



ACTIVATE



INSPIRE



TEACH



SUPERVISE



CHALLENGE

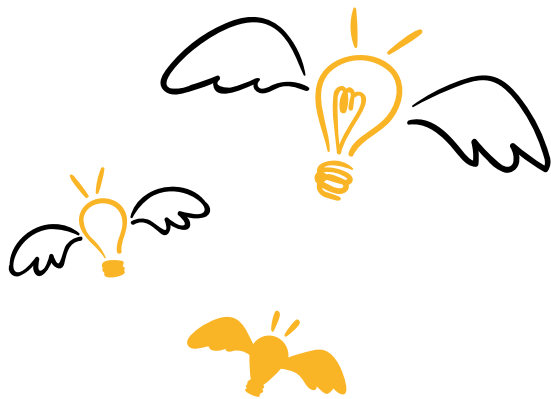


MENTOR



REFLECT

# 7 Dimensions Enhancing the Impact of Educators



# Colophon

The white paper '7 Dimensions Enhancing the Impact of Educators' is created by content experts (Blended Learning Developers) from TU Delft Teaching and Learning Services and is based on experiences with TU Delft educators. This process is facilitated and supported by TU Delft Teaching Academy.

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**Would you like to provide feedback?** Feel free to share with us by emailing to [teachingacademy@tudelft.nl](mailto:teachingacademy@tudelft.nl).

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“People are naturally curious, but curiosity is fragile.”<sup>1</sup>

## Introduction



Educators hold a unique position of influence, one that can significantly contribute to the intellectual, professional, and personal development of students.

Whether educators are engaged in full-time or part-time teaching, the primary aim of the “*7 Dimensions Enhancing the Impact of Educators*” is to illuminate the complexity of teaching and the profound impact educators have in students’ lives.

This whitepaper has been developed collaboratively drawing on the expertise of Learning Developers using an evidence-based approach with an iterative design format.

The content is carefully crafted to equip educators with

valuable tools for self-reflection and to offer guidance on how to navigate teaching authentically and effectively.

While this document aims to encompass a wide range of dimensions, it cannot fully encapsulate all facets or address the myriad contexts in which educators find themselves in.

For support and advice on teaching and learning, we encourage educators to contact [Teaching Support](#) and explore the resources available on the [TU Delft Teaching Support website](#).

Join [Teaching Academy events](#) to connect with your peers and meet the TU Delft Teaching Community

<sup>1</sup>Willingham, D. T. (2009). Why don't students like school? A cognitive scientist answers questions about how the mind works and what it means for the classroom. Jossey-Bass/Wiley.

# Executive Summary



**#1 Activate** /// What students learn is largely dependent on the activities the students undertake. As an educator, you can organise your education in a way that makes teaching more enjoyable, interesting, and the learning process of your students more effective. Students are not always fully aware of the best learning strategies. By implementing the principles outlined in this dimension, you can inspire and activate your students, fostering a more dynamic and fruitful learning environment. Ultimately, this approach will empower them to develop their distinctive capabilities and evolve into creative, proactive, responsible, and resilient engineers within their chosen fields of expertise.



**#2 Inspire** /// An essential dimension is to inspire students and convey your passion for a subject matter. When educators are genuinely enthusiastic about their course material, it fosters an authentic connection with their students. By instilling a sense of inspiration in your students regarding your course or topic, you have the power to ignite their own passion and stoke their innate desire to learn. This not only enriches their educational experience but also strengthens the bond between educator and student, creating a more vibrant and fulfilling learning environment.



**#3 Teach** /// One of the most important roles educators have, is to teach students new concepts, content, and applications, and educate them in becoming experts in their field of study. As an educator, you introduce new content, link it to what students already know, and help them apply this knowledge in similar or new contexts. This holistic approach plays a transformative role in cultivating their evolution from novice learners to accomplished experts within their respective fields.



**#4 Supervise** /// Fostering a supportive learning environment that not only tolerates but actively encourages students to embrace mistakes as valuable opportunities for learning is a fundamental aspect of effective education. As a supervisor, you play a crucial role in enhancing students' intrinsic motivation by fostering autonomy, bolstering their sense of competence, and cultivating meaningful relationships.<sup>10</sup> Moreover, it is imperative that the guidance and support you offer are thoughtfully tailored to align with the unique needs of each student.



