



Teaching Techniques for motivating students to read literature

Perusall & Feedbackfruits Interactive Documents

Perusall and Feedbackfruits Interactive Documents are tools specifically designed to motivate students to prepare better for class by reading the required literature beforehand. Both tools are very similar: the teacher uploads the literature in the tool. Students read the literature in this tool and they can place annotations (for example comments or questions) directly in the text. The other students can read this and are able to respond to it. This way, students can help each other understanding the literature. As a teacher, you can make placing annotations mandatory and even grade the students by using a pass/fail system (Feedbackfruits Interactive Document) or by quality of the annotations (Perusall).

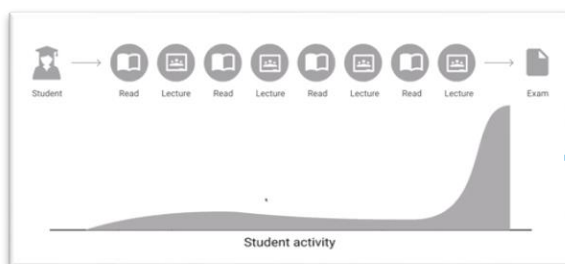
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- Pedagogical value
- How to use these tools effectively?

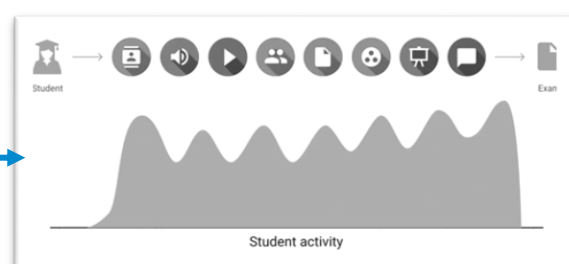
Pedagogical value of Perusall and Feedbackfruits Interactive Document

The main goal is to engage students in high level participation throughout the entire course.

This is what the student activity looks like throughout the course with a traditional way of teaching:



This what the student activity looks like when students use tools like Perusall and Feedbackfruits throughout the course:



These tools **stimulate interaction** in several ways: student-teacher, student-student and student-content. Especially in this time now everything is online, interaction is something most courses are lacking.

- **Student-content:** these tools stimulate students to read the literature and to do that on a deeper level.

- **Student-student:** the students read the literature together. If a student doesn't understand something, they can place a question in the text and other students can respond to this. This way they can help each other to understand the literature. Students can also place comments: the literature might activate prior knowledge they have and they can write about this helping others to share this prior knowledge. Maybe the literature reminds the student of an experience they had, they can write this in an annotation to help the other students to make the literature more concrete. Other students can respond to this and place their own experiences. This way students can help each other reaching a deeper level of understanding of the literature.
- **Student-teacher:** you as a teacher can also respond to the annotations of the students, but we recommend you doing this as little as possible. Instead use the annotations to see if there remain any gaps in the students' understanding of the literature. Take these gaps as input for your next class. Also ask students during class if any questions remained unanswered. This way you can use your classes to engross the learning material, instead of repeating it.

These tools **stimulate active learning**. Instead of passively reading the literature, students are more engaged when they need to place annotations and when they read the annotations of others. It also stimulates students to look at the reading material more than once, since other students respond to their annotations and because they might be curious to see what other students have written.

These tools **stimulate to think critically** about the reading material. Students are stimulated to connect the learning material with prior knowledge, with experiences, to think of examples. This helps students to understand the reading material at a deeper level and to remember it for a longer time. The annotations of other students also help with this.

These tools **stimulate social learning**. The threshold to ask questions has been made very low, so even shy students are stimulated to ask questions if they don't understand something. The annotations can even be made anonymous, if you wish. Students are stimulated to help each other out and to consume the reading material together. Because students have already started a discussion about the learning material, the threshold to continue this discussion in class is lower. Shy or anxious students already have gotten an assurance that their opinion is valuable and problems they experience are shared by others.

These tools give the teacher **insight in who prepared for class**. You can see exactly who opened the literature, how many annotations students placed, how spread out the annotations of a single student are and with Perusall you also have insight in how much time students spend in each article and how much time students spend on each section of an article (aka did they only read part of the article or everything).

