



Social reading and collaborative discussion of documents using Moodle PDF annotation

Social reading refers to the shared reading and discussion of documents in online environments, but with a time delay and spatial separation. Using web-based annotation tools, learners and teachers can mark up and comment on documents together, engaging in a dialogue about the content of the document.

Social reading can deepen text comprehension, stimulate discussion and ultimately increase motivation to read.

There are many possible **applications**: For example, teachers can encourage the use of reading strategies for academic texts through small reading tasks embedded in the document or use questions to stimulate discussion for an online discussion of text content. Students can also use annotation tools to ask comprehension questions that can be answered by peers or the teacher. Peers can support each other, e.g., by explaining unfamiliar terms or providing links to more in-depth material.

The sometimes tedious reading of demanding scientific texts is thus transferred from individual study, in which students have to overcome challenges and possible motivational obstacles on their own, to a **situation of social learning**. In this way, difficulties in understanding can be made visible and solved, and learning from each other can be encouraged. The dialogic form of reading also promotes a deeper engagement with the learning content.

In **Moodle**, social reading can be implemented using the **PDF annotation activity**. The tool works in a similar way to annotating PDF documents with PDF readers (e.g. Adobe Reader/Acrobat): You can mark up text passages, add comments and replies (and a few other features). The document is stored in Moodle, not on the local computer. This means that the comments are visible to everyone in the course and thus an exchange between the students (and the teacher) is possible.

The use of PDF annotation is suitable for **asynchronous self-learning**. It is less suitable for synchronous reading and annotation, as new annotations are not displayed automatically, but only after the web page has been refreshed.

In this handout, we provide **instructions on how to use** PDF annotation in Moodle, as well as **didactic tips on social reading**.

A. Creating the PDF annotation

- In your Moodle course, switch to **edit mode** by clicking on the settings wheel icon at the top right.
- At the bottom of the section where you want to create the PDF annotation, click on



Add an activity or resource

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A. Creating the PDF annotation

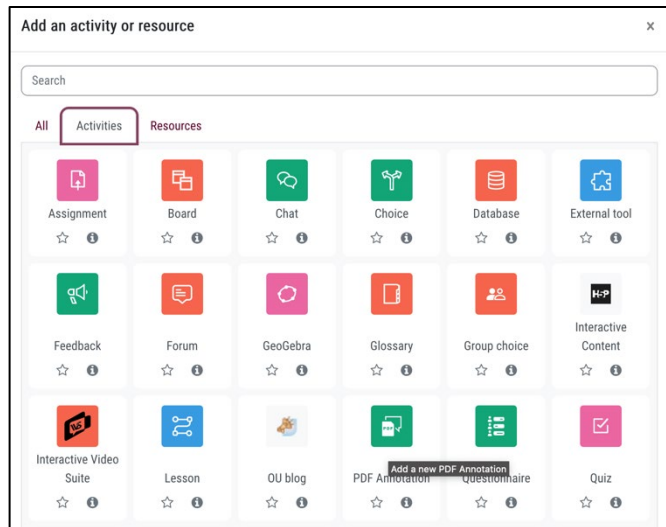
B. Using the PDF Annotation

1. Functional areas & views
2. Creating annotations
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Didactic tips for social reading



- Select the **PDF Annotation** from the list of **activities**.
- In the window that appears, enter a **title** for the activity and formulate a **task** in the Description field.
- Add a PDF file using drag and drop or the icon (*the icon is missing in the screenshot because a file is already selected*). If possible, use only **single-sided PDFs**. Double-sided documents will be displayed very small. (*Tip: Use the library's supervisory scanners to scan books. Double-sided scans can be separated into single pages*).



General

Name ! ? The social power of algorithms

Description

Rich text editor toolbar: Undo, Bold, Italic, Bulleted list, Numbered list, Link, Unlink, Image, Video, Audio, Embed, Refresh, Underline, Strikethrough, Subscript, Superscript, Bulleted list, Numbered list, Bulleted list, Numbered list, Bulleted list, Numbered list.