**#5 Challenge** /// Facilitating the intellectual development of your students necessitates the deliberate and thoughtful act of mentally challenging them. An integral facet of motivating students to confront the intellectual challenges before them is ensuring they have a solid grasp of preceding material and content, allowing them to progress confidently. However, it is important to acknowledge the inherent complexity in individually challenging students, as their levels of mastery naturally vary. As an educator you can challenge your students through a repertoire of principles elaborated upon in this chapter.



**#6 Mentor** /// Mentoring holds a pivotal role in the realm of education.<sup>16</sup> It includes fostering the personal and professional development of students, and providing opportunities to seek support and address issues.<sup>17</sup> Cultivating resilience in students is essential when acting as a mentor. Encourage students to ask for help, to reflect, and to adapt in academically challenging environments. Facilitate building relationships rooted in understanding, trust for one another, and the recognition and appreciation of progress in each other.<sup>18</sup>



**#7 Reflect** /// Reflection is one of the core values of teaching and learning at TU Delft. According to McAlpine et al.<sup>22</sup> reflection in education is a process wherein knowledge, focus, goals, decision making, actions, monitoring and evaluation all play a pivotal role. In this dimension, there are several key domains that are relevant for educators to reflect upon. It is helpful for all educators to seek out a peer who can serve as a mentor,<sup>23</sup> for a mentor can nurture and catalyze professional development.

“Student engagement is the student’s cognitive investment in, active participation with, and emotional commitment to their learning!”<sup>2</sup>



## #1 Activate

What students learn is largely dependent on the activities the students undertake. As an educator, you can organise your education in a way that makes teaching more enjoyable, interesting, and the learning process of your students more effective. Students are not always fully aware of the best learning strategies. By implementing the principles outlined in this dimension, you can

inspire and activate your students, fostering a more dynamic and fruitful learning environment. Ultimately, this approach will empower them to develop their distinctive capabilities and evolve into creative, proactive, responsible, and resilient engineers within their chosen fields of expertise.



# Activate

**How active learning works** /// For effective learning, active engagement is crucial as it allows students to integrate the taught knowledge with their personal knowledge and unique perspective of the world.<sup>3,4</sup> As an educator, you can organise your learning activities and teaching practices in such a way that your students actively take part in your classes, dive into the study material, and feel motivated to take ownership of their learning.

## Principle #1

Promote active engagement in synchronous teaching sessions by scaffolding student knowledge.

- ✓ Activate their prior knowledge, checking their understanding, and monitoring their practice by quizzing the information from previous week(s).
- ✓ Facilitate Q&A's during your sessions to make sure that students understand the shared content. This can clarify difficult aspects and solve misunderstood concepts.
- ✓ Include (group) exercises so that students can actively practice the study material on the spot.
- ✓ Check whether your students collectively understand the topic at hand and monitor your students' understanding independently as well.

## Principle #2

Let students actively integrate study materials into their unique understanding and perspective.

- ✓ Implement generative learning activities, such as summarising, mind mapping, self-testing, or teaching others, to help students work the study material into their own mental map.
- ✓ Facilitate open discussions and debates with specific questions/statements to let students put their knowledge into practice.
- ✓ Encourage peer-to-peer interactions to discuss the study material, or to increase their understanding by providing feedback on each others' work.
- ✓ Design realistic activities related to the field and professional practice, and give students the freedom to explore course themes while encouraging creativity.

## Principle #3

Empower students to actively learn and take ownership of their learning.

- ✓ Implement activities to help students develop their metacognition skills – in other words, 'learning how to learn'.
- ✓ Show your students how to take on a proactive mindset to find information and solve difficult problems.
- ✓ Where possible, give students freedom to explore course themes while encouraging creativity.
- ✓ Provide sufficient and constructive feedback to act upon, and share examples of relevant work from past students (or examples from the field) to communicate expectations.
- ✓ Facilitate sessions with immediate tutor feedback on practice exercises.

