



Effective and
Surprisingly
Simple



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Learning Journals in Teaching

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1. What is a learning journal?

Instructors who want to increase their students' mindfulness need simple yet effective tools to do so. One tool that is both effective and surprisingly simple to implement is the learning journal. It can be used in all kinds of teaching scenarios: it can be part of self-study in a flipped classroom, serve as preparation or follow-up, etc.; and it's generally suitable for all subjects.

Learning journals stimulate both metacognition – thinking about thinking – and self-regulated learning in general (Nückles et al., 2009). Through the use of "prompts" (guiding questions), students are asked to be mindful of their strategies for organising knowledge, elaboration, monitoring understanding, and regulating motivation; and to adapt their strategies if necessary. A learning journal entry is typically a document of 1-2 pages in which students respond to various prompts about their learning process.

The aim is *not* to reproduce the content, but to look at the meta-level – at how one has reacted to the content, how one has been thinking and acting. A learning journal should be clear and legible, but it should also be written informally, in a personal style (Lang, 2018). Writing in a way that readers will understand (avoiding a chaotic 'stream of consciousness' style, for instance), but also using a natural and informal style, is especially effective for integrating new knowledge into one's own prior knowledge.

In research, learning journals have so far only been associated with metacognition and not with mindfulness. However, writing a learning journal requires a conscious, accepting, curious engagement with one's own experience - and thus trains not only metacognition but also mindfulness, according to our understanding of the two concepts.

2. Laying the foundation

Learning journals require mindful awareness - and that can be challenging . Adopting a conscious, accepting attitude and letting go of the usual pressure to perform is the greatest challenge that must be overcome when writing a learning journal for the first time. This is because students are often more used to instructors who expect them to reproduce facts and 'correct answers', or to argue as objectively as possible. Many students are therefore confused when writing their first learning journal. That is why we should definitely take the time to introduce students to the idea of writing a learning journal.

Instructors can proceed as follows to introduce the idea of a learning journal to students:

- **Why?** Make it clear why you are going to ask students to write learning journals and what benefits (for example increased self-regulated learning and mindfulness) that will have for the students. A video or lecture is a particularly good way to present this information.

- **How?** Now explain how students should write their journals: A learning journal should consist of full, meaningful sentences so that it is coherent and legible for readers. However, it does not have to present formal arguments as scientific writing often does. Rather, it seems to be more conducive to learning to write in a personal, informal style (Lang, 2018); students may, for example, feel free to describe something as cool.

Students should *not* use their learning journal to prove how much they have learned and how perfectly they have studied. The aim is to shed light on the learning process in a mindful and curious way. A learning journal entry is typically 1.5-2 pages long. Teachers can offer students a collection of prompts to choose from or offer 3-5 prompts per learning journal. Tell students if and how their learning journals will be collected / evaluated / graded and show them your grading rubric, if possible.

- **Samples.** Now show students samples of learning journals - it is important that you show a range of positive and negative samples of learning journal entries so that students do not get hung up on the samples' superficial features. Share your thoughts about the samples. If you cannot yet show your own samples from previous years, feel free to show the samples at the end of this document (see 8. Appendix: Sample excerpts from student learning journals).
- **Questions?** Give the students a chance to voice their questions or concerns. This could be done anonymously, e.g. via an online survey - this lowers students' inhibition to express their concerns. You can respond to the results of the survey straight away. The point is not to wave away all concerns. Some of them can be dispelled by further explanations, or sometimes rule changes (for instance, I once agreed to give students concrete prompts each time because they wanted more structure). Other concerns relate to subjective feelings, cannot be explained away, and should simply be received calmly and empathetically (*"I can understand that you have such concerns... I might have felt the same way in your position / many students feel the same way. Most students get used to it... the feedback will give you more clarity... if the issue persists, let me know..."*).

3. Which prompts are suitable for learning journals?

The following table provides suggestions for prompts. A mix of prompts from all four categories should maximise student learning (Wäschle et al. 2014).

1. **Organizing knowledge** helps combine new knowledge with prior knowledge, which supports retrieval from memory and application in new contexts.
2. **Elaboration** refers to creatively and actively playing with the content, e.g. by inventing examples or relating it to personal experience. As in the verb *to elaborate*, elaboration is basically the generation of new meaning around information. It also improves memory and the ability to apply knowledge in new contexts.
3. **Metacognition** – ‘thinking about thinking’ – refers to the learning process. How have I been thinking *about* the content so far? This fosters self-regulated learning, or the ability to monitor and improve one’s own learning and motivational strategies.
4. Reflecting on **personal benefit** is helpful for motivation.