Read the text by David Beer (2017) with the following focus:


- What does Beer mean by the social power of algorithms?
- Why does he consider it important?

Highlight the author's references and outline in a commentary; the examples he gives...

Display description on course page ?

Select a pdf-file ? Maximum file size: 950 MB, maximum number of files: 1

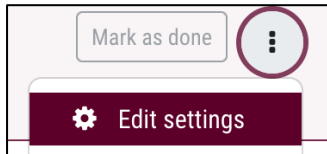
Files

 The social pow...

- You can select **different options**. Click the question mark icon to open an explanation of the option.
 - The **vote/like function** can be used, for example, to like comprehension questions to show which questions are most urgent.
 - The **text box** and **freehand drawing** allow you to make marks in the text, but you cannot add a comment directly to the text.



- When finished, select **save**.
- You can **change the settings later** by selecting *Edit settings* under the settings wheel. The **PDF document cannot be shared**. If you want to change the document, you must create a new PDF Annotation activity and delete the old one.



Votes/Likes	<input checked="" type="checkbox"/> Allow users to like comments. ?
Textbox	<input type="checkbox"/> Enable textbox tool for participants? ?
Drawing	<input type="checkbox"/> Enable drawing for participants? ?
Save and print pdf document	<input checked="" type="checkbox"/> Give participants access to the PDF? ?
Save and print comments	<input type="checkbox"/> Give participants access to the PDF and its comments? ?
Allow personal notes	<input type="checkbox"/> Allow participants to write personal notes? ?
Allow private comments	<input type="checkbox"/> Allow participants to write private comments? ?

B. Use of the PDF annotation

1. FUNCTIONAL AREAS & VIEWS

The PDF annotation display is divided into four functional areas: two menu bars (top), the document view (left) and the annotation block (right) (Fig. 1).

