students can also download a PDF and the videos can be viewed using QR codes."

Enthusiastic students

"It is not possible to print a paper copy, but the toxicology group are considering publishing a luxury edition of the open textbook. For students, the PDF is enough, as the book is too big and too interactive and the material changes too quickly to make it worth printing a paper copy. Students are enthusiastic, not just because the book is free, but also because of its modular structure and the fact that it is always up-to-date. The project has been so successful that VU Amsterdam has decided to make more open textbooks."

See paragraph Project Organisation for additional explanation on the current projects: Streetlaw, Medical Textbooks and Toxicology.

Marketing

"We take care of platform-related issues, while the authors make sure that the content is kept up-to-date. For the marketing of our open textbooks we use a newsletter, publications on the platforms and interviews, for example with [Kennisset](#). The authors also promote the books in their own academic communities."



Good practice: Our own open textbook

'It didn't feel right that students had to pay for the whole book'

In 2017, the lecturers Joyce van Aalten, Peter Becker, Marjolein van der Linden and Eric Sieverts wrote the open textbook [Maak het vindbaar](#), in which they describe the most important methods and techniques for ensuring that people can find information in an organisation.

The basis of the open textbook was an existing, ten-year-old paper textbook. However, the authors were not satisfied with the publisher, who refused to publish the paper textbook as an e-book and was also not interested in publishing it online in separate chapters. By publishing an up-to-date version of the book as an open textbook, the authors have provided students and themselves with the freedom to do what they want with the book. As one of the authors, Peter Becker, says: "It is quite a specialised book, and students often only need a few chapters of it, so it didn't feel right to make them pay for the whole book."

Improve teaching

Becker found writing the open textbook very inspiring. "When you write a textbook, you have to break through the routine that you develop in your teaching. Is there a better way of doing it? Are there new developments in the field? You learn to describe things well. How am I going to say this? What is the right structure? Must the chapters be available separately, or do students need to progress through the book? You then incorporate the answers to all of these questions in your teaching, which also develops as a result."

Professionalisation

Although he spent many hours of his own time writing the open textbook, in his words 'like a madman', he advises other people not to do the same. "A lot of universities provide lecturers with opportunities to work on their personal development and professionalisation, for example by joining a research group, doing a practical intervention or following a course. Writing a textbook should also be an option, as it is also a form of research. For example, lecturers could be given one day a week over a certain period to write a good textbook in collaboration with a few colleagues, to be published under a Creative Commons licence. The university can then advertise the fact that their students do not have to spend so much money on textbooks."

Editor

Their field of expertise meant that the authors of 'Maak het vindbaar' had little need for support when it came to copyright issues. The team did, however, make use of the services of an editor, who checked the syntax and spelling. The editor also provided the writers with some useful feedback. Becker: "For example, if the editor didn't understand the text, we sent it back to the author because a first- or second-year student would probably have difficulty understanding it too."

Guest speaker

Although the open textbook is now only used on a commercial course, Becker is still asked as a guest speaker because of the book. He is happy to promote OER: "Not so long ago, I got cross with a lecturer who asked the library for help to promote research that she had done with us commercially. Universities should not respond to such requests, as they demonstrate a lack of knowledge of open educational resources. Libraries can help to increase people's awareness of this."



Good practice: University of Groningen

'Writing an open textbook deserves reward and recognition'

The University of Groningen Library (UB) and the University of Groningen Press (UGP) have, together with lecturers and the Open Educational Resources (OER) team, started a pilot project for developing open textbooks. The aim of the pilot is to make and publish several textbooks and, in doing so, develop policy, a workflow and best practices, as well as get an idea of the costs involved.

Determine service level

Myroslava Zhuk, academic information specialist at the UB in Groningen, explains: "The pilot project is part of a larger open educational resources and open education project. One thing that we want to use the project for is to determine the service level that we can and want to offer to lecturers who are making an open textbook. This concerns infrastructure and technical support, but also support in searching for information."

Selection

Of the seven applications for the pilot project, four were selected. This number was not determined beforehand – the University of Groningen (UG) had considered starting with just one book, but decided – following advice from TU Delft – to select four projects that varied in terms of size and timing. All four open textbooks are expected to be ready at the end of 2022.

The four groups were invited to a general information meeting in December 2020 in which the aim of the pilot project, the different types of open textbooks, CC licences and expectations were discussed. Some lecturers already had content that they could use, which they are now rewriting.

Types of support

All of the authors in the pilot project said that they would be interested in receiving support for copyright issues, and two of them have asked students to make some of the content. They have also received information on open pedagogy and support and have taken part in workshops and webinars.

Support for the publishing process is provided by the UGP, which helps the authors with editing and issues concerning layout, the cover design, and so on. "We do not get involved in the content," says Zhuk. "We know that the lecturers have a good reputation and innovative ideas, and how they organise the writing process and what they let students do is up to them."

Search for a platform

One of the first tasks for the supporters was to find a suitable platform on which to publish the open textbooks. "We thought that we would be able to use the UGP platform,

which is used for open access monographs and journals," says Zhuk, "but that turned out not to meet the needs of our authors. For example, one of the lecturers has published a lot of his own materials on his personal website, which he now wants to collate to make a comprehensive, interactive open textbook. Readers of the open textbook should also have the option to rate the content, for example with a number of stars. Another project is an open textbook to learn a language, which needs to contain interactive exercises that students can give direct feedback on."

Licence

As well as the interactive and multimedia aspects, the platform also needed to be user-friendly for students. "We don't want to send them all over the internet – all the information needs to be available in one comprehensive textbook." The team finally decided on Pressbooks, an open source platform that meets all of these requirements. It is possible to use the platform individually, but the UG decided to pay for an institution-wide licence. This costs about US\$10,000 a year, including hosting and support but excluding integration in the learning management system.

Recognition

The UB is paying for the platform and publication, but the pilot is part of a larger open science programme at the UG and will be funded under this programme in the future. More minor costs can be paid for by the faculty. The lecturers have not officially been given time to write the books and therefore depend on informal agreements with their supervisors, who fully support the pilot. "In the bigger project, we want to think about how we can recognise and reward this kind of work," says Zhuk. "Perhaps a small grant could be possible for making open educational resources, or lecturers could be given time to work on them."

Rely on enthusiasm

At the moment, the projects rely on the enthusiasm of the lecturers involved and of the OER team, which consists of just 1.5 FTE. "We work closely together with the Educational Staff Development team at CIT to provide training courses and a specialist at UGP provides advice. They also provide technical support and coordinate publishing-related processes. Hopefully, however, we will receive more funding and staff when the big project gets started, because it is not really enough at the moment."

As far as Zhuk is concerned, the pilot will be considered a success when all four of the books have been published (unless there are good reasons not to do so) and when a well-documented workflow is in place for the support. "We are successful if, after the pilot, we have a good, clear idea of how to turn this into a permanent service with permanent funding."



Offer authors a service package

ESSENTIAL STEP

Authors who are planning to write an open textbook often benefit from having a clear overview of the support available. Make sure that you can refer them to such an overview, even for a pilot project.

Make sure that you have a few things in place before your first meeting with an author. This [checklist](#) (in Dutch) provides an overview of what you need to do before you can offer any kind of support service. Use the information on the checklist as a basis for the meeting and make sure that you are able to answer any questions that arise about the checklist.

The library should offer a service package for lecturers who want to make an open textbook. Identify which services the library is able to provide and communicate this on the website of the institution and/or department. Provide an email address that lecturers can use to contact the service.

Stay up-to-date

ESSENTIAL STEP

Make sure that you are up-to-date on the opportunities that the different platforms provide for making open textbooks. Are these platforms compatible with the institution's policy and the needs of the lecturers in the various faculties? Information on the use of these platforms is available for the Netherlands in the [werkgroep Bibliotheken Open & Online Onderwijs](#) (B-OOO) (Open & Online Education Libraries working group).

Identify scope, purpose and target group

ESSENTIAL STEP

The first step for authors is to determine the scope, the purpose and the target group of the open textbook. You can help them in this by considering the purpose: how will the book be used, who will it be used by and what will it be used for?

A general project template can be found [here](#) (N.B. you first need to make a copy of the template before you can fill it in). More information on the scope of open textbook projects can be found in [Rebus Guide](#).

Note that to determine the scope of a project, it is important to consider its *purpose*:

1. What is the intended effect of the book? For example, the book may be intended:

- to share knowledge (reference book)
- to teach (activate students in the learning process)
- for professional development (training, CPD)

2. Who is the book for?

Possible target groups are:

- students in the author's own institution
- international students
- participants in a MOOC
- colleagues in the same field, at the same or another institution
- lecturers in other fields, at the same or another institution
- lecturers or colleagues at foreign universities
- the wide academic field

A distinction should be made between the primary and secondary target groups.

For example, the primary target group may consist of students and the secondary target group of colleagues.

