

The four FEST factors

How universities can strengthen students' learning outcomes, well-being and completion

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The Danish Evaluation Institute

T +45 35 55 01 01

eva@eva.dk

www.eva.dk

Strengthen students' learning outcome, well-being and completion with the four FEST factors

In a new survey, EVA identifies four factors that universities can use as benchmarks in their efforts to strengthen students' learning outcomes, well-being and completion.

Universities have a core task in ensuring that students complete their education, thrive while studying – and, not least, that their learning outcomes are high. But what factors are most important for university management, teachers and counsellors to focus on in order to succeed in this?

EVA has examined this in an extensive survey of which parts of student life are most closely linked to university students' drop-out risk, grades and well-being.

The survey shows that four factors in particular are important, and they can all be strengthened in a university context:

- F** Academic engagement
- E** Efficacy
- S** Collaboration
- T** A sense of belonging

Together, we refer to them as the **FEST** factors. Students who score high on these factors are more likely to complete their education, get a high learning outcome and thrive in their studies.

In this paper, we present the four factors and show how they relate to students' learning outcomes, drop-out rates and well-being.

The paper is particularly targeted at management and teachers at universities and can help ensure that the individual programmes strive to promote the FEST factors.

FEST

Academic engagement

In brief

Academic engagement concerns the extent to which students are interested in the academic content, find it useful and work actively with the material. This includes both emotional engagement (interest and sense of relevance) and cognitive engagement – e.g. persistence in the encounter with difficult material and the ability

to connect new knowledge with existing knowledge (effort regulation and elaboration). According to EVA's survey, academic engagement is the factor that seems to have the greatest impact across student drop-out risk, grades and well-being, even when correcting for a number of background conditions.



How do you measure academic engagement?

Academic engagement has been studied in EVA's first-year survey among university students.

The answers are used to understand the level of each student's academic engagement. The four questions are:

- 1 I am very interested in the academic content of the programme.
- 2 I think I will use what I learn in my current subjects when I have completed my programme.

- 3 When I study for my current subjects, I try to relate new material to what I already know about the topic.
- 4 Even when something in the programme does not interest me, I keep working until I finish what I need to do.

The students were asked "How do you agree or disagree with the following statements?" with the following options: [Strongly agree; Mainly agree; Neither agree nor disagree; Mainly disagree; Strongly disagree; Don't know; Not applicable].

Students with high academic engagement have:



19 percentage points

lower drop-out risk than students with a low degree of academic engagement.

1.2 grade points

higher grade average than students with a low degree of academic engagement.

16 percentage points

lower risk of dissatisfaction than students with a low degree of academic engagement.

RECOMMENDATION

How universities can promote student academic engagement

Academic engagement can be promoted through teaching and the frameworks within which it takes place. It thus concerns the core task, where university teachers and management have significant scope for action – rather than special initiatives. Based on existing knowledge, universities can, among other things, promote academic engagement by:

- **Focusing on academic engagement in teaching;** supporting teachers in stimulating students' academic interest and sense of relevance by including different perspectives, such as varied examples, cases and applications, and by helping students connect to existing knowledge from other subjects and contexts.
- **Organising coherent courses** where the teachers have time and opportunity to discuss and develop their teaching and coordinate content, progression and requirements.
- **Supporting structures that promote active participation,** such as through schedules, organisation and assessment formats that set the stage for attendance and engagement.



FEST

Efficacy (self-efficacy)

In brief

Efficacy, also known as self-efficacy, concerns students' belief in their own abilities in relation to the academic requirements and challenges they face in their programme. It reflects their expectation of being able to succeed academically. EVA's survey shows that self-

efficacy is linked to both grades, drop-out risk and risk of dissatisfaction. Students' self-efficacy thus appears to be important for both their motivation to continue in the programme, their learning outcomes and their well-being.



How do you measure self-efficacy?

Self-efficacy concerns the students' own assessment of their ability to handle the academic requirements they face in the programme. This has been studied in EVA's first-year survey among university students.

The answers are used to understand the level of the individual student's self-efficacy. The four questions are:

- 1 I am confident that I can understand the most difficult literature in the current subjects in my programme.
- 2 I am confident that I can understand the basic concepts taught in the current subjects in my programme.

- 3 I am confident that I can understand the most complex topics I am presented with in the current subjects in my programme.
- 4 I am confident that I can master the skills taught in the current subjects in my programme.

The students had the following options: How well do the following statements describe you as a student? [Perfectly; To a great extent; To some extent; To a small extent; Not at all].

Students with a high degree of self-efficacy have:



10 percentage points

lower drop-out risk than students with a low degree of self-efficacy.

1.2 grade points

higher than students with a low degree of self-efficacy.

17 percentage points

lower risk of dissatisfaction.

RECOMMENDATION

How universities can promote self-efficacy

Self-efficacy is not only shaped by the individual student's immediate belief in themselves, but can also, for example, be influenced by how clear and manageable the academic requirements are experienced, the support experienced by the students and how they see other students succeed.

Based on existing knowledge, universities can, among other things, promote student self-efficacy by:

- **Clarifying the academic requirements and expectations** so that students know what is required to succeed.
- **Providing specific ways to meet the requirements**, for example through clear learning objectives, feedback and examples of good solutions and handling of academic material.
- **Supporting and clarifying progress in teaching** so that students build a sense of mastery over time.
- Being aware that it matters whether you, **as a teacher**, signal to the students that you **believe they can succeed**, even with challenging material.