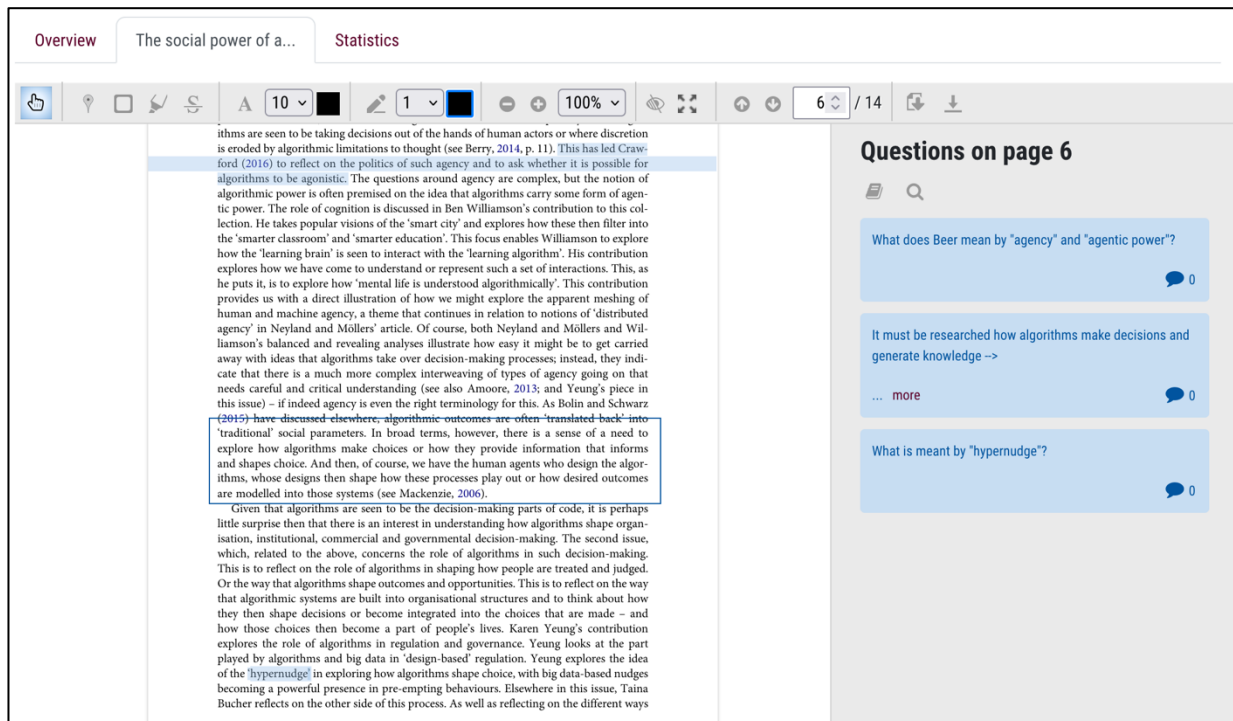


Figure 1

- By default, the **top menu bar** displays the middle tab, whose name corresponds to the title of the activity. The *overview* tab shows the annotations of **all** the PDF annotation activities in a Moodle course. The *statistics* tab shows how many annotations have been created in each document.



- The second menu bar contains the **editor area**, which includes tools for annotating, zooming, page navigation and printing.
- The **document view** shows the PDF and the annotations: for example, underlining, frames or a pin as a placeholder for comments.
- The text comments on the annotations are displayed on the right in the **comments block**. There are **three views** in the comments block:
 - The list of all comments on the current page (Fig. 1).
 - Individual comments (Fig. 2)
 - The number of comments (questions) on each page in the document (Fig. 3).