3. How will the primary and secondary target groups access the book?

The institution's own students may be able to access the book (possibly in modules) in the local virtual learning environment, while participants in a MOOC could access the book through a link provided in the MOOC. If the authors are keen for the book to be adopted, it must be easy to find for lecturers who are searching for teaching resources. It is also useful if the book can be found on [edusources](#). Do the authors want their colleagues to adopt the book? If so, it is a good idea to promote the open textbook



through the authors' networks. Some platforms, such as [Wikiwijs Maken](#), make it easy for colleagues to adapt the book, as they can edit the book on the platform or contribute to one or more chapters.

Identify topics

ESSENTIAL STEP

To identify which topics to include in the book, it is important that the authors have a good idea of which content is already available and for which topics content still needs to be created. Support them where necessary in drawing up a draft table of contents.

Are the authors making an open textbook based on adopted materials? If so, identify the content already available on the platforms mentioned above and draw up a draft table of contents for the book. If there are any gaps left, these need to be filled with new content.

Are the authors making an open textbook based on new materials? Draw up a draft table of contents for the book and identify whether content is already available for some topics, such as lecture notes, PowerPoint presentations or an assignment that can be adapted for inclusion in the book.

Choose the language

ESSENTIAL STEP

An English open textbook has the potential to reach a much larger audience than a Dutch-language book. If the authors do choose to write the book in Dutch, you should also think about whether it may be useful to have the book translated into English at some stage.

The content context is also important when deciding on the language. Content that focuses specifically on the Dutch context will be more difficult to reuse, even if it is translated. If there are a lot of international students on the course, then of course it makes sense to make an English-language version.

Make sure that the authors take into account the scope of the open textbook when deciding on the language. Is the secondary target group the academic field? Is the academic field limited to the Netherlands, or is it international, in which case it would not make sense to write the book in Dutch.

You could use a translation agency to translate the book, or you could ask an English student. Professional societies may also be able to advise on translation agencies that are specialised in the field. You could also use NGTV or SENSE-online to find the best translator depending on the content of the open textbook.

Arrange funding

ESSENTIAL STEP

Help the authors to draw up a simple budget. Provide information on how to apply for funding for a project on a website or through the support service.

Support costs

As well as any financial compensation for the authors, there are also other open textbook. These include:

- hiring a proofreader
- hiring a designer
- hiring an illustrator to redesign figures
- producing video material
- possible costs for use of a tool

Put together a list of suitable external specialists and their hourly rates, so that the project group can get an idea of the expected costs of hiring an illustrator, for example, or an editor.

In some institutions, external professionals can be hired as part of a project, such as an open science programme. Furthermore, keep in mind that while you can of course hire external professionals, there is also expertise available within the institution. For example, TU Delft works a lot with student assistants, who are hired for 40 to 80 hours to make content suitable for open publication.



TU Delft Library provides a general copyright check but outsources the detailed work to student assistants. The costs of this are paid for under the open science programme. The library budgets the following costs for hiring in extra support:

Solving copyright issues	40 - 80 hours (€500 - €1,000) for a student assistant (it is better for the author to do this if it involves less than 20 hours of work)
Redesign of figures	1.5 hours (€37 - €45) per figure for a student assistant
Editing	€750 - €1,400 for an editor

At VU Amsterdam, the university library provides support for solving copyright issues. The costs of producing video materials is paid for from internal budgets, so the only additional budget required is for illustrators. VU Amsterdam does not hire designers.

Apply for financial support

A small project does not have to be expensive. However, in the case of a larger project, lecturers should apply for financial support from the institution for the time that they spend on the book. This can be done in several ways:

- The open textbook may form part of the research project of a lecturer or a research group. In this case, the authors may be able to arrange that they work on it for one day a week, for example, as part of this research project.
- The book may be written as a form of professional or expertise development. Most institutions have schemes in place for promoting professional development in educational innovation with IT. Advise the authors to discuss with their supervisor or the HR department whether the scheme covers the writing of an open textbook.
- Some institutions organise open education or open science projects, which include a budget for the creation of OER.

Other funding possibilities

- Does the field have a professional society or community? If so, they may be prepared to contribute to the project, particularly if the open textbook fills a gap in the OER or reference books available in the field. It makes sense at any rate to inform the professional society or community of the plans for the open textbook at an early stage in the process and to involve them in its creation. It may also be worth exploring opportunities for obtaining research grants in the field.

- Respond to current developments: for example, a curriculum review may present an opportunity to start using an open textbook on a certain course. It may also mean that there is more budget and/or time available for lecturers to create new content.

Relevant for intra-institutional projects: apply for a grant

Help the team to apply for a national grant such as the former [Open and Online Education Incentive Scheme](#) from SURF. Provide the team with a realistic estimate of whether or not they are likely to receive the grant in advance, so that the team members know whether it is worth completing the time-consuming application. You should also look into other projects that have already received a grant and decide whether the project in your institution represents a useful addition to the field. For example, does it concern a new domain or the development of a new service with the potential for scale-up? This will increase the chance of a successful application.

Identify the potential impact

OPTIONAL STEP

The authors draw up a list of performance indicators to identify the potential impact of the book. These may include the number of users, the number of downloads, the number of adoptions, and so on. Decide whether this corresponds with the needs of your institution and how to achieve this impact.

Performance indicators

Start with the purpose of the book as identified by the authors. What do they hope to achieve with the book? How will they determine whether or not it is successful? Have them write down a few measurable performance indicators, such as the number of users, the number of downloads and the number of adoptions.

Some indicators may be more qualitative; for example, the following indicators say something about the level of openness, the benefit to education and the way in which the book will be adopted.



- Is the open textbook easy to use for lecturers? The easier it is to find and adopt the book (or parts of it), the more likely it is that other lecturers will use it. This involves more than good metadata, and is therefore an important point for you as a supporter.
- Is it easy to use parts of the book as separate modules? Important in this respect is the file format. For example, PDF is a common format for open textbooks, but PDFs are not easy to edit. It is easier to make changes in an HTML document, but this requires knowledge of HTML. A PDF that is published together with the LaTeX source code is also easy to edit. The .docx format and online text editors such as Google Docs are also suitable for adopting content.
- Does the open textbook help students to achieve their learning objectives? Does it improve the learning process or make it easier or more attractive?
- How interactive is the book? The more interactivity that is added, the greater its advantage over a paper book.
- How well-integrated is the book into the virtual learning environment? The greater the level of integration, the easier it will be for lecturers to use the book on a course and the easier it will be for students to access the book. It is not however obligatory for the book to be integrated into the virtual learning environment.
- How will the book be reused? For example, lecturers may only use certain sections of the book in their teaching, or they may adopt the complete book as a standard textbook.

Potential impact checklist

Put together a checklist to identify the potential impact of a project.

- Think about how the book will be used inside and outside the university.
Will it be used on just one course, or will other faculties want to use the book too?
- Are there other similar degree programmes in the Netherlands that could also use the book?
- Does the book have the potential to be used as a standard reference book in the field?
- How many students will use the book? These could be students on the author's own course but also students on other degree programmes/at other institutions. Make sure to restrict this to the courses and degree programmes that you know will make use of the book.
- Will the authors work together with other institutions in the Netherlands and abroad? The more institutions that are involved in making the open textbook, the more institutions that will use it. Involving a lot of institutions from the outset is therefore the quickest way of making sure that the book is widely adopted.
- Which language will the authors write the book in? A Dutch-language book will have a much narrower reach than an English-language book, simply because of the number of people who are able to read it.
- What is the proposed investment in time/money?

- Does the book include innovative content? Will the authors use simulations, videos, software? The more innovative and diverse the content, the more it will distinguish itself from existing content.
- How open will the book be? What are the user's rights under the CC licence? How will you make sure that reuse is possible?
- What is the academic value of the book? How much demand is there for an open textbook on this subject? Have the authors analysed what is already available in the field and how their book complements this? Is the book unique or is it a reinterpretation? Will a particular course/degree programme benefit greatly from publication of this book?

Increase the potential impact

As a supporter, you can help to increase the potential impact of an open textbook. You can do this by providing good metadata, so that the open textbook is easy to find on as many platforms as possible. You can also ensure that the textbook is published on a platform where it will be harvested by other platforms with a big impact. Think about which platforms the open textbook should be findable on and what you need to do to achieve this. Note that the importance attached to the potential impact depends on the institution's policy and identity.

Assign roles & editing tasks

ESSENTIAL STEP

The authors decide who will take on which tasks. In a smaller project group, it is common for each member of the group to take on more than one role.

The following roles, if they are required in the project, should be assigned:

- **Author** – the writer (usually writers) of the book.
- **Advisor** – a person who is not directly involved in writing the book and provides advice on its content and style.
- **Editor** – an editor checks the content and ensures a consistent style. The editor makes sure that the text is readable, understandable and does not contain mistakes (copy editing), that the attributions and references are correct and that the copyright of all non-text content has been checked.
- **Instructional designer** – a supporter who helps to identify the learning objectives of the different sections of the book and ensures that the content meets these objectives.
- **Copyright/acknowledgement support staff** – usually a member of the university library staff.



