Online Education: Students in Charge of Their Own Learning

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Many students experience **difficulties** transitioning to higher education. Research (e.g. Ainscough, Stewart, Colthorpe, & Zimbardi, 2017) shows that there is a gap between secondary and higher education. This gap is understandable, because at these two levels of education, expectations of pupils and students are quite different. Secondary school graduates starting higher education appear to be **insufficiently equipped** to **plan, monitor and evaluate their learning processes** independently. However, these so-called 'self-regulation skills' are inherent to higher education (Torenbeek, Jansen, & Hofman, 2010). Given that teachers in secondary education stimulate self-regulation in pupils in a wide variety of ways, lecturers in higher education cannot simply assume that all students will manage on their own. It is undeniable that there is **great diversity** among students in higher education. This also applies to the extent to which they manage to regulate their own learning.

In this ECHO Teaching Tip, we want to demonstrate how you as a lecturer can contribute to the self-regulation of your students in an **online learning environment**. Self-regulation is essential to success not only in higher education, but also in the workplace and in one's private life (Boekaerts, Pintrich, & Zeidner, 2000).

Definition of self-regulation

Before we look at the specific actions you can take as a lecturer, let's first define the concept of 'self-regulation' or 'self-management'. There is **no universally accepted definition** in literature. Zimmerman (2002), one of the leading authors on self-regulation, describes it as 'the degree to which students are metacognitively, motivationally and behaviourally active participants in their own learning processes'.

There is consensus, however, on the components of self-regulation: these are **metacognitive, motivational and cognitive**. Cognition (cf. the cognitive component) is about learning, knowing and understanding, whereas metacognition (cf. the metacognitive component) refers to 'thinking about thinking'. An example of a metacognitive strategy is self-evaluation. Motivation refers to students' interest and willingness to learn (Boekaerts et al., 2000). In order to become self-regulated, it is important to focus on all three components.

In addition to the consensus on these three components, most models of self-regulation are also based on three successive phases: **preparation**, **implementation** and **reflection**. These three phases must be completed in order to enhance self-regulation (Panadero, 2017).

For more information about these phases, be sure to check out Teaching Tip No 87 (in Dutch).

How to stimulate students' self-regulation

Blended or hybrid learning is all the rage in higher education. Not only in Flanders, but also internationally, it is becoming more and more established. It is basically becoming 'the new normal'. Below is our advice on how lecturers can stimulate the self-regulation of their students in online learning environments.

Although these recommendations are mainly aimed at stimulating self-regulation in an **online learning environment**, they can also be applied in **on-campus settings**.

- **Strengthening students' learning strategies**

In order to teach students to study more effectively and efficiently, you can teach them learning strategies. Be sure to provide **clear structure** in the content of your lectures. After all, this facilitates student learning and sets an important example. Don't worry, this won't stop students from adding further structure to the learning content as they see fit.

Techniques students can use to add more structure to the subject matter are mind maps, concept maps, summaries, etc. It is best to give students free rein to experiment with these methods. As their lecturer, you can point out various possibilities, but it is ultimately up to the students to find out what works best for them. There are several tools for structuring learning content, both for lecturers and students, such as Coggle *or* Lucid.

It is important that students **work through the subject matter in an active way**. Merely reading the text and highlighting words or sentences with a marker is not an active way of processing the subject matter if the student does so without giving it much thought. One way to stimulate active processing is by **activating students' prior knowledge** in your lectures. What do students already know about the subject of the lecture? Does the subject overlap with their personal interests? What do they expect to learn in class? More ways to activate students are discussed in Teaching Tip No 70 and Teaching Tip No 90 (in Dutch).

Spacing studying sessions over time is another effective learning strategy. This learning strategy is closely linked to **good planning**. It is better for students to revise the subject matter in several shorter sittings than to try and memorise everything at once. You could schedule some specific time for self-study in the timetable, if possible. If not, you can mention the importance of spacing studying sessions over time in your lectures.

If you want to check whether students are keeping up with the content of your course, you can test this throughout the year. Digital tools for such formative testing include Go Formative, Mentimeter *and* Bookwidgets. *Digital testing (including formative testing) can also be done via Blackboard. University of Antwerp staff can find more information on* this page.

More information about formative testing can also be found in Teaching Tip No 59 (in Dutch).

- **Encouraging self-evaluation and self-reflection**

Evaluating oneself and reflecting on one's own learning strategies stimulates **metacognition** ('thinking about one's own thinking'). In order to make students aware of their learning processes and to ensure that they adjust their learning strategies if necessary, they need to be encouraged to self-evaluate and self-reflect. There are undoubtedly students who do this on their own and also manage to adjust their learning processes. Students who are not (yet) familiar with this, however, may find the **reflection cycle of Korthagen** useful (see Figure 1).
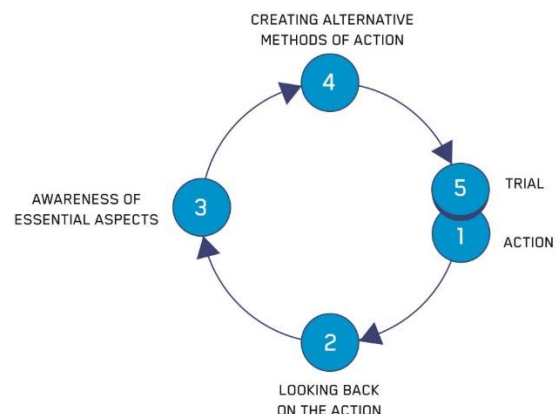

Figure 1. The ALACT model. Taken from Professional development of teachers and teacher education pedagogy by Korthagen, 2020 (https://korthagen.nl/en/focus-areas/professional-development-teachers/)

More information on the use of this cycle can be found in Teaching Tip No 10.

