

Guideline universal design

Sheet 15: Learning paths



What? ¹

A learning path is a succession of steps to achieve certain knowledge. The offered learning trajectory can include teaching materials, practice assignments, discussions, (peer) evaluations and many other activities that the student can go through independently and at his own pace. The student goes through these learning paths mainly outside class hours since learning paths are mainly used to supplement (or even replace) a lecture. A learning path can both form part of the evaluation and be offered to the student without obligation.

Learning paths can be offered to the student through different channels. The most efficient method within higher education is to embed the learning paths in the digital learning environment of the higher education institution (see also sheet 17: the digital learning environment).

Why and for whom? ^{3,4}

The power of completing an independent online study route through a learning path lies in offering a variety of options for instruction, interaction and testing of knowledge. The use of learning paths has various **advantages** and can also facilitate **differentiation**:

- Well-being and understanding** | Going through learning paths results in more involvement and well-being of the student and an increasing understanding of the contents.
- Flexibility** | Learning paths increase the flexibility of learning, the student can follow them independently of location and time.
- Insight** | The progress and results are saved in a structured way. Both the student and the teacher gain insight into the student's learning process and level of understanding.

- ❑ **Statistics** | The teacher can consult statistics for each student, such as the progress in the learning path, the score (if applicable), the number of attempts to achieve a correct result, the elapsed time to complete (a part of) the learning path.
- ❑ **Differentiation** | Learning paths can be assigned to individual students, this makes differentiation possible. Adaptive learning paths are also possible. Content can be released on an individual basis based on acquired competences.

Tips & Tricks ^{1, 2, 3}

Conditions

- ❑ **Preparation** | Ensure proper preparation: how do you want to use the learning path, what do you want to achieve with it, which topics are suitable.
- ❑ **Structure** | Use a clear structure and save the overview by using categories and consecutive steps if necessary.
- ❑ **Framework** | Specify the framework of the learning path (content, for whom, deadline, objective, how to use, available time, possible score allocation, etc.).
- ❑ **Process** | Determine how the student must go through the learning path. The teacher can choose whether or not to enforce the order of the learning activities offered. In addition, the student must first complete a certain step well before starting a subsequent activity.
- ❑ **Alternation in working form** | Motivate students by providing structured variation in instruction, interaction and testing.

Lay-out and accessibility

- ❑ **Language use** | Use an accessible language.
- ❑ **Layout** | Use a consistent layout and format.
- ❑ **Contrast** | Ensure sufficient contrast between background and text.
- ❑ **Clarity** | Avoid scanned images or texts.
- ❑ **Alt text** | Always add alt text to images, diagrams, tables, graphs, etc.
- ❑ **Subtitles and transcripts** | Add subtitles to video and audio clips and add a short transcription of the main lines.

- ❑ **Hyperlinks** | Give hyperlinks a meaningful description.
- ❑ **Information transfer** | Make sure that text formatting (shape, color and formatting) is not the only way to convey information. A good example: an incorrect answer is given a red color and the caption "this answer is incorrect".
- ❑ **Structure** | Consider the structure: limit a part to a page.
- ❑ **Space** | Provide enough space between different parts on a page.
- ❑ **Multimedia** | Vary with multimedia material: combine text, sound and image.
- ❑ **Do not play automatically** | Don't let animations, audio and video start automatically.
- ❑ **Structure and naming** | Use a clear structure with transparent naming.
- ❑ **Short sentences** | Work with short sentences and summaries.
- ❑ **Printer friendly** | Provide a printer-friendly version if required.
- ❑ **Highlight text** | Emphasize text by putting it in bold instead of underlining it, etc.

In practice

“The learning paths are important for us in relation to workplace learning. Each student is linked to a mentor and the learning paths are also accessible to mentors. That's how they learn together. This way you can strengthen the dual partnership.”

“The great advantage of learning paths is also that I now see what colleagues make. I cannot attend every lesson. With the entire Canvas (DLE) story, I can very easily follow the story.”

“We also often teach the same subject on different campuses. Then a learning path is a solution: you can follow it on every campus. It is time and place independent.”

References

- ¹ Universiteit Gent. (2018). Leerpaden [website]. Geraadpleegd op 4 december 2018 via <https://icto.ugent.be/nl/manual/Minerva/Leerpaden/studenten>
- ² Buffel, A., & D'haenens, B. (2010). SoE à la carte: ontwikkelen van interactief lesmateriaal. Geraadpleegd op 4 december 2018 via <https://associatie.kuleuven.be/schoolofeducation/nieuwsenagenda/afgelopen-evenementen/InteractiefLesmateriaal.pdf>
- ³ Steunpunt Inclusief Hoger Onderwijs (2017). Universeel ontwerp [onuitgegeven intern document]. Gent: Steunpunt Inclusief Hoger Onderwijs
- ⁴ D'Haese, I., & Valcke, M. (Eds.). (2005). *Digitaal leren. ICT-toepassingen in het hoger onderwijs*. Tielt: Uitgeverij Lannoo.