- **Designer** – produces the images, graphs and tables.
- **Peer reviewer** – a colleague (or colleagues) of the author who assesses the academic value of the content.
- **Proofreader** – a person who is not acquainted with the academic field and assesses whether the content is understandable and informative.
- **Project coordinator/manager** – responsible for the project organisation.
- **Review coordinator** – the person who coordinates the peer review process, collects the reviews and discusses them with the authors.
- **Publication coordinator** – the person responsible for the publishing process and tasks such as maintaining contact with the printers.

Some of these roles may be assumed by people who are not members of the project team, such as colleagues, students or other professionals. For this, the authors can approach their professional community, a professional society or a study association, or they can ask colleagues whether they would like to be a peer reviewer, for example. This also has the benefit of increasing awareness of the existence of the open textbook. Make sure that the authors inform these groups that they are writing an open textbook in time, as they may have information on the subject that they are willing to share. Students may also be involved in making an open textbook as a form of [open educational practice](#), for example by working with the team to produce a chapter of the book.

The Rebus Community identifies several specific external roles, such as a *beta tester* (someone who provides feedback on the open textbook before it is published) and an *accessibility reviewer* (someone who reviews the accessibility of the open textbook for readers with an impairment or disability, such as impaired vision or dyslexia). You could also consider using students for these roles.

Relevant for large (intra-institutional) projects: put together an editorial team

The authors put together an editorial team that organises the content creation process. A few of these editorial team members will also be responsible for most of the writing. The editors also read the contributions of other authors. An editorial team will consist of about six editors but, depending on the size of the project group, this could be up to 12. For example, for a project with about 35 authors, four editors may be needed, each of whom supports a group of authors. More than one project coordinator may be needed to organise the project, or one project coordinator and one project manager. The project coordinator is the first point of contact for authors, while the project manager focuses on keeping track of the project-related documents and tools, coordinating meetings and managing timelines and schedules.

Create table of contents

ESSENTIAL STEP

Make a draft table of contents for the book in a spreadsheet and assign the various chapters to the authors. You should also find out which content is already available.

The lecturers decide which topics are to be included in the book and in which order. If necessary, discuss the type of interaction that they hope to achieve with the different parts of the book. How can they engage readers in the various topics in the book?

An [example](#) of a chapter with learning objectives is given on edusources.

List the table of contents in a spreadsheet and assign chapters to the authors. Who is going to write what? Will authors work together on the chapters or will they work individually on their own chapters? It is useful if a co-authored spreadsheet is used, so that everyone has access to it at all times. You can add information about the content to the spreadsheet as the project develops: does it concern plain text, a video, a table, an image, exercises, and so on?

Timelines and deadlines

ESSENTIAL ORGANISATIONAL STEP

Support the lecturers where necessary in deciding on the best approach to take, scheduling meetings, organising the peer feedback process, setting the timeline and deadlines, motivating the team, expressing recognition of other people's input, maintaining the content and organising version management.

Approach

- The authors agree on the writing style and the structure of the chapters. If the book is intended to be easily accessible, an informal style is preferred to an academic style.
- The authors should also agree on a consistent system for quotations. Remind them that quotations should always be copied word-for-word. The usual way to write a short quotation is to incorporate it into the text and enclose it in double quotation marks. Longer quotations are not enclosed in quotation marks but are placed separately from the text, indenting the whole of the quotation and inserting a white line before and after it. The author can use three full stops between square brackets to indicate that the quotation



is incomplete. More information on this can be found in the Utrecht University (UU) [LibGuide](#) and at [Netwerk Auteursrechten Informatiepunten](#).

- Make sure that the authors also agree on how they will use images. The number of images in each chapter and the size of the images will depend on the topic, but they must always support the book's learning objectives. Rules on how to refer to online images can be found in the UU [LibGuide](#). Explain to the authors how to correctly attribute other people's work. Information on including images is also provided in these [guidelines](#).

Timeframe

For a group of lecturers who have never made an open textbook together before, good project planning can be a challenge. As someone who has experience in providing support, you are probably in a position to determine whether the project plan is realistic. Help the authors to decide on the timeline, the number of chapters that they need and required collaboration with other experts. Create a production and publication schedule with milestones.

How long does it take to write a textbook? This depends on the ambitions, the format of the book, the amount of existing content and the number of authors, but also on the time that the authors have available. Some teams, for example, meet once a month for a writing day, while others organise writing weekends to boost production. Whatever you decide to do, make sure to include extra time for unexpected delays.

Deadlines

The authors agree on a reasonable deadline for delivery of the draft version of each chapter. Try to get an idea of how strictly they think they should adhere to the deadlines. What will they do if an author fails to meet a deadline? Make sure that enough time is factored in to allow for delays.

Time indicators

It is difficult to provide a good indication of how long it takes for a first draft to be ready, as this can depend on the number of pages, the proportion of reused materials and the complexity of the content. There are examples of small primers that are made in three days, but a book of more than 250 pages can easily take several months. In any case, make sure to include plenty of time in the schedule for preparation and production, so that you do not run into problems if certain deadlines are not met.

It is very important to know how much time is required once the manuscript is ready. Publication of the open textbook can take another 12 to 16 weeks, depending on the size of the book and whether or not it is to be printed. Let the printers know that the book is on its way about two weeks in advance, so that they can get started as soon as they receive the PDF.

Time indicators for publication of the manuscript:

Book of up to 50 pages

Preparing book for open publication	20 hours
Editing by editor/copy editor	2 weeks
Processing	2 - 3 weeks
Publication	2 - 4 weeks
Printing paper version (optional)	1 week (give printer advance warning)

Book of 50 to 250 pages

Preparing book for open publication	40 hours
Editing by editor / copy editor	3 - 4 weeks
Processing	2 - 3 weeks
Publication	2 - 4 weeks
Printing paper version (optional)	1 week (give printer advance warning)

Book of more than 250 pages

Preparing book for open publication	80 hours
Editing by editor / copy editor	6 - 8 weeks
Processing	2 - 3 weeks
Publication	2 - 4 weeks
Printing paper version (optional)	1 week (give printer advance warning)

Meetings

How often do the authors want to meet? Will they meet in person or online? Large groups usually meet at least once every two months, but this very much depends on the specific situation.

Peer feedback process

The authors agree on how they will provide feedback. Normally, the editors will read all of the content, but if this is expected to be too much work, it may be better to divide up the chapters and assign one or two reviewers for each chapter. Agree beforehand to only provide constructive criticism. Normally, an editor will coordinate the collection and processing of the peer feedback process. The lead editor sends the chapters to the reviewers



and discusses the feedback with the author of the chapter. For a large project, for example with 35 authors, it may be more convenient to assign several lead editors, for example one per module. Some platforms, such as [Wikiwijs Maken](#), make it possible to work simultaneously on the chapters rather than sending them to each other.

Motivating the team

Make sure that the team celebrates milestones. For example, you could agree to eat out together when a certain milestone is reached, or you could organise a weekend writing retreat to keep up people's motivation.

Recognise everyone's contributions

People put a lot of time and energy into the project, so make sure that the project group recognises everyone's contributions. Encourage the authors to think about how they can show their appreciation, for example by taking the time to thank people for new chapters or feedback.

Updating content

Agree with the team how the book will be kept up-to-date.

- Who will maintain the book? This could be the project coordinator, but you could also give all of the authors access to the book. The advantage of the first option is that one person keeps a record of all the changes made to the content. The advantage of the second option is that authors can make changes to their own chapters, for example in response to feedback from students.
- How often should revisions be carried out? This really depends on how dynamic the book is – developments take place in some fields more rapidly than in others, and these will therefore require newer editions more often. In the case of less dynamic content, we recommend updating a textbook at least once a year.



Integrating the open textbook into teaching

ESSENTIAL STEP

An open textbook offers more opportunities for interaction with the reader than a paper book. To make optimum use of this, the authors should write the content with the intended learning objectives in mind. If necessary, engage an instructional designer/education specialist to help identify the learning objectives and translate these into the learning experience (form of content, interaction).

[The wheel of insight tool](#) gives you an idea of how different types of content can support different learning objectives and activities.

Make sure to think about the transitions between chapters. Suggest starting each chapter with an introduction that describes the learning objective and ending with some review questions.



Add the learning objectives to the table of contents in the spreadsheet, so that you have a good overview of which learning objectives are covered in which chapter.

You can also discuss the structure of the content and the learning objectives with an instructional designer.

Keep track of the type of content that is used in the open textbook and the implications of this for accessibility and interaction. Also check whether a certain type of action is permitted under a particular licence. For example, an interactive assignment may require students to mark a photograph ('what happens where in the photo?'). In this case, not only must the reader be capable of editing the photograph, it must be permitted under the CC licence. If not, you will need to discuss an alternative to the photo or the assignment with the author.