<sup>2</sup> Chapman, Elaine (2002) "Alternative Approaches to Assessing Student Engagement Rates," Practical Assessment, Research, and Evaluation: Vol. 8 , Article 13. DOI: <https://doi.org/10.7275/3e6e-8353>

<sup>3</sup> Barkley, E. F., & Major, C. H. (2018). Interactive lecturing: A handbook for college faculty. John Wiley & Sons.

<sup>4</sup> Saul Mcleod, P. (2023) Constructivism learning theory & philosophy of education, Simply Psychology. Available at: <https://www.simplypsychology.org/constructivism.html>



“Hearing someone talk and model what it means to truly love something can be life changing for an impressionable young mind.”<sup>5</sup>



## #2 Inspire

An essential dimension is to inspire students and convey your passion for a subject matter. When educators are genuinely enthusiastic about their course material, it fosters an authentic connection with their students. By instilling a sense of inspiration in your students regarding your course or topic, you have the power to

ignite their passion and stoke their innate desire to learn. This not only enriches their educational experience but also strengthens the bond between educator and student, creating a more vibrant and fulfilling learning environment.





# Inspire

**How inspiring learning works** /// Inspiring students can be achieved in multiple ways. De Bruyckere & Kirschner<sup>6</sup> describe that “a harmonious passionate teacher can have a ‘contagious’ effect on the pupils”. Students value authentic educators who are passionate about their subject. Additionally, using a motivation model like ARCS<sup>7</sup> can contribute to inspiring and motivating your students. According to this theory, a course or instructional materials are more motivational when they grab the Attention (A), are Relevant (R) for the students, make the them feel Competent (C), and are Satisfactory (S).

## Principle #1

Show you are passionate about your course and subject.

- ✓ Take time and effort to prepare your lectures. Students will notice when you put in the extra effort.
- ✓ Include (group) exercises so that students can actively practice the study material on the spot.
- ✓ Sometimes students can wander off. In that case, start a conversation and find out where they lost you to bring them back to the content.

## Principle #2

Connect your course to the real world.

- ✓ Use storytelling to let students experience stories from your professional practices or research.
- ✓ Bring in your own research to demonstrate the relevance or implications of the content.
- ✓ Use real case studies to bring the content to life.
- ✓ Demonstrate parts of your course. This can be an experiment, but also simulations, games, videos, a story, or case study. Show what the implications of your course can be.
- ✓ Invite relevant guest speakers from the field or scientists.
- ✓ Set up games which allow students to practice realistic scenarios.

## Principle #3

Share students' work.

- ✓ Showcase and value students' (past) work.
- ✓ Encourage students to share their work and experiences with other students (current class, future students).
- ✓ Set-up a symposium/mock-conference so students can showcase their work, projects or creations. Add an optional prize for the best or most original work.

## Principle #4

Make students' work matter.

- ✓ Create opportunities for students to be involved in real projects.
- ✓ Let students (co-)author an academic paper.
- ✓ Invite companies to share challenges with students of which the right solutions will be implemented in reality.

<sup>5</sup> Kirschner, P. A., Hendrick, C., & Heal, J. (2022), p. 245. “To thine own self be true”. In How teaching happens: Seminal works in teaching and teacher effectiveness and what they mean in practice (p. 245). Taylor & Francis.

<sup>6</sup> De Bruyckere, P., & Kirschner P.A., | Yvonne Xian-han Huang (Reviewing Editor) (2016) Authentic teachers: Student criteria perceiving authenticity of teachers, Cogent Education, 3:1, DOI: 10.1080/2331186X.2016.1247609

<sup>7</sup> Keller, J. M. (1987). Development and use of the ARCS model of instructional design. Journal of Instructional Development, 10(3), 2–10. <https://doi.org/10.1007/bf02905780>

“Learning should be durable, not only until the exam or the end of the term, but for much later”<sup>8</sup>



## #3 Teach

One of the most important roles educators have, is to teach students new concepts, content, and applications, and educate them in becoming experts in their field of study. As an educator, you introduce new content, link it to what students already know, and help them apply

this knowledge in similar or new contexts. This holistic approach plays a transformative role in cultivating their evolution from novice learners to accomplished experts within their respective fields.