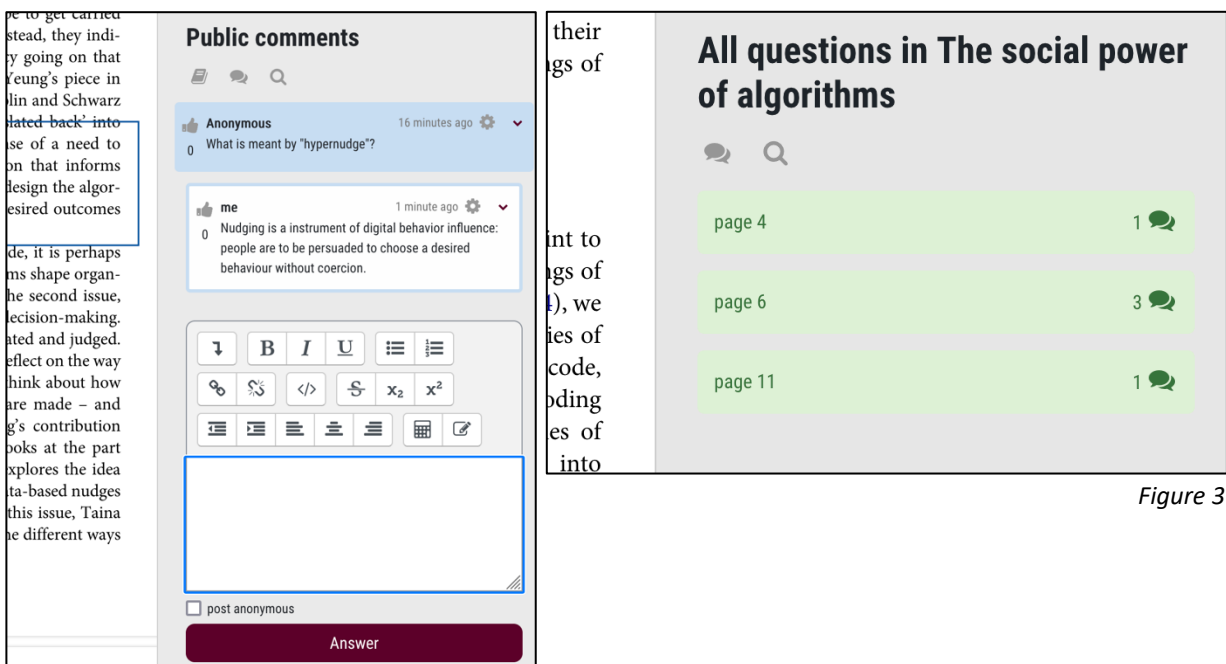


Figure 3

- **Switching between the views** in the comment block is possible by selecting the corresponding icons. It is also possible to switch to the list of comments by clicking on the corresponding page and to the individual comment by clicking on a list entry.
- Comments can also be accessed by clicking on the corresponding annotations in the document.
- The **magnifying glass icon** can be used to open the search box and search the comments.
- *Note:* In the page overview the heading is **All questions in [document title]**. *Questions* here means all comments, but they are not necessarily questions.



2. CREATE ANNOTATIONS

Available tools

Various tools are available for annotation in the editor area (see Fig. 4).

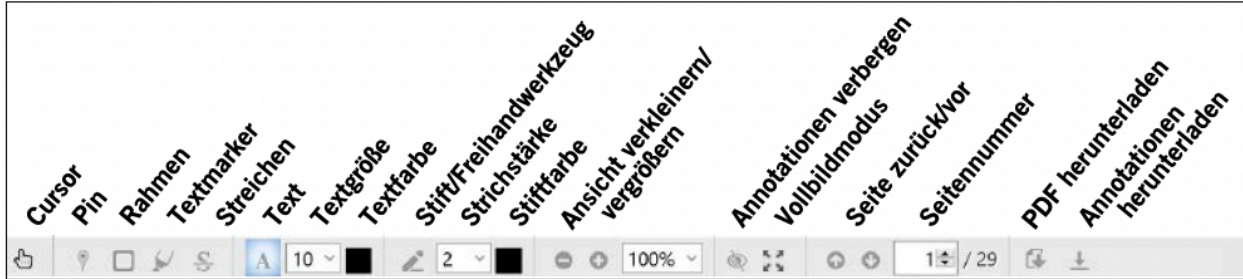


Figure 4

- The **pin** as a placeholder, the **frame**, the **swipe** function and the **highlighter** are linked to a comment field.
- With the **text tool** and the **freehand drawing/pencil tool** (both must be activated in the settings), text or any shapes can be placed directly in the document. **Colour** and **text size** or **line width** can be set beforehand.
- The **view size** of the document can be varied by **zooming** and it is possible to switch to **full screen mode** if required. The **text** can also be read **without annotations**: Click on the corresponding icon to display or hide them. Pages can be accessed directly by entering the **page number**.
- Both the **document** and the **annotations** can be **downloaded** (this option must be enabled in the settings).

Add annotations

- Select the desired **tool**, add an appropriate annotation to the document and enter your **text comment** in the comment block.
- Finish by selecting the **create annotation** button.
- To help filter comments, you may find it useful to **use hashtags** such as *#question*, *#understanding-question*, *#discussion-point*, *#comparison*, etc. If necessary, agree on appropriate tags in the course. You can then use the search function to filter comments.
- Optionally, **comments** can be **posted anonymously** by ticking the appropriate box. In this case, the author will not be visible within Moodle. However, the author can be identified via a link in the email notification, so unfortunately there is no reliable anonymity.

3. REACT TO ANNOTATIONS

In the comments block it is possible to respond to existing comments. There are three areas to do this (see Fig. 5):

- The **Like button** to the left of the commentator's name,



- the menu under the **settings wheel** in the top left corner,
- the **reply box**.

Students/readers can ...

- **reply** to a comment,
- **subscribe** to the replies to a comment by email,
- **report** a comment (e.g. if it contains offensive content)
- **like** a comment (*only if this option has been enabled in the settings*).

Figure 5 shows the opened settings wheel menu from the student perspective of the comment shown.

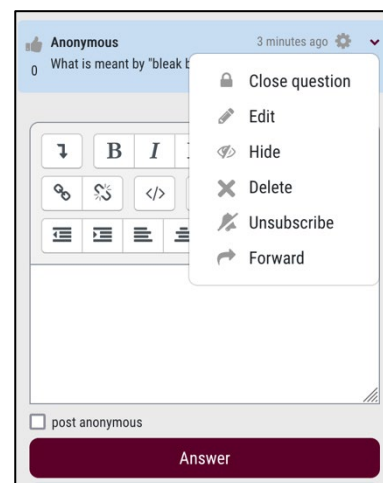


Figure 5

Teachers or authors of a comment can also ...