Students can be given an active role in creating an open textbook. For example, they could update the contents of the book by incorporating new academic insights. An [inspiring example](#) comes from BCcampus in Canada, where a study showed that not only did students understand the information better as they were using it more actively, but that the language used by co-students to write content was easier to understand for the students using it.



If content is made by students, you should advise the author on where the content should be stored before publication in the open textbook and which review and editing processes are required before publication. Find out whether the platform supports this.

Permission is required for the reuse of content written by students before it can be published in the open textbook. Advise the authors on how they can obtain this permission. Students who contribute to the content of an open textbook can be asked for permission in advance (sign a contract) to publish their contribution under the author's name. The students can then be named and thanked in the textbook.

Suggest that lecturers use the open textbook in a course as a pilot to obtain student feedback. This should preferably be arranged early on in the preparation phase, so that the authors can try out the textbook or parts of it either while they are making the content or during the publishing process.

Collect the authors' own content

ESSENTIAL STEP

Schedule an intake meeting with the authors and make sure to also discuss copyright issues during this meeting. Even if all of the content has been made by the authors themselves, a copyright check should still be done. Is the author certain that they own the copyright? How do they know this?

The authors collect together all of the content that they have made over the years that is relevant to the topics included in the book. Assess whether the content needs to be adapted and how much work this will entail. For example, does text need to be rewritten or do images need to be replaced or redesigned? Use a spreadsheet or a to-do list, with actions such as 'rewrite text' or 'replace figure' and the status of each action. If a book has a lot of figures, you could make a separate list of all of the figures and their status. Discuss the items on this [checklist](#) (in Dutch) with the authors during the intake meeting.

Make an inventory of external content

ESSENTIAL STEP

The authors can use the table of contents to work out whether external content is needed. Provide support where necessary to help them make an inventory of: a) materials that they can reuse directly, b) materials that they can reuse after adaptation, and c) content that they will have to make themselves.

Estimate how much own author's content is available and how much external content is required and agree with the project team on how this external content will be collected. The authors may choose, following instruction, to search for suitable open content themselves, or you can help them with this. It is also possible to conduct a random copyright check. Do not forget to agree where the content will be stored.

An existing book:

Incorporate this inventory into the draft table of contents in the spreadsheet that was made in the 'Create table of contents' step.

Using the table of contents in the existing book, identify which content is already available. This will depend on how the authors intend to reuse the existing book: for example, do they want to translate, update or rewrite it? If there are any gaps left, these need to be filled with new content.

A new book:

Incorporate this inventory into the draft table of contents in the spreadsheet that was made in the 'Create table of contents' step. Is content available for every item? Make sure that the authors start to gather their own materials together, such as lecture notes, slides and scripts.

They should also find out whether their colleagues have suitable materials specifically related to the content of the book. You could also suggest that they approach their academic communities for relevant content.

Support the authors if necessary in their search of open textbook repositories, as they may find suitable content that they can reuse.

Once they have completed the inventory, the authors go back to the spreadsheet. Are the chapters in balance? Does the structure support the learning process? Is each chapter long



enough? Is there sufficient variation in content: text, video/audio, animation, interactive questions? Identify any gaps and discuss any required changes and additions with the team. If necessary, involve education experts in the process. Work out what still needs to be written, assign the various tasks and update the spreadsheet accordingly.



Determine the modularity

ESSENTIAL STEP

We recommend that you create content that is modular. This makes it easier for other lecturers to use the book as they do not need to adopt the whole book but can implement single chapters. You also need to consider modularity with reference to the structure: content that makes a lot of references to other parts of the book will be difficult to use as a separate module.

'Maak het vindbaar is quite a specialised book and students often only need a few chapters of it, so it didn't feel right to have them pay for the whole book.'

Peter Becker, lecturer in information management at The Hague University of Applied Sciences and one of the authors of the open textbook [Maak het vindbaar](#).

Determine type of content

ESSENTIAL STEP

Encourage the authors to make the book as interactive as possible. With the learning objectives in mind, they should determine which type of content is needed: video, exercises, software, data, text, and so on. If necessary, ask an instructional designer to help the authors decide on suitable content that reflects the learning objectives.

Type of content

Formative tests not only show readers how much they have understood, but they also show the authors whether changes are needed in the content. After all, if a lot of students score low on a particular question, a better explanation is either required or the question needs to be rephrased.

The Towards Digital (Open) Educational Resources acceleration zone has developed [the wheel of insight tool](#), which shows which type of OER is best suited to a particular kind of learning objective and didactic method.

Tips:

- It is very important that videos are embedded in the open textbook so that the reader does not need to go to a different platform to view the video.
- It is also useful to subtitle videos so that they can be viewed in public areas without the need for headphones.
- Place QR codes or TinyURLs in paper textbooks so that readers can load the video in a 'second screen'.
- Discuss how to embed videos in the textbook with an instructional designer.
- Read more in the open textbook about annotations, introduction videos and accessibility in relation to inclusivity.

Annotations

Would the textbook benefit from the possibility to add annotations? Students may find it useful to be able to jot down questions and comments in the text, and there are tools that can be used to make the annotations visible for others. Students can therefore add comments to the text to discuss with each other or write questions for the lecturer. [Hypothesis](#) is a suitable tool for public/social annotations. Whether or not you decide to use annotations will also influence the choice of publishing platform, as it needs to support the annotation tool.

Introduction videos

Consider starting each chapter with an introduction video in which the author briefly explains what the chapter is about. This is not only a good way of introducing the subject, but it also quite literally gives a face to the book.

Accessibility

There are legal requirements in place to ensure that higher education is as inclusive and accessible as possible. The web content accessibility guidelines also apply to open textbooks that are made by institutions.



The following reference sources may help the authors to ensure accessible content:

- digitoegankelijk.nl
- [Digitale toegankelijkheid van het hoger onderwijs nu belangrijker dan ooit \(Digital accessibility of higher education more important than ever\)](#)
- [Inclusive education and digital accessibility \(ECIO\)](#)
- [Digitale toegankelijkheid hoe zijn verantwoordelijkheden binnen de onderwijsinstellingen \(Digital accessibility: who is responsible for what in education institutions?\)](#)
- [Tips om online onderwijs meer toegankelijk en inclusief te maken \(Tips to make online education more accessible and more inclusive\)](#)
- [Open inclusive course material \(UM\)](#)

Here are a few guidelines, mostly from the brochure '[Verbeteren digitale toegankelijkheid in het hoger onderwijs \(Improving digital accessibility in higher education\)](#)' (2020, PDF), produced by the Expert Centre on Inclusive Education (ECIO):

- Students with autism, ADHD and other cognitive impairments are helped with simple web pages containing clear text and a simple structure.
- Students with a sight impairment often want to increase the size of the text on the screen, so for them a good contrast is important.
- Blind students use their own Braille display or screen reader to 'read' the content of a web page, which means that they will miss anything that is not included as text. Text equivalents should therefore be provided for images, tables, videos, buttons and formulas.
- Users must be able to navigate on the screen using only the keyboard, as blind students cannot see a cursor and therefore cannot use a mouse. People with motor disabilities may also use only the keyboard or other aids to work online. A simple and consistent page structure and the use of a heading structure in texts are also necessary for navigating using a keyboard.
- Many deaf people prefer to use sign language to communicate, which means that Dutch is not their first language. It is therefore very important for them that the text is easy to understand, in the same way as for other students with Dutch as their second language.
- Make sure that a transcription and/or subtitling is available for video and audio. This also helps students who are working in a noisy area without headphones.

Determine output format

ESSENTIAL STEP

Various file formats are used for open textbooks, including PDF, EPUB and HTML. You do not need to limit yourself to one format, as some publishing platforms allow you to publish books in different formats.

Help the authors to decide on suitable output formats by making an overview of the different formats, the platforms that support them and how to create them. Also include in the overview whether and how the formats can be integrated into the learning environment. You could then publish the overview on a website or as a flyer.

Format	Read using
PDF	Adobe Reader
HTML	an internet browser
EPUB	eReaders (except Kindle), iPhone and Android apps, Firefox- and Chrome extensions, Google Play books
MOBI (.AZW3)	Kindle e-Book
EPUB is generally considered to be the most accessible format for screen reading software.	

Point out to the authors that what works well in one format does not necessarily work well in another. For example, if they decide to make a paper version of the book, students will need QR codes or TinyURLs to access the audiovisual content. Furthermore, if they are keen for the book to be reused, they should not only publish it in PDF format. HTML is easier to adapt for lecturers who are acquainted with it, and a PDF that is published together with the LaTeX source code is also easy to edit. The .docx format and online text editors such as Google Docs are also easy to reuse. VU Amsterdam has good experience with using Wikiwijs Maken to publish open textbooks directly in various formats.