# Teach

**How building expertise works** /// The main difference between a novice (student) and an expert (educator) is that experts have large, rich, and deep cognitive schemas. A cognitive schema is a mental structure of already learnt and available knowledge, skills, and ideas. Building these cognitive schemas is key to becoming an expert. By teaching new concepts, students will gain more knowledge in the domain you are teaching and progress towards becoming an expert. However, new content can be overwhelming for students. It's important to design education in such a way that students do not feel overwhelmed by new content. Let students think along with you to discover the material/knowledge together.

## Principle #1

Facilitate students in constructing cognitive schemas and becoming an expert in their field.

- ✓ Activate prior knowledge of your students. Ask questions, use a polling tool or a quiz to activate relevant information. New content will be more easily remembered and accommodated when prior knowledge is activated.
- ✓ Connecting existing and new concepts. Explicitly connect concepts, explain how they overlap, differ, or are connected.
- ✓ Let the students experience how an expert (you) would solve the problem. Show the process of solving a problem, think out loud, and share your considerations.
- ✓ Provide an overview and show how content fits together. Give your students an advance organiser (like an image, schema, graph, process) which shows the outline of your course and how new content fits into the bigger picture.

## Principle #2

Teach new concepts in a way that does not overwhelm students.

- ✓ Teach new topics in small steps. Take enough time to explain the steps and make sure students master a step before proceeding to the next step.
- ✓ Guide students in solving problems by offering worked examples, tips, tricks and step-by-step guides. These supporting materials can be reduced once students master the materials.
- ✓ Use a variety of examples, including both worked examples and real-life case studies, alongside engaging demonstrations.
- ✓ Provide regular informal and formal feedback on how students are doing and what they should do to progress.

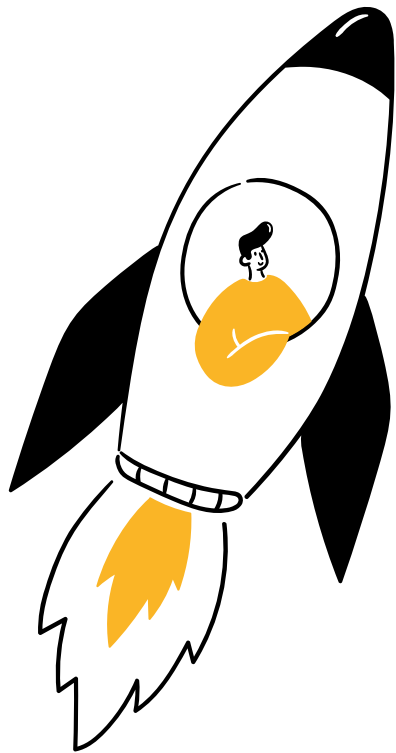
## Principle #3

Incorporate learning activities throughout the content.

- ✓ Split content into manageable sections. Split large chunks of content (e.g., 30 minute video, chapters from a book) into smaller, more feasible sections.
- ✓ Incorporate regular knowledge checks or activities. Add small quizzes, reading guidelines, knowledge checks, flashcards, in order to encourage students to engage with the content.
- ✓ Facilitate deeper processing of knowledge. Add interactive, reflective activities like (online) discussions, roleplaying, Q&A sessions, and learning activities where students generate new output (e.g., summaries, mind maps, videos, overviews, exam questions).

<sup>8</sup> Kirschner, P. A., Hendrick, C., & Heal, J. (2022). "Activities that give birth to learning". In How teaching happens: Seminal works in teaching and teacher effectiveness and what they mean in practice (p. 153). Taylor & Francis.

“Effective feedback must answer three major questions asked by a teacher and/or by a student: where am I going, how am I going, and where to next?”<sup>9</sup>



## #4 Supervise

Fostering a supportive learning environment that not only tolerates but actively encourages students to embrace mistakes as valuable opportunities for learning is a fundamental aspect of effective education. As a supervisor, you play a crucial role in enhancing students' intrinsic

motivation by fostering autonomy, bolstering their sense of competence, and cultivating meaningful relationships.<sup>10</sup> Moreover, it is imperative that the guidance and support you offer are thoughtfully tailored to align with the unique needs of each student.



# Supervise

**How supervising works** /// A supervisor has multiple roles and responsibilities. For example, starting and maintaining fruitful relationships with students and keeping an eye on time investment. In order to supervise effectively, successful communication, providing constructive feedback, and managing expectations is of utmost importance. Educators are essentially guiding students in the 'right' direction, while allowing space for autonomy. Recognise the needs of the student and adapt your supervision strategy to their needs. Additionally, equally important is to reflect on the process of supervision and adjust as required by the situation.