- **close** a comment (no further replies possible),
- **edit** a comment or reply,
- **hide** a comment or reply,
- **delete** a comment or response,
- **forward** a comment,
- **mark a reply as correct**. (see Fig. 6)

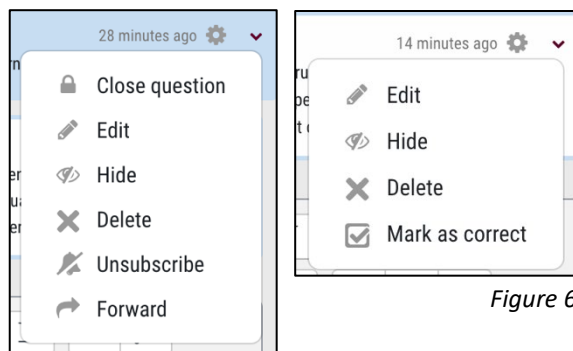


Figure 6

Figure 6 shows the opened settings wheel menu from the teacher's point of view for a comment (left) and a reply (right).

Important note!

If you are working in the activity and other users add new comments at the same time, they will not appear automatically, but you will have to refresh the page. The tool is suitable for asynchronous reading, not so much for synchronous reading.

4. CONFIGURING THE NOTIFICATION FUNCTION

The PDF Annotation has an email notification feature.

- When other people post **a new comment**, you will receive a **notification**.
- **Replies to this comment** are not subscribed by default. You can optionally activate the subscription (see Fig. 5).
- **Replies to your own comments** are **automatically subscribed**. You can optionally cancel this subscription (see fig. 5).

Unlike, for example, in the Moodle forum, you **cannot turn off notifications by default** in the activity settings. If a lot of comments are posted, it can be annoying to get an email notification every time a new comment is posted.



Disable system notifications for PDF annotations

The solution to too many email notifications is to **disable system notifications for the PDF annotation in the user account settings**. This has to be done individually by each user and will affect all of their courses. It cannot be configured at course level.

- Open the drop down menu at the top right of your profile name and select *settings*. Under *user account* select *system messages*.
- A long list of Moodle activities will appear.
- Scroll down to the *PDF annotation* (see figure 7) and deselect the message options you want. You can configure these separately for email notifications and in the Moodle web interface.

PDF Annotation		
When a new question was asked	<input type="checkbox"/>	<input type="checkbox"/>
When a question you subscribed to was answered	<input type="checkbox"/>	<input type="checkbox"/>
When a comment was reported	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
When a question was forwarded to you	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Figure 7

As a teacher it is advisable to leave *notifications* for messages (e.g. due to misuse) and *forwarding* enabled.

5. GROUP WORK WITH PDF ANNOTATIONS

When **working with groups** in a Moodle course, the teacher can **restrict access** to a PDF annotation **to one group** within the Moodle course (in the *settings* under the menu item *prerequisites*). For example, text A could be assigned to one group and text B to another. Group members will then only be able to access their own group's PDF annotation.

However, if course members have enabled notifications for the PDF annotation, they will also receive notifications of contributions from the other group (they will still not be able to access the activity). When working in groups it is even more recommended that all course members disable notifications.

Unfortunately, the **separate/visible group mode does not** currently **work** at all in PDF Annotations. Although the option can be selected, it has no effect.

PDF annotation is a **relatively new Moodle activity** and is not yet fully developed in all areas. **Improvements can therefore be expected** with regard to the notification and group function as well as anonymity.

In Moodle you can only annotate **PDFs**. Other tools, such as Hypothesis, are designed for annotating web pages. However, these tools are not provided by Leuphana. We recommend that you use Moodle PDF annotation, which meets Leuphana's data protection standards.