Select platform

ESSENTIAL ORGANISATIONAL STEP

Advise the authors on the possibilities provided by the different platforms. Based on your advice, they should choose a platform that meets their requirements in terms of language, output formats, price and collaboration possibilities.

'As well as the interactive and multimedia aspects, the platform also needs to be user-friendly for students. We don't want to send them all over the internet – all the information needs to be available in one comprehensive textbook. The open source platform [Pressbooks](#) turned out to meet all of our requirements.'

Myroslava Zhuk, academic information specialist at the University of Groningen Library

Things to consider when choosing a publishing platform:

- Which language or languages is the platform available in? A Dutch-language platform may not be very useful for an international group of authors.
- Which formats will the open textbook be available in? If the publishing platform only offers PDF, you will have an open textbook that people cannot easily adapt.
- Is knowledge of HTML required to be able to use the platform? A platform that requires knowledge of HTML is only useful if the authors have this knowledge.
- Can several authors work on the open textbook at the same time? Some platforms provide access through a single author account, which is not very useful if you are working as a team of 65 authors on an open textbook.
- How much does the platform cost? There are free publishing platforms and there are platforms with a free, restricted, version and a paid version with more features. Some platforms require the institution to purchase a licence.

A project team may also choose to use the platform for publication but to organise the collaboration in another online environment such as Microsoft Teams, or to send chapters to each other by email. Be aware however, that this can cause problems with version management, as different versions of the chapters will be in circulation at the same time. The institution's library or the IT department can provide advice on suitable writing and collaboration software.

Some institutions have already selected a platform to be used by the whole of the institution; for example, VU Amsterdam uses [Wikiwijs Maken](#). Supporters at TU Delft let authors choose from a selection of platforms that TU Delft has experience with after discussing the advantages and disadvantages of each, while UG provides support for authors who work with Pressbooks to make open textbooks.

Popular platforms include:

- [Pressbooks](#)
- [Sunbird](#)
- [Wikiwijs Maken](#)
- [OpenStax](#) (requires knowledge of HTML, cannot be used by more than one author at the same time, currently migrating to Google Docs)
- [Overleaf](#) (previously WriteLaTeX)
- [Editoria](#) (open source)

If the authors choose a platform that the institution does not yet have any experience with, you will need to register with the platform as an institution and arrange technical support, for example by training library staff to provide support for authors on the platform.



Arrange permissions

OPTIONAL ORGANISATIONAL STEP

Access to the publishing platform can be organised by the authors themselves or by the library staff. You need to think about the level of access for each role.

Administration

Make sure that it is clear who is responsible for administration of the open textbook – the library or the project team – and communicate this on the institution and/or department website. The administrator controls author access to the chosen platform, so make sure that they have a demo or instructions on how to use the platform.



Who has which permissions?

Different roles can be assigned different levels of permission on publishing platforms. For example, some roles can only read the content, while others can edit other people's content. For a small project group, all of the authors will be on the editorial board and it will therefore make little sense to organise different levels of permission. Proofreaders, supporters and copy editors must also be assigned the correct permissions to be able to access and edit the book.

Relevant for large (intra-institutional) projects: assign different levels of permission

A large project group will have both an editorial board and a group of authors and permissions may differ for each group. For example, the editorial board will have access to the contact details of all the authors. Some supporters will also have editing permissions, as they are involved in the publishing process and design.



Identify publisher contracts

ESSENTIAL STEP

The institution may have agreements in place with publishers for reuse. Find out which existing content can be copied or reused and whether contracts have been drawn up for previous publications.

Draw up a list of the agreements made with publishers and agree on how this list will be kept up-to-date within the organisation.

Find out whether and how the content was previously published, such as in lecture notes or as a book. Which kinds of contract were drawn up with the publisher at the time? Imagine, for example, that an open textbook is going to be made based on an existing lecture notes. If lecture notes were printed by a publisher, agreements may be in place concerning ownership of the text and you may not be able to publish the content.

Copyright and similarity checks

ESSENTIAL STEP

The copyright check carried out by the library is in fact an inventory of what needs to be done to make the content suitable for open publication. Note that not everything that lecturers use in their teaching can be published as open source material.

Unintended copyright infringement

Certain exemptions apply to education, including the virtual learning environment, that do not apply to open publishing. All content used in an open textbook must be royalty-free, or written permission must be obtained to be able to reuse the content. Authors often copy content without realising that they are not in fact permitted to reuse it. Authors may also think that they own the copyright to a book that they have written, but this may turn out not to be the case. To prevent expensive negotiations with publishers to obtain the copyright, it is important to very carefully check beforehand who holds the copyright on all of the existing content.

Similarity check

A similarity check must be carried out to make sure that authors do not reuse content without attributing it correctly. This can be done using plagiarism software.

Copyright on own work

If a lecturer at an institution of higher education creates an educational resource, it is in fact owned by the institution. Lecturers are not always aware of this, but the copyright on an open textbook is therefore owned by the institution. Some institutions, in particular universities, choose to assign the copyright of open textbooks to the lecturers concerned, as the copyright on research lies with the researchers and not the institution. You need to know how this is organised in your institution. You should also ask whether the type of CC licence that applies was chosen by the authors or by the institution.

Relevant for large (intra-institutional) projects: assign copyright

In the case of intra-institutional projects, the project group needs to decide how to assign copyright. For example, they could assign it to the institution that assumes ownership of the project.



Animation on digital educational resources by the Towards Digital educational resources zone.

There are several useful sources of information on copyright issues relating to OER. For example, more information on copyright can be found in the VU [LibGuide](#) and at [auteursrechten.nl](#).

Bij instellingsoverstijgende projecten is het aan de projectgroep om te bepalen waar het auteursrecht wordt belegd, bijvoorbeeld bij de instelling die het eigenaarschap op zich neemt. Zie ook: [Eigenaarschap beleggen](#).



Choose layout and template

ESSENTIAL ORGANISATIONAL STEP

Request the logos of the participating institutions or departments.



Assign ownership

ESSENTIAL ORGANISATIONAL STEP

Ownership of the open textbook must also be determined. Who will keep the book up-to-date? Who will make sure that the links still work in five years' time? Who will decide what to do with the open textbook if it is no longer used on a course?

Often, the project coordinator/project manager will be considered the owner of the open textbook. It is important that the project team agrees on what to do if this person moves job or retires or leaves for some other reason.

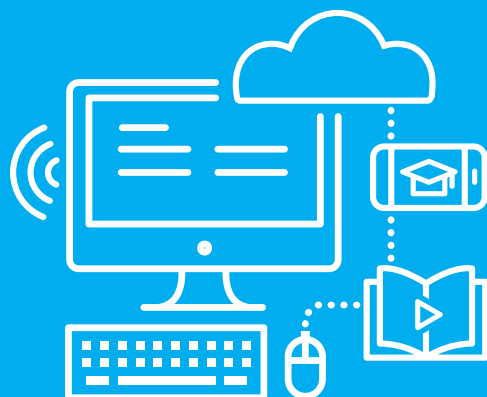
Make an overview of all of the published open textbooks and their owners and agree on how this will be kept up-to-date. For example, is there a functional email account or an online form that can be used to record changes?

Consider drawing up a commitment agreement; while it is not legally binding, it does record the commitment of each team member to the project. The authors commit to writing the book, while the supporters commit to contributing time, money and energy. Such an agreement is largely symbolic, but it can be helpful should an author decide to pull out halfway through the project. The choice of licence should also be named in the agreement, so that the conditions under which the author plans to publish are recorded in writing, as well as a rough outline of the project schedule and the responsibilities of the author and the supporters.

Relevant for large (intra-institutional) projects: assign intra-institutional ownership

Assigning ownership can be difficult in the case of a large (intra-institutional) project. Is co-ownership possible, or will a single institution assume ownership? Another option may be to assign ownership of the book to the academic community.

THE CONTENT PRODUCTION PHASE



Choose CC licence

ESSENTIAL STEP

Open textbooks are published under a CC licence. This licence describes what users are allowed to do with the book and under which conditions. If necessary, advise the authors on how to choose a suitable CC licence.

Explain the basic principles of copyright to the authors. As with commercial educational resources, copyright also applies to published open textbooks, which therefore have a copyright holder. Open textbooks are however published so that other people can use, share and edit them, and even publish new versions of them. Normally, explicit permission would have to be obtained from the copyright holder for this kind of reuse of their textbook. This is however not very practical for open textbooks, which are therefore usually published under a CC licence.

A CC licence is a licence that allows anyone, under certain conditions, to reuse and share content without having to request the explicit permission of the copyright holder. Lecturers can therefore simply use parts of an open textbook in their own course or reuse parts of existing open textbooks in their own open textbook. Clear explanations of CC licences can be found online, and you can use these to explain how they work to authors.

When making an open textbook, we recommend that you decide early on in the project which kind of CC licence will apply, as this can have implications for the way in which the book is published.