> The extent to which you guide and monitor students in this self-evaluation and self-reflection process will depend on the nature and learning objectives of your programme component. Self-evaluation and self-reflection aspects can also be factored into continuous assessments. If you want to monitor and adjust students' thought processes throughout the year, you can schedule reflection interviews (intervision/supervision) to discuss students' self-evaluation and self-reflection skills.

Self-evaluation and self-reflection skills are especially important in online learning environments. You could encourage students to hone these skills by having them keep track of the progress they are making in a **journal**.

> Guiding questions to keep track of the learning process may include: What goals did you achieve in the past period? What goals are you setting for the coming period? What motivates you to study? What facilitates your learning process? Which tasks have you already completed? How much time did each task take?

By asking students this type of short question, you encourage them to think about their own learning. Students' answers to these questions can be used as a starting point to **enter into a dialogue** and, if necessary, to offer them further support in their learning journey.

- **Sending reminders**

Especially for weaker students (but really for all students), it is a good idea to send out regular reminders when certain deadlines are approaching. You can also encourage students by sending the occasional **motivational** reminder.

- **Scaffolding**

Since online education is generally perceived as more distant than on-campus education, it is important to give students extra support in their learning processes. This can be done by providing 'scaffolding' to their learning. This educational concept hinges on the importance of challenging individual students at their own levels, offering enough support to enable them to achieve a specific goal. For example, you could consider:

> ... setting multiple intermediate deadlines instead of one final deadline, so that students are encouraged/obliged to study regularly. This is part of the 'spacing study sessions over time' strategy.
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> ... sharing good examples of completed tasks, papers or past exams with students, to give them a reference framework.
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> ... using a discussion forum. This can be an interesting tool to stimulate self-management in students, allowing them to ask (you or one another) questions as they process the subject matter. You can focus on 'peer-to-peer assistance', with students answering one another's questions. You can play a supervising role here and address any unanswered questions in your lectures.
>
> ... providing additional resources. Based on the sources you provide, students who need more information or who wish to study a particular topic in depth can search for valuable insights that stimulate learning.

- **Be a role model for your students**

Set **clear goals** and **communicate** them to students. Not only does this let them know what the expectations are for your programme component, or for a specific lecture or assignment, but it also gives them a **good example of how to formulate goals**. By showing students what good objectives look like, you can stimulate their self-management.

Another possible way to be a role model for students is by **explicitly stating when you are scheduling something, and why**. By setting a clear and achievable schedule, you show how students can schedule their own tasks, group assignments, exams, study time, leisure time, etc.

> An interesting planning application is [Todoist](). This Google Chrome extension is a convenient planner that allows the user to schedule different types of activities (studying, completing assignments, leisure time, etc.).

Want to know more?

References

Ainscough, L., Stewart, E., Colthorpe, K., & Zimbardi, K. (2017). Learning hindrances and self-regulated learning strategies reported by undergraduate students: identifying characteristics of resilient students. *Studies in Higher Education, 43*(12), 2194-2209. DOI: 10.1080/03075079.2017.1315085

Boekaerts, M., Pintrich, P.R., & Zeidner, M. (2000). *Handbook of self-regulation*. London: Elsevier.

Panadero, E. (2017). A review of Self-Regulated Learning: Six Models and Four Directions for Research. *Frontiers in Psychology, 18*(8),1-28. doi: 10.3389/fpsyg.2017.00422

Torenbeek, M., Jansen, E., & Hofman, A. (2010). The effect of the fit between secondary and university education on first-year student achievement. *Studies in Higher Education, 35*(6), 659-675. DOI: 10.1080/03075070903222625

Zimmerman, B.J. (2002). Becoming a self-regulated learner: An overview. *Theory into Practice, 41*(2), 64-70. DOI: 10.1207/s15430421tip4102_2

Zimmerman, B.J. (2013). From Cognitive Modeling to Self-Regulation: A Social Cognitive Career Path. *Educational Psychology, 48*(3), 135-147. DOI: 10.1080/00461520.2013.794676

Follow this link for an overview of articles and books about self-regulation.

Sources for students (in Dutch)

'Starten met studeren: ingrediënten voor je studieaanpak in het hoger onderwijs' by Sara Backx, Rein Baets, Ruth De Pau, Vicky Feremans & Elke Schelfout – 2012 (available from ECHO and in the UAntwerp Library).

'Effectiever studeren: leerstrategieën voor het hoger onderwijs' by Pieternel Dijkstra – 2019 (available in bookshops).

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