However, if you wish to use other annotation tools, please choose those with strict privacy policies and restrictions on all data traffic to servers within the EU. Inform students of the privacy policy and urge them not to post personal information. Also, the use of external tools must always be voluntary for students.

C. Didactic tips for social reading

Possible applications

- Social reading, i.e. reading together with the help of an annotation tool, is suitable for **asynchronous reading**, i.e. for the time-independent self-learning phase. In this way, reading can be decoupled in time and space, but can still be done together.
- Social reading can be used both as a **preparation for a synchronous work phase** (via videoconference or on-site) **and as a purely asynchronous activity**.
- You can annotate **texts** (seminar readings, students' own texts, ...) as well as **other documents** such as **concept maps** or other **graphics**.
- The annotations can contribute to both **comprehension** and **discussion**, e.g. foreign words, terms or difficult vocabulary can be explained with comments or background texts can be linked. Students can be encouraged to recapitulate and reflect by asking appropriate questions.
- The use of annotation tools is particularly useful when you want to **support the reading** or **discuss close to the text**.

If you want to discuss a text in a more general way, or if very extensive, long discussion posts are desired, then using a Moodle forum may be a better choice. You can also combine text-based discussions aimed at comprehension with a more in-depth discussion in the forum using the PDF annotation.

Introduction to the tool

- Before using the annotation tool for the first time, you should give an **introduction to its use**.
- For example, provide the students with section B of this manual. Before using it for the first time, it is best to give them the task of making some test entries in a dummy document (e.g. creating an annotation and replying to a comment). In this way, students will gain confidence in using the tool.

Tips for successful use

- In order for collaborative asynchronous reading to work, there needs to be **enough time** to read, annotate and respond to the annotations of others.
- Plan a sufficient time frame for this and ask the students to make full use of it. If everyone starts reading an hour after a synchronous session, there will not be enough time for exchange through annotation.
- Especially at the beginning of social reading, it is advisable to guide the reading with reading tasks. You can either...

a) communicate **centrally in the description field**

Examples:



- ⇒ *Summarise each paragraph of the text with a concise heading.*
- ⇒ *Mark in the text where Yilmaz's position differs from Sahin's and give brief reasons.*

This is suitable for more **overarching reading assignments**.

b) place directly **in the text using the appropriate annotation**.

Examples:

- ⇒ *How does this definition of globalisation differ from Wallerstein's? Which one do you find more helpful?*
- ⇒ *Can you think of an example of this?*
- ⇒ *Do you agree with this thesis?*
- ⇒ *What aspects of social inequality are not included in this list?*

This is suitable for **questions** that refer to a **specific passage** in the text.

- You can also designate **smaller groups** as "**reading patrons**", whose task is, for example, to ask questions about the text beforehand and/or to summarise the discussion at the end (either in writing or orally in a synchronous session). It is also possible, for example, to give the group the task of answering comprehension questions.
- The student's motivation to participate actively will be increased if they take part in the discussion themselves or if they **take up the results** elsewhere, e.g. in the synchronous session. In this way, students will experience an **appreciation** of their annotation work.

PRACTICAL EXAMPLE

- [Einsatz von Social Reading im Lehrgebiet Philosophie an der FernUni Hagen](#)

FURTHER MANUALS

- [Hilfeseiten der RWTH Aachen, welche die PDF-Annotation entwickelt hat](#)
- [Video von Captain Moodle \(Ruhr-Uni Bochum\) zur PDF-Annotation \(8:20 Min.\)](#)
- [Video „PDFs gemeinsam annotieren in Moodle“ der Uni Greifswald \(4:05 Min.\)](#)
- [Infos zur PDF-Annotation auf moodle.org](#)

If you have any questions regarding the use of PDF annotation or Moodle in general, please contact the Support Digital Teaching Team of the Teaching Service at digi-support@leuphana.de.



The development was carried out by members of the Leuphana Teaching Service: Verena Eickhoff (2021) | updated by Sigrun Lehnert (2023).



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