It is also important that everyone is aware of the institution's policy on OER. Find out whether your institution has already chosen a certain type of CC licence and make sure that this is known within the institution (communicate it on the institution's website or in a flyer).

There are six different types of CC licence, each with different conditions for reuse:

1. **CC-BY:** Reusers may use, adapt and distribute the material, as long as attribution is given to the creator.
2. **CC BY-SA:** Reusers may use, adapt and distribute the material, as long as attribution is given to the creator. If the material is used in new content, this must also be licenced under a CC BY-SA licence.
3. **CC BY-ND:** Reusers may distribute the material, as long as attribution is given to the creator. The material may not be adapted or adopted in other publications.



4. **CC BY-NC:** Reusers may use, adapt and distribute the material, as long as attribution is given to the creator. Only non-commercial uses of the work are permitted.
5. **CC BY-NC-SA:** Reusers may use, adapt and distribute the material, as long as attribution is given to the creator. Only non-commercial uses of the work are permitted. If the material is used in new content, this must also be licenced under a CC BY-NC-SA licence.
6. **CC BY-NC-ND:** Reusers may distribute the material, as long as attribution is given to the creator. Only non-commercial uses of the work are permitted. The material may not be adapted or adopted in other publications.

More information about CC licences can be found on the site [CreativeCommons.org](https://creativecommons.org). For help with choosing a licence, you could use the [Chooser CC](#) licence chooser or [OpenWa](#). These online tools can be used to correctly cite CC-licensed materials. The Introduction to open educational resources by SURF provides an [overview](#) of the building blocks of CC licences.

Additional open educational resources

ESSENTIAL STEP

There may be additional content that can be used in the book that the authors have not found. If necessary, help them to look for more suitable content on OER platforms.

Agree with the project team how the external content will be structured and where it will be stored prior to publication.

The [Introduction to open educational resources](#) by SURF explains how lecturers can reuse other people's learning materials in three steps: search & find, assess and adapt.

Search criteria

Dit [werkblad](#) beschrijft een stappenplan voor het zoeken naar open content. Om tot de juiste zoekcriteria te komen, begin je bij de leerdoelen waaraan te vinden content bijdraagt. Welke sleutelwoorden horen er bij deze leerdoelen? Dit zijn je zoekcriteria.

Hier volgt een opsomming van openbare zoekportalen voor:

Open textbooks

Penn State University maintains a [list](#) of platforms that contain high-quality open textbooks.

Open teaching materials

- [edusources](#) searches repositories for Dutch- or English-language educational resources in the Dutch higher education sector.
- [OER Metafinder](#) simultaneously searches 21 different sources of open educational materials, including [BC Campus](#), [Directory of Open Access Books \(DOAB\)](#), [Merlot](#), [OER Commons](#), [OpenStax](#) and [Open Textbook Library](#).
- [OASIS](#) (Openly Available Sources Integrated Search) simultaneously searches 114 different sources of open educational materials, including [BC Campus](#), [Directory of Open Access Books \(DOAB\)](#), [OpenStax](#), [Open Textbook Library](#), [Sunny OER Services](#), [TU Delft Open Course Ware](#) and [TU Delft Open Books](#).

Images, photos and/or videos, in alphabetical order

- [Europeana](#) provides access to more than 50 million images, videos, texts and more. It provides search and filter tools as well as licence information.
- [Free Stock Photos.biz](#) Free public domain (royalty-free) or CC licence photos. Images that require payment for use are watermarked.
- [OASIS](#) (Openly Available Sources Integrated Search) simultaneously searches [Librivox](#) (audiobooks), [Phet](#) (interactive simulations), [Wisc-online](#) (images, animations, audio and video clips) and [TED](#) (presentations) and more.
- [Pexels](#) Photos and videos with a CC0 licence.
- [Pixabay](#) Free photos, images, vectors and videos.
- [Techniek Beeldbank](#) Free images and videos on learning and working in the world of technology.
- [Unsplash](#) Free high-resolution photos with a CC0 licence.
- [Videezy](#) Free HD images and videos. Make sure to check the licence information.
- [Wikipedia](#) Almost all images on Wikipedia have a CC licence and can be reused.

Additional overviews of search portals for OER

- [Curated overview of open resources](#) by Robert Schuwer.
- [Open Educational Resources](#) by TU Delft – focuses on STEM subjects.
- [Free material](#) websites with free open source multimedia materials, via TU Delft.
- [LibGuide](#) Such as the Dealing with copyright in education guide by VU Amsterdam or a LibGuide from your own institution's library.



Using open content

If authors use open source materials that they have found online, they must acknowledge the creator, even if the material was published under a CC licence.

If they use images that they find on the internet, it is important that they make absolutely clear:

- who the creator is
- where the image can be found on the internet
- whether copyright applies, who owns the copyright and whether permission has been given to use the image (e.g. through a user licence or obtained directly from the copyright holder):
- in any case, the creator, the year of publication, the title and a link to the source must be provided
- authors may also use the [Attribution Builder](#) to generate attributions

Rules on how to refer to online images can be found in the [Utrecht University LibGuide](#).

Support the authors where necessary to ensure that they attribute images correctly, perhaps by carrying out a random check.

Adapting open content

Make sure that the authors are aware of which licence applies to the open source material and that they adhere to the relevant conditions. The licence of the open source material must be compatible with the CC licence under which the open textbook is to be published.

Versions of the source must also be provided; if an author changes the original version, this must be made clear, for example by writing beneath the image: 'this is a derivative of...'. It is also possible to include a copyright section in the back matter (the part of the book that appears after the main content), with an overview of all sources of and adaptations to images. Whether this is worth the time depends on the platform that you are using and the functions that it provides to support this.



Copyright check

OPTIONAL ORGANISATIONAL STEP

Only include content in the open textbook that is royalty-free or for which permission for reuse and republication has been provided. Identifying whether a material is subject to copyright can be quite a job, so you should support the authors in this as much as possible.

Preparing a textbook for publication means that all of the attributions and footnotes need to be checked and that all of the materials used in the book, such as images, audio and video files, graphs and formulas, are royalty-free and may be openly shared or reused.

The basic rules of copyright are explained on [auteursrechten.nl](#). Make sure that the authors take a look at the website before they start writing, so that they know what they need to be aware of, and tell them to get in touch with you if they have any concerns or doubts.

The copyright check is organised differently in different institutions. Develop a procedure for your own institution and communicate this on the institution and/or department website.



Inspiration

VU Amsterdam and TU Delft have a support desk that is manned by library staff for questions relating to copyright. The TU Delft copyright desk follows the procedure described below to achieve completely open source content.

1. A similarity check is carried out on all of the text using the plagiarism software [Original](#). Text that does not pass the check must be rewritten by the author or changed (see point 3).
2. A copyright expert assesses the attributions to images, sources, figures, own work and the work of others. The copyright expert then discusses any copyright issues in the book with the author.
3. Reuse of copyrighted text is possible if it is a citation or paraphrased, as long as the source is acknowledged of course.
4. Images often present the biggest challenge.



- a. When is an image a work of art? A vector diagram is not a work of art, and neither is a diagram of a scientific concept. Such images may therefore be included in the open textbook.
- b. A graph is, however, a work of art if it is copied directly from a commercial book, and so may not be used (see [this manual](#)). What can be done about this?
 - [Request permission](#) to reuse the graph. Reuse should be possible if the author or photographer has given their permission in writing. Note that copyright supersedes any other trade rights. Use these [example templates](#) to request permission to reuse a CC BY-SA image in a CC BY-NC-SA open textbook.
 - Use it as a citation (this is not usually a very good option for images).
 - Use an exclusion statement in which you state in the colophon that everything in the book is published under an open licence, with the exception of this image.
 - Have a diagram redesigned. A diagram from a commercial textbook may not be copied directly, but it may be used as the basis to illustrate a concept in a new diagram. Hire a designer to do this.
 - Refer to a video using a link, which is always permitted.
 - Find an alternative to a copyrighted photo or request permission to use the photo in the open textbook. Without this permission, you cannot use the photo.

TU Delft organises this process as follows: after a general copyright check has been carried out, the library can arrange for the author to hire a student assistant for 40 to 80 hours. The student assistant goes through the draft version of the open textbook, corrects attributions and footnotes and assumes responsibility for copying graphs and other images. The design of new images is not included in this 40 to 80 hours.

Some institutional libraries will produce a copyright report on request, in which they can give a general idea of whether images, sources, figures, own work and the work of others are correctly attributed. The copyright expert advises the authors on any copyright issues.



Monitor progress

ESSENTIAL ORGANISATIONAL STEP

The authors reflect on the agreements made in the [timeline and deadlines](#) step and whether they are realistic. They agree on how and when they will discuss the progress being made.



Start the writing process

ESSENTIAL STEP

Depending on how much existing content is available, the writing process can take many months. Make sure that clear agreements are in place before writing starts and that they are known to all of the authors.