FEST

Collaboration on academic issues

In brief

Collaboration on academic issues concerns students' experience of the collaboration across the programme as a whole. This includes, for example, collaboration through academic discussions, sparring and knowledge sharing. EVA's survey shows that collaboration on academic issues is of great importance for

students' drop-out risk, grades and well-being. We have also examined the importance of collaboration in study groups, and it appears that collaboration across the programme as a whole is more important than collaboration within individual study groups. The results cover collaboration across the programme.



How do you measure collaboration?

Collaboration covers both *collaboration in study groups and broader academic interaction with fellow students*. This has been studied in EVA's first-year survey among university students. Collaboration is measured using a total of six questions about general collaboration and group work. The answers are used to understand the level of individual student collaboration and group collaboration.

Collaboration

- 1 I discuss academic content from the programme with one or more of my fellow students several times a week.
- 2 I find that the atmosphere in my programme is characterised by collaboration.

- 3 I often ask other students for help if I am unsure about academic issues.

Group collaboration

- 4 We help each other if someone in the group has academic difficulties.
- 5 We help each other if someone in the group has personal difficulties.
- 6 We talk about things in the programme that we find difficult.

The students had the following options: To what extent do you agree or disagree with the following statements? [Strongly agree; Mainly agree; Neither agree nor disagree; Mainly disagree; Strongly disagree; Don't know; Not applicable].

Students who experience a high degree of collaboration have:



12 percentage points

lower drop-out risk than students with a low degree of collaboration.

0.6 grade points

higher grade point average than students with a low degree of collaboration.

15 percentage points

lower risk of dissatisfaction than students with a low degree of collaboration.



RECOMMENDATION

How universities can foster collaboration

Collaboration primarily occurs between the students, but the way university structure their programmes and the facilities have a significant impact on the ways and frequency with which it takes place. Based on existing knowledge, universities can, among other things, promote collaboration by:

- **Supporting the formation of study groups** and providing students with tools to build well-functioning collaborations and deal with disagreements in the groups.
- **Organising classes so that they invite academic interaction**, for example through discussions, joint solving of tasks and knowledge sharing.
- **Paying attention to the environment created by the teachers**, also for collaboration outside of fixed groups.

FEST

A sense of belonging

In brief

Belonging concerns students' sense of belonging to their programme. This depends both on academic and social conditions and on whether students sense that they are included in and recognised as part of an academic community. One aspect of belonging is the students' sense of social connection to other students, which is what we have measured in this analysis.

EVA's survey shows that students' social attachment is important for reducing the risk of drop-out and the risk of dissatisfaction. Social attachment is particularly important for students' well-being and is, among other things, shaped in the transition to university life, where students at the start of their studies have the opportunity to form many new relationships.



How do you measure social attachment?

Social attachment refers to the student's sense of being attached to other students in the programme.

This has been studied in EVA's first-year survey among university students. Social attachment is measured using four questions: The answers are used to understand the level of each student's perceived level of social attachment. The four questions are:

1 I have one or more fellow students that I see outside university and do things with that do not relate directly to the programme.

2 I try to get all my fellow students involved in communities in the programme.

3 When I go to classes, I know virtually everyone and who they are.

4 I feel that my fellow students know who I am.

The students had the following options: To what extent do you agree or disagree with the following statements? [Strongly agree; Mainly agree; Neither agree nor disagree; Mainly disagree; Strongly disagree; Don't know; Not applicable].

Students who experience a high degree of social attachment have:



9 percentage points

lower drop-out risk than students with a low degree of social attachment.

0.3 grade points

higher grade point average than students with a low degree of social attachment.

16 percentage points

lower risk of dissatisfaction.

RECOMMENDATION

How universities can strengthen the sense of belonging

Belonging is shaped both in teaching, at the start of studies and in the broader study environment. Universities can therefore promote the sense of belonging in many contexts through structures, culture and organisation.

Based on existing knowledge, universities can, among other things, strengthen the sense of belonging by:

- **Ensuring an inclusive study start** with room for different ways to participate – both socially and academically.
- **Creating structures that enable relationship-building** and informal meetings between students, including systematic work with scheduling, class formation and support for group work.
- **Supporting volunteerism and study environments** where students can meet about both academic and social interests.
- **Giving students influence and ownership** over elements of the physical environment
- **Being aware that some students may be at particular risk of feeling that they do not belong** to the programme, for example if they are the first in their family to attend university or if they have a disability or belong to a minority.



Learn more about the FEST factors

The FEST factors originate from a larger project on learning outcomes, well-being and completion for university students, where both knowledge collection and large quantitative and qualitative surveys have been carried out. The project is carried out by EVA with support from the Novo Nordisk Foundation. It follows previous surveys conducted by EVA, which have dealt with parts of the FEST factors.

You can read more about the basis for the preparation of the FEST factors in the following publications, all of which can be found at www.eva.dk:

- *Hvad fremmer gennemførelse, fagligt udbytte og trivsel på universitetet?* (EVA, 2026)
- *Good teaching at university. Knowledge and inspiration for teachers and management* (EVA, 2026)
- *Social environments at university. Knowledge and inspiration for management, teachers and students* (EVA, 2026)
- *Organisation and physical environment at university. Knowledge and inspiration for management and administration* (EVA, 2026)
- *Videregående uddannelsers arbejde med studiemiljø* (EVA, 2022)
- *Studerendes oplevelser af studiemiljøet på de videregående uddannelser* (EVA, 2022)
- *Nye studerendes deltagelse i sociale fællesskaber på studiet* (EVA, 2021)
- *Et nyt perspektiv på faglige og sociale aspekter af studielivet* (EVA, 2020)
- *Fagligt engagement og social tilknytning – fra teoretiske begreber til empirisk måling* (EVA, 2020)



The Danish
Evaluation
Institute

EVA
+45 35 55 01 01
eva@eva.dk
eva.dk