

Dashboard Features

▼ Challenges

- A lack of social interaction: Participants wished for features that support the interaction with

other students and offer possibilities to exchange knowledge and facilitate asking for help. They

stated that it can be frustrating to study on their own, be stuck with a topic, and not know

how to proceed or get help. They miss the exchange about topics relevant to their studies.

Further, they would like to easily get in contact with the course instructor to ask questions or

give feedback.

- A lack of motivation: Studying on their own, participants stated that it sometimes can be hard

to get the motivation to start or continue to study. They wished for elements that raise their

motivation, like displaying successfully completed activities.

- Time management: Studying besides a full-time job or extensive family obligations needs good

time management skills. The dashboard should facilitate planning and organizing their studies,

as well as keeping an overview of all ongoing activities and events. All relevant study material

and information should be organized in one place.

- Easily getting distracted: Studying online and on their own, it is easy for students to get

distracted. The possibility of including a focus tool, such as a Pomodoro Timer, was discussed.

This tool could also act as a time tracker to track the total time spent learning

▼ Ideation

- comparison with others (yes/no?)
 - visualization of grade distribution in a box plot
 - quiz and assignment submissions (visualized the number of submissions for each quiz or assignment)
- access graph (shows for each activity how often it was accessed)
- hits distribution (line chart that visualizes the activity over the past weeks)
- time sequence of events
- heatmap to show user interaction
- add to-do list?
- add questionnaire about learning goals?
- show latest replies to forums etc. ?
- timetable (where also own appointments/goals can be added; maybe lerngruppen meetings too)
- help page with information and faq (?)
- dialog that opens to ask for user consent on data use
- interactive tour/introduction to get to know the functionalities of the dashboard
- add icons and symbols to support text whenever possible to support user experience
- maybe comparison of how much time already spend on the course in comparison to how much time they are supposed to spend on the course
- general course information (like credits, exam date, course requires, upcoming events)
- send reminders (for assignments, before exams, as a regular reminder to study)
- add field to add "self-reflective notes"
- Möglichkeit der Selbsteinschätzung: Für ein Thema/LE anhand einer 5-Sterne Skala angeben, wie gut man das Thema verstanden hat (→

Möglichkeit sich selbst Feedback zu geben)

→ Mischung aus implizitem und explizitem Feedback (implizit: z.B. Dauer in der man sich mit einem Thema beschäftigt hat; explizit: Selbsteinschätzung)

- actionable insights → give learners additional information how to act on the information; give information which data is used, etc.
- ask for consent before using the data
- anonymize data as much as possible
- Allowing learners to select the data they want to monitor from a flexible and extendible set of indicators would support learners in developing their metacognitive skills further and encourage them to take a more active role in LA, in line with the solution proposed by Durall et al. [50]. (Jivet thesis)
- weekly activity graph

▼ Components

- progress chart , rate understanding of knowledge
 - ask for help (channels to bring persons with strong and weak background together)
 - visualize knowledge
 - compare time spent to recommended time for each section
- resource list to share with other students
 - recommended resources based on weak and strong topics
 - practical projects
 - job skills
- give feedback to instructor
- timeline and task list as in notion