Before they start writing, make sure that all of the authors know:

- what needs to be done and who will do what
- which agreements have been made concerning the writing process
- which agreements have been made concerning the writing style and the chapter structure
- which agreements have been made concerning citations
- which agreements have been made concerning the use of images



Design visual content

OPTIONAL STEP

Are new figures required, such as graphs, images, diagrams or videos? If so, help the authors where necessary to find a designer or illustrator and discuss which visual content is required.

A well-stocked rolodex is unmissable for supporters of the open textbook publishing process. Fill it with the names of designers and other external specialists that you or your colleagues have had good experiences with, preferably along with their hourly rates. Authors must be able to rely on you to choose the right people, as this can have consequences for the timeline and quality of the open textbook.

TU Delft uses students in this step, who should ideally be well acquainted with the subject matter and a good designer who knows how to use Adobe InDesign or Photoshop. In practice, two students are usually hired, each with their own talents.



Collect front matter

ESSENTIAL STEP

Front matter is all of the information that precedes the actual content of the book. This may just be a title page and a table of contents, but you can also include other information.

The front matter should include at a minimum:

- a title page with the book title, the author and the place and date of publication
- a table of contents with an overview of the chapters
- a copyright page showing which CC licence applies to the book

Consider including the following in the front matter:

- a [colophon](#), especially if a large number of authors and supporters have contributed to the book, also indicating whether the book is available in print (an example colophon can be seen [here](#))
- a [review statement](#) describing who reviewed the book and the review process
- a version history listing changes made to the open textbook
- a preface that explains how the book came about
- an acknowledgements section in which you name everyone who contributed to the book
- an introduction by an external expert

You can help the authors by providing an list of templates for their use. If your institution does not have suitable templates, the [templates](#) available here may provide some inspiration, or you can simply reuse them. The following templates are also available:

- [Colophon](#)
- [Preface](#)
- [Acknowledgement](#)

Collect back matter

ESSENTIAL STEP

Back matter is all of the information that appears after the actual content of the book, such as an epilogue, appendices and a bibliography. You could also include a feedback form so that readers can suggest improvements to the open textbook.

The back matter includes at a minimum:

- A brief description of the professional and/or private background of the author, which may be provided by the authors themselves.
- Exceptions to copyright, describing which text, figures or other content may not be reused according to the conditions of the CC licence under which the open textbook is published. In non-open publications, the exception to copyright is often provided in the front matter ('No part of this publication...'). The exceptions to copyright may also be included in the colophon, which is what TU Delft does.
- A bibliography.



Consider including the following in the back matter:

- An afterword. This is often provided in a new edition of a book, to describe the book's journey following publication, such as how it was received and how it is being used in teaching practice.
- A feedback form for readers to provide feedback on the book, so that improvements can be made to the next version.
- A list of abbreviations.
- A glossary: a list of terms / technical jargon specific to the field.
- An index so that readers can quickly find what they are looking for.
- Appendices, such as interviews or surveys that were conducted for the book.

[Open templates](#) are also available for the back matter.



Copyright check of manuscript

ESSENTIAL STEP

An initial copyright check was carried out in the preparation phase, but should be done again to check the new content.

Similarity check of manuscript

OPTIONAL STEP

An initial similarity check was carried out in the preparation phase, but should be done again to check the new content. This can be done using plagiarism software.



Hire an editor

OPTIONAL ORGANISATIONAL STEP

The editor or copy editor does not have to be an expert in the field, but it should be someone with an affinity with the topics covered in the book. The editor must be capable of independently editing all of the content in the open textbook.

The role of the editor

The editor edits all of the content: text, images, videos, exercises and tests. They make sure that all of the chapters have a similar tone and structure and that a consistent writing style is used.

The editor or copy editor may be an external professional, such as an education specialist or a freelance editor, or it may be someone on the project team. As well as style and readability, the editor or copy editor checks and corrects the grammar and spelling. If the relevant professional community or society has a list of preferred terms or a style guide, make sure that these are used.

Expert or layman?

Editors and copy editors are not normally subject experts, but this is an advantage if the book is intended for students and readers who are not already acquainted with the subject matter. If the editor finds a part of the book difficult to read or understand, the authors can assume that first-year students will also have trouble with it.

However, even if the editor is not an expert in the field, it is useful if they have some affinity with the subject matter. After all, an editor who is experienced in editing technical textbooks will be much better at reviewing a physics textbook than someone who has never seen a mathematical formula before. You can find an editor with experience of working in the relevant field through the department and professional community (of SENSE).

Timeframe

An editor will normally need four to six weeks to edit a book. Make sure that the editor receives the text in a format that they can work on, such as a .docx file or a Google Docs document, or that they are given access to the publishing platform.

Structure the peer review process

OPTIONAL ORGANISATIONAL STEP

It is up to the authors to decide whether or not they want the book to be peer reviewed. After all, peer review is a time-consuming process and they will need to find people in their network to do the reviews. The authors may also decide to review each other's chapters.

When is peer review recommended?

Academic research papers are peer reviewed to check the validity of the academic work. This is not normally considered necessary for an open textbook, as the authors – being university lecturers – are of course experts in the subject matter. Even so, the quality of the book can be improved if it is reviewed by fellow experts.

The authors develop a procedure for reviewing and editing the chapters and one team member is appointed review coordinator. If they decide to make use of external peer reviewers, they need to decide who they will ask. The authors then approach the reviewers themselves, as they have the relevant contacts in their networks.

The peer review of a book is of course a huge job, so discuss with the authors how they will reward and recognise the contributions made by the peer reviewers.

To discuss with the core team:

- What are the advantages of peer review compared with feedback from the copy editor and students? One advantage may be that reviewers become acquainted with the book and therefore use it themselves. Another advantage is that it improves the quality of the book to have it reviewed by experts in the field.
- Will they use different reviewers for different chapters, or one for the whole book?
- Which tool will the reviewers use? Will they be sent the chapter by email, review it in Google Docs or be given access to the collaboration platform used by the authors, such as Wikiwijs Maken?
- Which aspects of the book would benefit from feedback? You could adapt or use the Open Textbook Library [peer review form](#) to organise the peer review process.

PUBLICATION PHASE



Final checklist

ESSENTIAL STEP

The final checklist is used to collect the metadata – or information about the book. This includes keywords and a description of the book and the authors, as well as a photograph for the cover. A paper version will also need text for the back cover.

Checklist for collecting metadata

- Obtain digital passport photos of every author.
- Ask every author to write a short description of themselves, including at a minimum their job title and place of work.
- Ask the authors to write a short, intriguing summary of the book. This will be placed on search platforms for open textbooks, so it needs to attract target readers while also clearly explaining what the book is about.
- To make reuse easier, make sure that each chapter is numbered and accompanied by a short description.
- Of course, reuse is only possible if the open textbook is easy to find, and this requires a summary of the book and metadata, including keywords. The authors can do this themselves, but provide support if needed. You should have a list of the required metadata, although this may be provided by the platform. In the case of Wikiwijs Maken, the metadata is harvested directly by Edurep Delen and the book is therefore findable on the Dutch edusources platform. The metadata can also be used again on a different platform.

Accessibility

- On some online platforms, you can test the accessibility of a document and convert it into an accessible format.
- [NonVisual Desktop Acces](#) Free Windows software to test accessibility for the blind and visually impaired.
- [DAISY Consortium's Pipeline](#) A free programme that converts text documents into formats that are accessible for the blind and visually impaired.



Relevant for intra-institutional projects: intra-institutional design

It is important to think carefully about the design of an intra-institutional project. While this will of course be different from the style of the individual institutions, it must be recognisable as a product of the participating institutions. You can of course restrict yourself to displaying the logos of the participating institutions, but it may be worthwhile hiring a professional designer. Make sure to involve the university press office and/or the communication department of the participating institutions in the decision-making process.

Deliver all output formats

ESSENTIAL STEP

Make sure that the book is available in every format that the authors wish to publish it in. Some publishing platforms make this process very easy.

Design the cover

OPTIONAL ORGANISATIONAL STEP

The authors discuss the book content and their ideas for the cover design with the designer. They also need to think about a suitable photograph for the cover. The designer will make proofs of the cover, from which the authors will select one. For more information, take a look at [this manual](#) on cover design.

Relevant for intra-institutional projects: template for open textbooks

If you wish to make a template for a book that is to be published as part of an intra-institutional project, you need to gather all of the institutions' logos and check that they are the most recent version and in the house style. You will need to decide on the font, colour and form, and don't forget to include the logos of subsidy providers.



Organise student feedback

OPTIONAL ORGANISATIONAL STEP

Some lecturers use parts of the open textbook on a course before the manuscript has been finalised, while others might ask students to provide feedback on the first draft. Another option is to organise a feedback loop (e.g. an annual loop) in which each group of students receives an improved version of the book.