These tools give the teacher **insight in topics that need additional explanation**. If students don't understand something they can place a question about it in the text. Other students can help them find the answer, but sometimes other students don't know either or they give the wrong answer. You as the teacher can see all the annotations, so you know where students had difficulty. You can use this information as input for the next class. In Feedbackfruits Interactive Document students have the option to like annotations. Give students the assignment to like annotations of other students if it's a problem they had as well or if an annotation was helpful to them. This way, you have a quick overview of the most important annotations in the text. Perusall gives you a rapport of each article and tells you exactly what common problems among students were and what needs more explanation.

How to use these tools effectively?

Before using these tools, you should **ask yourself why you want to use them**. Never use them for the sake of using them. The tool is only a means to achieve your educational goal(s). Examples of educational goals that can be achieved using Feedbackfruits Interactive Document or Perusall are:

- Motivate students to be prepared for lecture.
- Having insight in who prepared for class.
- Make your course more interactive.
- Make your course more active.
- Achieve a deeper level of understanding.
- Having insight in topics that need additional explanation among students.
- For more examples, see the pedagogical values on the pages above.

Communicate to your students **why you are using this tool** for the course. What advantages does this tool have for your students? Students are more motivated to use the tool if they understand why they are using it.

Communicate your expectations clearly to your students. Think about the number of annotations, time needed for reading, interaction, grading, deadline, how will the assignment be used in the following lecture, etc.

It is not only wise to **set a minimum number of annotations** (we recommend 7 per article), but also to assign an amount of these to a **response to annotations of other students**. If students need to respond to other students, discussions about the literature start easier and deeper understanding of the material will be reached. This also motivates students who read the literature early, to come back to check on new annotations and to respond to them.

Divide students in groups of 10-20 to work in the same document together. Students can only see the annotations placed by students of their own group. This way the document doesn't get too cluttered with annotations and still start valuable discussions. In Perusall you can make groups, in Feedbackfruits Interactive Documents you can use Canvas groups directly.

Publish the assignment at least one week ahead of the deadline, so student can plan when to work on it and return multiple times to interact with other students.

Do not set the deadline at midnight, but rather at noon (12:00 p.m.), to prevent that students work on the assignment during the night just prior to the deadline. It's also a good idea to give yourself some time to scan through the annotations to see what topics need additional explaining.

Do not interfere with the students when they are annotating. Give students time to help each other out. If students go into a wrong direction, discuss this during the live contact moment, not in Perusall or Feedbackfruits itself.

Let students use the thumbs up button is an annotation of other students was helpful or if someone asked a question they had as well. This way you have a quick overview of the most valuable comments. You can address most common questions and most useful annotations during the live contact moment.

These tools are **not a substitute for discussions during a live contact moments**. They are good for students to prepare better, to help each other and to see other points of view, but the annotations

are great input for the live contact moments to really reach that deeper understanding of the literature.

Always **ask students during a live contact moment if there are still questions or problems unanswered**. There is always a chance you have missed something while going through the annotations. This way, students can tell you themselves if something is still unclear.

It's a good idea to add all your course literature to Perusall or Feedbackfruits, but **don't make everything mandatory**. It takes students a lot more time to annotate well than to just read the course material. It's still a good idea to add all the literature, so when students have questions, they can still help each other out in a really low threshold way.

It's a good idea to use these tools with a pass/fail grade to ensure participation. With Perusall it's also possible to give students grades based on the quality of their annotations. However, this should not be a major part of the total grade. We advise to calculate an average for all Perusall assignments, which counts for e.g. 2-10% of the total grade. Make sure you use a balanced work-grade ratio. Also, always be careful when using Perusall, the AI it uses to grade the annotations isn't 100% fail proof.

Want help? Using a new tool can be challenging, we understand that. That's why we (the VU Onderwijswerkplaats) offer the possibility to talk to one of our student assistants to help you set up these tools. Any questions you have, you can ask them as well. Email onderwijswerkplaats@vu.nl to make an appointment for free.