## Principle #1

Create a flying start.

- ✓ Plan your first meeting with your students by balancing content, procedures, and building a positive rapport.
- ✓ Stimulate intrinsic motivation by making a student feel competent and autonomous, and invest in the relationship.
- ✓ Get to know the student in front of you, by setting up and fostering a constructive collaboration.

## Principle #2

Keep your students engaged.

- ✓ Know that a supervisor has different roles and responsibilities, and be able to reflect on these.
- ✓ Provide effective feedback to students through a combination of feedback, feed forward, and feed up. Where am I going? Feed-up provides insight into the desired situation. Feedback offers insight into the current situation. Feed-forward suggests insight into how to close the gap between the current and the desired situation.<sup>11</sup>
- ✓ Be an active listener: Not only listen with your ears but with your whole body. Show that you are interested.

## Principle #3

Let your students make their own choices

- ✓ Keep your student in the lead in a conversation.
- ✓ Ask open questions.
- ✓ Know which tasks are for the student and which tasks are your responsibility.

## Principle #4

Support students in the process

- ✓ Provide students with examples of effective planning and guide them in developing their own plan.
- ✓ Help students by reflecting on their process and product. By planning regular reflection moments and providing students with tools to reflect.
- ✓ Teach students how they can provide feedback, by setting the right example, provide a structured method to provide feedback and for instance by planning regular peer to peer feedback moments.

<sup>9</sup> Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of educational research*, 77(1), 81-112.

<sup>10</sup> Deci, E. L., & Ryan, R. M. (Eds.). (2004). *Handbook of self-determination research*. University Rochester Press.

<sup>11</sup> Provide effective feedback (no date) TU Delft. Available at: <https://www.tudelft.nl/teaching-support/didactics/teach-and-supervise/provide-effective-feedback>.

“Learning is more than the acquisition of the ability to think; it is the acquisition of many specialized abilities for thinking about a variety of things.”<sup>12</sup>



## #5 Challenge

Facilitating the intellectual development of your students necessitates the deliberate and thoughtful act of mentally challenging them. An integral facet of motivating students to confront the intellectual challenges before them is ensuring they have a solid grasp of preceding material and content, allowing them

to progress confidently. However, it is important to acknowledge the inherent complexity in individually challenging students, as their levels of mastery naturally vary. As an educator you can challenge your students through a repertoire of principles elaborated upon in this chapter.



# Challenge

**How challenging students works** /// According to Vygotsky's<sup>12</sup> zone of proximal development theory, in a learning process there is: the learner's current knowledge and skills level, what a student can do with guidance, and what a student cannot do yet on their own. Setting high (but realistic) expectations leads to better learning outcomes. Challenging your students will help them get in the "flow"; this is a mental state where they are fully immersed in a feeling of energized focus, full involvement, and enjoyment in the process of the activity.<sup>13</sup> Scaffolding will help students get into that flow and build their confidence.<sup>14</sup>

## Principle #1

Let students experience competence and don't overload them.

- ✓ Help students to set clear expectations so they can plan and prioritise.
- ✓ Create a safe environment for students to learn by making mistakes.<sup>15</sup>
- ✓ Encourage students to question you and think out of the box.
- ✓ Demonstrate how to solve problems with step-by-step guidance by providing examples, and discussing both sides of an argument.
- ✓ Provide students with scaffolds. Give clues on how to break down difficult problems and exercises.

## Principle #2

Go 'above and beyond'.

- ✓ Go beyond the core content by providing students additional materials and by giving them diverse opportunities to immerse themselves.
- ✓ Let students be creative by giving them the opportunity to create content.
- ✓ Provide opportunities to showcase work, for instance by involving societal challenges and/or societal stakeholders in assignments.

## Principle #3

Give students constructive and inspiring feedback.

- ✓ Include exercises from previous weeks/courses and build in opportunities to recap topics later on or after the course.
- ✓ Provide students with sufficient oversight of the (course) content by using overviews and mind maps and by referencing to topics and readings.
- ✓ Discuss arguments by playing devil's advocate.
- ✓ Support students to question their own work and reflect.
- ✓ Have students present and host Q&A sessions
- ✓ Encourage students to challenge assumptions.