Possible prompts for structuring learning journals

Category	Possible prompts
Organizing knowledge	What new concepts have I encountered? What are the key takeaways of the new content? How can this issue be placed in a wider context? How is this topic related to other topics?
Elaboration	What are fitting examples / analogies / metaphors for these concepts? What are the strengths or weaknesses of what I have learned? What other arguments could be relevant here? Where do I disagree with the authors / researchers? How does what I have learned relate to everyday life / to what is happening in the media / to society / to my past experiences?
Metacognition	What was easy for me to understand? What have I not yet understood and what, specifically, can I do to understand it? How have I been learning? What learning strategies have I used and what has been my experience with them? How could I optimise my learning process?
Personal benefit	What did I like, what didn't I like? Why am I learning this? What could I use this for in the near future / in the distant future?

Table 1: Examples of questions students can answer in their learning journals.

4. How can learning journals fit into a course?

4.1. How to implement learning journals?

Since students have to get used to writing a learning journal, it's not really worth it to only use them once. The return on investment is higher if they become a regular element of the course. This means that we might have the students write a learning journal entry...

- after each (virtual) class session,
- to prepare for each (virtual) class session in a flipped classroom,
- four times a semester,
- at the beginning and then at the end of the semester,
- or similar.

(This seems like too much? See section 4.3)

You can also have students write a learning journal entry in preparation for class and then revise it after class. Explain when you'll be asking students to write learning journal entries at the beginning of the course (see section 2. Laying the foundation).

The next question is what to do with all those learning journals. Students will want feedback, otherwise the learning journal will seem like pointless busywork. And instructors can use learning journals to learn a lot about how students are doing in the class. So next to the challenge of introducing the idea to students, the other challenge around learning journals is actually *doing* something with them.

4.2. How can we give feedback without it draining our resources?

Learning journals can make up part of the grade - in this case, it is best to give the students the rubric with assessment criteria in advance and discuss it together (see 3. Creating the framework). An example of this can be found in the appendix (see 9. Sample rubric for learning journals). Learning journals can even make up the entire grade if students submit them as a portfolio. For this purpose, they should be given a chance at the end of the semester to revise all learning journals submitted so far. This lowers the stakes for submissions during the semester, which will lower anxiety and allow students to experiment.

Students definitely need feedback on the learning journals they submit during the semester - otherwise it may feel like no one cares about those submissions, and they won't be able to improve their writing in preparation for the final grade.

One easy method to give feedback is the **sample method**: Try taking screenshots of particularly interesting sections of learning journals - these might be positive or negative examples of mindful metacognition, elaboration, etc.; open questions that students still have; miscon-

ceptions or errors; etc. Then show students these anonymous screenshots in the next session (or in a video) and add your comments. This gives students insight into your criteria for “good” learning journals and into the way other students are completing the assignment. It also shows them that the journals are actually being read – even if the class is very large, say, 500 students, and they know that only a fraction of submissions are reviewed each week, they will know that their own submission might feature in next week’s feedback, projected for all their classmates to see.

Peer feedback is also a good option. Students usually appreciate peer feedback if it is of high quality; you can ensure the quality by setting up guidelines and offering students both quantitative points/scales and some space to add qualitative comments (Huisman et al., 2019). If you’re grading the learning journals and have created a rubric, then it’s especially easy: just ask students to use the same rubric that you yourself will be using for grading.

You can easily combine both methods by giving a smaller round of sample feedback each lesson/unit and employing peer feedback a couple times throughout the semester.

4.3. What if I really don’t have time? - The mini learning journal

The prompts for learning journals can also be used in a very simple and spontaneous way. Give the students 1-2 of these questions (see Table 1) and ask them to...

- write half a page and submit it (anonymously)
- write a post on the learning management system’s forum, or on a bulletin board (either a physical one or a virtual one such as Padlet)
- take personal notes, discuss them with 2-3 others, and then discuss in the entire class (this three-step method is also called think-pair-share)

After choosing prompts, the important thing is to use a teaching method such as the above which will require *all* students to think about the question. Avoid just asking the entire class the question and waiting for a couple students to raise their hands.

5. Takeaway: Are you ready to use learning journals?

Learning journals support self-regulated learning and mindfulness. As this takes some getting used to, they should be used regularly; instructors should introduce the principle and give feedback. If learning journals seem like too much work, you can also use the prompts for a mini-version of this reflective task.

6. References

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7. Appendix: Sample excerpts from student learning journals

The following screenshots show student learning journals from a course in the field of educational science. These are examples of both good and sub-par work – the description contains my feedback.