Organise peer review

OPTIONAL ORGANISATIONAL STEP

If the authors have decided to have the book peer reviewed, the manuscript should now be sent to the reviewers. The review coordinator will communicate with the reviewers, collect the reviews and discuss them with the authors.

The review coordinator should discuss the following with the reviewers in advance:

- The purpose of the review.
- Expectations concerning the review, e.g. remind the reviewer that the feedback must be constructive.
- How much time the reviewer has for the review; agree on a deadline.
- Which aspects of the book require feedback. The Open Textbook Library [peer review form](#) can be used for this.

The review coordinator also keeps the peer reviewers informed of the book's status after they have submitted their review.



Finalise the manuscript

ESSENTIAL STEP

The authors need to process the student feedback and peer reviews before presenting the final version of the book to all of the authors, editors and reviewers. If there are no further changes or comments, this is the final manuscript.



Request ISBN & DOI

OPTIONAL ORGANISATIONAL STEP

Like all other books, an open textbook has an identifier, such as an ISBN and a DOI, which is a unique number that ensures that a publication can always be found online. You need to request an ISBN and a DOI. You can register a DOI at doi.datacite.org. Request an ISBN through your institution's library or directly at www.isbn.nl/isbn-aanvragen.

Contact printer

OPTIONAL ORGANISATIONAL STEP

If a paper version is to be printed, make sure to contact the printer in time to let them know when the book needs to be printed. The printing should take no more than one week.

To print or not to print?

Every TU Delft open textbook is available online on the platform and can be downloaded for free as a PDF. Some books are also available as print-on-demand, but this depends on the course.

'If the book might be useful in the future as a reference book, Master's students often like to have it on paper. For example, 120 of the 150 students bought the Coastal Dynamics open textbook. However, we also have an open textbook for a Bachelor's course that costs €14 but is only bought by 5 - 10% of the students.'

Michiel de Jong, project manager and researcher in open education at TU Delft



Publish on platform

ESSENTIAL STEP

Upload the open textbook to repositories and publish it on the authors' personal websites, in the institution's repository or on open and closed platforms such as [edusources](https://edusources.nl).

Aspects to consider when deciding which publishing platform to use include openness and reach. The publishing platform largely determines just how open the textbook is. Can the book only be downloaded from the platform or can other people who are registered with the platform also edit it? Is there a possibility that the book will disappear into obscurity on the publishing platform? The textbook will be displayed more prominently on a personal website, but will probably have a much smaller reach. Of course, you do not need to limit yourself to one publishing platform.

A repository is a digital storage place, rather like an online archive. Once an open textbook with metadata is uploaded to the repository, it can be accessed through search engines for open textbooks. Do not limit yourself to one repository if the open textbook's target group uses different repositories.

Uploading a textbook to a repository is in most cases self-explanatory. In many cases, institutions employ staff members who administer the repositories. Publishing platforms require you to make an account before you can upload a textbook. Usually, there is an option to 'Submit a Resource' or something similar on the platform, and all you need to do is fill in the relevant fields.



Recommended publishing platforms and repositories:

- [Open Textbook Library](#)
- [OER Commons](#)
- [MERLOT](#)
- A repository maintained by the institution or [SURFsharekit](#)
- [Wikiwijs](#)
- The institution's learning management system (LMS)

Recommended search engines for OER:

- [HBO Kennisbank](#)
- [edusources](#)

Other open textbook platforms:

- The personal websites of the authors
- The institution's book store

Integrate in the virtual learning environment

OPTIONAL ORGANISATIONAL STEP

An open textbook can usually be easily integrated into the virtual learning environment (Canvas, Blackboard, etc.), using the URL. Help the lecturer with this if necessary.

You discussed the possibilities for integrating the book into the virtual learning environment with the lecturer during the intake meeting. Make an overview of the functionality available on each platform, and ensure that other employees are acquainted with this.



Communication strategy

OPTIONAL ORGANISATIONAL STEP

Help the authors to find the widest possible audience for their book. Once the book has been published, you need to bring it to the attention of potential readers, colleagues and other professionals in the field. Organise a book launch.

'For the marketing of our open textbooks we use a newsletter, publications on the platforms and interviews, for example with [Kennisset](#). The authors also promote the books in their own academic communities.'
Sylvia Moes, innovation manager in education at the University Library (UB), VU Amsterdam.

While preparing the book for publication is largely the responsibility of the supporters, there are some things that the authors can do. For example, the authors are best placed to generate an audience for the book, and can bring it to the attention of potential readers, colleagues and other professionals in their field. Work together with the project group to identify where the greatest demand for the information provided in the open textbook lies.

The authors have already reached out to people in their professional network – now it's time to let people know when the book will be published. Don't forget to also advertise the book's publication throughout the institution. Most institutions are also involved in OER, open education and open science at a more general level, and these are suitable avenues for generating interest in the book, not forgetting of course the communication channels in the lecturers' own faculty.

Read more in the open textbook about how to organise a book launch, write a press release (also for social media), thank contributors and update your email signature.

Book launch

Organise a book launch to celebrate the book's publication and to generate interest. Make sure that everyone who attends the launch knows where they can find the book; hand out bookmarks, postcards or folders containing the book's URL during the launch.



Social media

Write a few short, intriguing promotional press releases for Twitter and LinkedIn and tag the participating institutions in your posts. You also need to come up with a hashtag for the book. Ask the institution's communication department or open science project to promote the open textbook in the same way. You can also promote the book through blogs (written by you, colleagues or other professionals in the field) and other communication channels in the professional network. Make sure that people can respond to your messages, and that you are notified of responses by turning on notifications. In this way, you can quickly answer any questions and thank people for spreading the word. You can also set up a Google Alert to notify you of any mention of the open textbook.

Thank-you notes

Don't forget to thank everyone involved for their contributions to the open textbook, from peer reviewers to students who provided feedback. Sending a thank-you note is also a form of marketing, as well as simply polite.

Email signature

Include a line in your email signature to say that you have written an open textbook and add a link as soon as it has been released. Also notify people of the release of the book on your LinkedIn profile.

Relevant for intra-institutional projects: write a press release

One of the advantages of working in a large project group is that each person in the group can do their own marketing. Write a joint press release, which individual team members can supplement with information on their own contribution to the book. A press release must answer the questions: who, what, where, when and how, as well as highlighting what is so unique about the book.



Collect post-publication feedback

ESSENTIAL STEP

Collect feedback from the book's readers. The lecturers can also ask students for their feedback on the book, at least for the first year that the book is used on a course.

The authors can ask readers to review the book, for example by including a feedback form with the book or providing feedback options on the publishing platform. Develop a procedure for requesting and processing these reviews. You could also consider recording short interviews with users to promote the open textbook. Another possibility is to use social/open annotation tools to obtain feedback from a wider audience.

'Using the material in teaching practice is the best way to make sure that the community stays active, because it forces you to continue to revise the content. We regularly receive feedback from colleagues and students, or we come up with improvements ourselves. The advantage of an online platform is that you can input the changes straight away, but this does mean having to ask colleagues to write or rewrite some passages again, getting them to return it to you and asking reviewers to check the new text. Continuous revision of the material remains a challenge.'

Kees van Gestel, professor in ecotoxicology of soil ecosystems at VU Amsterdam and project leader of the [Toxicology](#) open textbook.

Revise current edition

ESSENTIAL STEP

A open textbook is a living document, and the core team should meet once a year to decide whether revisions are needed. A good moment for this is a few months before the start of a course that the book is to be used on.

Revision, new version or new edition?

You need to make a distinction between a revision/update, a new version and a new edition. An update or revision is limited to correcting spelling mistakes or punctuation or

changing links, while a new version is a more comprehensive update that involves changing a formula, for example. If new content is added or old content is removed, this is a new edition.

Version management

The authors use the feedback that they receive to revise the current edition. The best way to do this is to save the revisions and implement them in one go, making sure to record the changes to the content in the version history, so that users can see what has been changed. Use a copy of the open textbook to make changes and replace sections and store older versions in your own archives. Some platforms also provide version management so that you do not need to set up your own archive.

Monitor adoption

ESSENTIAL STEP

Make sure that readers can provide feedback on the publishing platform. Publishing platforms also provide user statistics, which the authors have access to. On platforms such as edusources and MERLOT, users can give their feedback and also rate the content. On Wikiwijs Maken, the adoption and modification of chapters by users is monitored by a third party.



The Acceleration Plan for Educational Innovation with IT is a four-year programme from SURF, the Netherlands Association of Universities of Applied Sciences and the Association of Universities in the Netherlands, that aims to bring together initiatives, knowledge, and experiences to realise ambitions for higher education at an accelerated pace. This is taking place in eight 'acceleration zones'. In the Towards digital (open) educational resources acceleration zone, eight universities are working to ensure that students and lecturers have the opportunity to compile and use an optimal mix of educational resources.



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