<sup>12</sup> Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

<sup>13</sup> Csikszentmihalyi, M. (1997). *Finding flow: The psychology of engagement with everyday life*. Basic Books.

<sup>14</sup> Chen, C. H., & Law, V. (2016). Scaffolding individual and collaborative game-based learning in learning performance and intrinsic motivation. *Computers in Human Behavior*, 55, 1201-1212.

<sup>15</sup> See for example: Kapur, M. (2017) Productive failure (PF), learning design, four core mechanisms, Manu Kapur. Available at: <https://www.manukapur.com/productive-failure/>.



“The presence of a caring mentor is associated with positive outcomes in different life domains, such as academic functioning”<sup>16</sup>

## #6 Mentor



Mentoring holds a pivotal role in the realm of education.<sup>16</sup> It includes fostering the personal and professional development of students, and providing opportunities to seek support and address issues.<sup>17</sup> Cultivating resilience in students is essential when acting as a mentor.

Encourage students to ask for help, to reflect, and to adapt in academically challenging environments. Facilitate building relationships rooted in understanding, trust for one another, and the recognition and appreciation of progress in each other.<sup>18</sup>



# Mentor

**How mentoring works** /// A mentor is someone who is connected to students. Although the type and frequency of mentoring might differ for various group sizes, the key is that mentors create a learning environment that is both safe<sup>18</sup> and challenging<sup>19</sup>. Mentoring is a dedication to the holistic development of your students, and it plays a crucial part in shaping their academic and personal success.

## Principle #1

Humanise yourself.

- ✓ Introduce yourself to your students by sharing something personal. Decide for yourself what and how much you feel comfortable sharing.
- ✓ Show vulnerability to make yourself human. Talk about lessons learned and personal experiences.
- ✓ Make sure students know how they can contact you and share your rules of engagement. Clarify to your students what your preferred channel of communication is and manage their expectations regarding your response time.
- ✓ It is important to frequently 'show' yourself. Give students the opportunity to find you when they need you.

## Principle #2

Foster social cohesion.

- ✓ Create informal social spaces, or encourage students to form their own.
- ✓ Facilitate icebreaker activities, fieldtrips, and optional study groups.
- ✓ You can implement tutoring, buddy-system, or group work to let students collaborate.
- ✓ Make sure you regularly interact with your students. Try to keep all students on board.

## Principle #3

Create a safe environment for students.

- ✓ Explain to students how the course is structured and where they can ask their questions.
- ✓ Provide clear guidelines and rules on how to respectfully communicate with each other.
- ✓ Give students opportunities to get to learn the tools in the Learning Management System (LMS). Let them introduce themselves on the discussion board or do a test-quiz. Then provide constructive feedback and opportunities to discuss it.
- ✓ Allow students to question the teacher, and learn how to debate constructively.

## Principle #4

Ensure student well-being.

- ✓ Explain where students can find help or support (e.g., academic counsellors, student counsellors, student psychologists, confidential advisor, etc.).<sup>20</sup>
- ✓ Support your students. Ask students how they are doing, what they are facing, and what they need (can be individual, but also in a class).
- ✓ Let your students have success experiences. Success experiences lead to motivation and less study anxiety. Make sure that you use feedback, scaffolding and guide your students.

<sup>16</sup> Aresi, G., Pozzi, M., & Marta, E. (2021). Programme and school predictors of mentoring relationship quality and the role of mentors' satisfaction in volunteer retention. *Journal of Community & Applied Social Psychology*, 31(2), 171-183

<sup>17</sup> Mullen, C.A. and Klimaitis, C.C. (2021) 'Defining mentoring: a literature review of issues, types, and applications', *Annals of the New York Academy of Sciences*, 1483(1), 19–35.

<sup>18</sup> Haeger, H., & Fresquez, C. (2016). Mentoring for inclusion: The impact of mentoring on undergraduate researchers in the sciences. *CBE—Life Sciences Education*, 15(3), ar36.