I want to mention another student we can see in the reportage. She's called Marissa and she lives in a good neighbourhood. So she goes to a school that doesn't have to worry about money. In result, the students have many opportunities for further education. The teachers are motivated, learning materials are available in sufficient quantities, there are laboratories where practical exercises are offered and a renovated building where everyone can feel comfortable. The prerequisites for good learning are therefore given.

Fig. 1: An example of pure reproduction of the content. There is barely any personal organization of knowledge here; it's mostly a retelling of a documentary that the student was asked to watch. No points for this section.

The principle to learn for life also applies for the teaching staff. To train the skill of upgrowing teachers and giving them the right skills for having a good teaching profession is also elementary for proving educational systems. Also to teach teacher systematically that they can face the extremely different challenges in school-life is important and it has to be worked on to get structural changes along in the education system. School systems also have to react on the changing family structure in society. Nowadays the reactions are all-day schools which provide more possibilities for social interaction and so on.

Fig. 2: This student is writing in an informal style, but the text isn't very legible due to a host of spelling and grammatical errors. I would dock style points for this.

portunities. That again, makes it much harder for them to break out. It's a vicious circle. I already knew that the educational system in Amerika wasn't really fair, with the college being very expensive, but I hadn't realized how immense the differences are in high schools. The school I went to during my exchange year in eleventh grade was well equipped, for example we had iMacs as work computers in Audio&Video Production class and at the end of the year even the small wrestling team got their own small building to train in. I didn't know at the time,

Fig. 3: Effective elaboration through reference to personal experience.

Maybe it is because writing in English requires more cognitive resources than writing in German, but I kept noticing that my mind drifted away more often. I remembered my sister's advice from last week. In order to be able to concentrate better in a long term, I have to take short breaks regularly. So, I set an alarm clock that goes off every thirty minutes and forces me to take a break. It doesn't matter if I want to do one or not. And at the end of the day, I can say that it really helped me to focus but it also prevented frustration.

Fig. 4: Great example of metacognition: the student is reflecting on their strategies and how they were able to adapt them.

To summarize, my take-home message is, that the PISA-study should not be treated as universally correct and important as it is right now, meaning that the numbers can be interpreted in different ways. So rather than just reading conclusions, there should be more time invested into actually understanding. Additionally I found that the term "Olympics of school performance" sums up the current situation very well: It's all about the ranking, when it should be more about the students behind the numbers. What stayed unclear to me, is the question, whether there are other studies to consider. In consequence I will do some more reasearch about that, but it appeared to me as if the most effective way to find out more about the quality of a system is to read several different studies and analyses and combine and compare the information.

Fig. 5: Wonderful organization of knowledge – naming the student's most important takeaways – and metacognition about what is yet unclear

8. Appendix: Rubric for learning journals

Rubrics are effective grading tools, and this example can be used to grade learning journals as systematically and fairly as possible; students should be given the rubric before writing their learning journals so that they can follow the instructions.

How your learning journal will be graded

Category	Properties	Maximum points
Length	700-1100 words	1
Structure	The text is divided into paragraphs of max. 10 sentences. It contains a recognisable thematic structure and subheadings.	1
Legibility	The text is legible. It is clear and not needlessly complicated. Spelling and grammatical errors are rare.	1
Layout	Margins: 2.5 to 1.5 cm. Font size: 10 to 12 for main text (subheadings larger if necessary) Line spacing: 1.5	1
Organization of knowledge	The learning journal shows personal organisation of knowledge, i.e. answers one or more of the following questions... <ul style="list-style-type: none"> • What new concepts have I encountered? • What are the key takeaways of the new content? • How can this issue be placed in a wider context? • How is this topic related to other topics? 	2
Elaboration	The learning journal shows personal elaboration, i.e. answers one or more of the following questions... <ul style="list-style-type: none"> • What are fitting examples / analogies / metaphors for these concepts? • What are the strengths or weaknesses of what I have learned? • What other arguments could be relevant here? • Where do I disagree with the authors / researchers? • How does what I have learned relate to everyday life / to what is happening in the media / to society / to my past experiences? 	2
Metacognition	The learning journal shows <u>personal</u> metacognition about the learning process, i.e. answers one or more of the following questions... <ul style="list-style-type: none"> • What was easy for me to understand? • What have I not yet understood and what, specifically, can I do to understand it? • How have I been learning? • What learning strategies have I used and what has been my experience with them? • How could I optimise my learning process? 	2

Personal benefit	The learning journal shows a reflection of <u>personal</u> benefit, i.e. answers one or more of the following questions... <ul style="list-style-type: none"> • What did I like, what didn't I like? • Why am I learning this? • What could I use this for in the near future / in the distant future? 	2
Total		12

Table 2: This is what a rubric for student learning journals can look like.