<sup>19</sup> Stelter, R. L., Kupersmidt, J. B., & Stump, K. N. (2021). Establishing effective STEM mentoring relationships through mentor training. *Annals of the New York Academy of Sciences*, 1483(1), 224-243.

<sup>20</sup> Well-being and study (no date) TU Delft. Available at: <https://www.tudelft.nl/en/student/well-being-and-study>.

“Reflection helps engineers to develop themselves and become better professionals” <sup>21</sup>



## #7 Reflect

Reflection is one of the core values of teaching and learning at TU Delft. Therefore, it is key that educational professionals give a high priority to reflection. According to McAlpine et al.<sup>22</sup> reflection in education is a process wherein knowledge, focus, goals, decision making, actions, monitoring and evaluation all play a pivotal role.

In this dimension, there are several key domains that are relevant for educators to reflect upon. It is helpful for all educators to seek out a peer who can serve as a mentor,<sup>23</sup> for a mentor can nurture and catalyze professional development.



# Reflect

**How reflection works** /// Reflection is a crucial process through which educators gain insights into their experiences, perspectives, and the diverse viewpoints of others, fostering more informed and collaborative decision-making.<sup>21</sup> Moreover, it enhances self-awareness, expansion of educators' teaching identity, contributes to the enhancement of teaching practices, and increases connection between educators and their students.

## Principle #1

Reflect on your profession as an educator.

- ✓ What works well and what doesn't work well in your teaching practices, lectures, and course design?
- ✓ What are your strengths and weaknesses are in the classroom? What characterises you as an educator?
- ✓ Is the content you provide up to date? Do students understand the concepts and other materials you teach?
- ✓ Do you connect your content to the things that are happening right now in society? Can students relate to your content and relate to their future role as engineers in society?
- ✓ Are you aware of alignment with other courses in the curriculum and the overall programme?

## Principle #2

Reflect on your relationship and interaction with students.

- ✓ Do you provide feedback to your students? Do you have patience when providing feedback? Do you feel free to provide feedback to your students? Is the feedback you provide constructive?
- ✓ Do you ask students to provide tips and tricks to upgrade your courses? If not, how can you ask for feedback that is useful to you?
- ✓ Do you know how your students are doing in general and in your course?

## Principle #3

Reflect on your professional development.

- ✓ Do you reflect on the progress that you've made as an educator? Have you developed in your teaching practices?
- ✓ What kind of educator would you like to become? In what aspects of lecturing would you like to develop yourself?
- ✓ How do you evaluate your performance from year to year and from course to course?
- ✓ How do you deal with ambiguity and when you feel uncertain about things?
- ✓ How do you invest in your development as an educator (e.g. by reading articles on education/teaching, connecting with peers, consulting a mentor)<sup>24</sup>?

## Principle #4

Reflect on your identity as an educator.

- ✓ What is your preferred style of teaching? What kind of strategies do you try out in your teaching practice? What aspects of teaching are you not entirely confident with?
- ✓ How do you act as a role model for your students and why?
- ✓ What are the values you live by and you would like to transfer to your students?
- ✓ How do you see your role in your students' journey to becoming a professional engineer? What do you want them to experience, know, and feel?
- ✓ Do you feel proud of your students who passed your course(s)? Why do you feel proud of them, or why not?

<sup>21</sup> Hermsen, P. E. A., Rooij, R. M., Rijnbeek, G., & Adrichem, T. (2022). Reflection in Engineering Education: White paper '100 DAYS OF... REFLECTION'. Delft University of Technology.

<sup>22</sup> McAlpine, L., Weston, C., Berthiaume, D., Fairbank-Roch, G., & Owen, M. (2004). Reflection on teaching: Types and goals of reflection. *Educational Research and Evaluation*, 10(4-6), 337-363.

<sup>23</sup> Turner, R., Huang, R., Poverjuc, O., & Wyness, L. (2016). What role do teaching mentors play in supporting new university lecturers to develop their teaching practices?. *Professional development in education*, 42(4), 647-665.

<sup>24</sup> TUnder - Learning Together (no date). Available at: <https://www.tudelft.nl/teachingacademy/kick-start-your-teaching/tunder>

# Do you want to enhance your impact?

For advice and support on teaching and learning contact [Teaching Support](#)

Explore the resources available on the [TU Delft Teaching Support website](#).

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