

Official Guide 2.3

Guidelines for use the EDU4standards.eu Teachers' Support Tool

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Step 1: Understanding what is the EDU4standards.eu Teachers' Support Tool

The main intention of the EDU4standards.eu teachers support tool, based on the ITCoS, is to become the foundation for exchanging information, good practices and experiences, as well as teaching material related to standardisation by educators to improve existing courses (or their parts) on standardisation or to inspire and support the involvement of standardisation topics/content in existing courses on different disciplines.

This tool provides key topics and concepts, recommendations for sources, support material, and good practice for tailoring part of the course or the whole course on standardisation.

Step 2: Getting Familiar with the EDU4standards.eu Teachers' Support Tool Structure

This guide provides key topics and concepts, recommendations for sources, support material, and good practice for tailoring part of the course or the whole course on standardisation. The format for developing topics of the EDU4standards.eu teachers support tool is presented in Table 1.

Structure of the ITCoS guide	Explanation
1. Topic	Topics are chosen to represent a unit that the educators can combine with other units of their choice. The topics are intertwined. It is recommended that all topics have SGD (social/green/digital) examples.
2. Short instruction	Short instructions elaborate on why understanding a specific topic is important or relevant
3. The ILOs examples	In this section is explained the connection with ILOs
4. Recommended Teaching Case studies/Serious games/Other	The teaching case studies do not have to be written (although that would be good), but they can be described in a few sentences, and a list of sources can be given for a specific case (for example, HD vs Blue Ray). Sharing teaching case studies used in a classroom is a practice we must support.
5. Good practice	Good practice is a description of educators' experience in working with students/trainees. All partners and pilots should contribute to this part.
6. Recommended sources	It lists literature (books, papers) that is recommended to someone who wants to start teaching standardisation or to improve existing classes.

Table 1. Format for the Topics in the EDU4standards.eu Teachers Support Tool

Step 3: Use the EDU4standards.eu Teachers' Support Tool

Step 3.1: Start

The link for the EDU4standards.eu Teachers' Support Tool is: <https://edu4standards.eu/teacher-support-tool>. Go to "Teaching" and choose "Teachers' Support Tool"



Figure 1. Finding the EDU4standards.eu Teachers' Support Tool

Step 3.2: Discover the KA you need

Knowledge Areas (KAs) in the ITCoS enable a way to systematize knowledge and skills related to standardisation, as well as, topics, existing teaching material (recommended books and research papers, teaching case studies, serious games, video material) and teachers' experiences (good practice). The ITCoS is based on four KAs:

- KA1. Basic knowledge of standardisation needed to raise awareness
- KA2. Standardisation interdependencies with other areas and roles in specific contexts
- KA3. Strategic use of standards
- KA4. Strategic participation in standards development



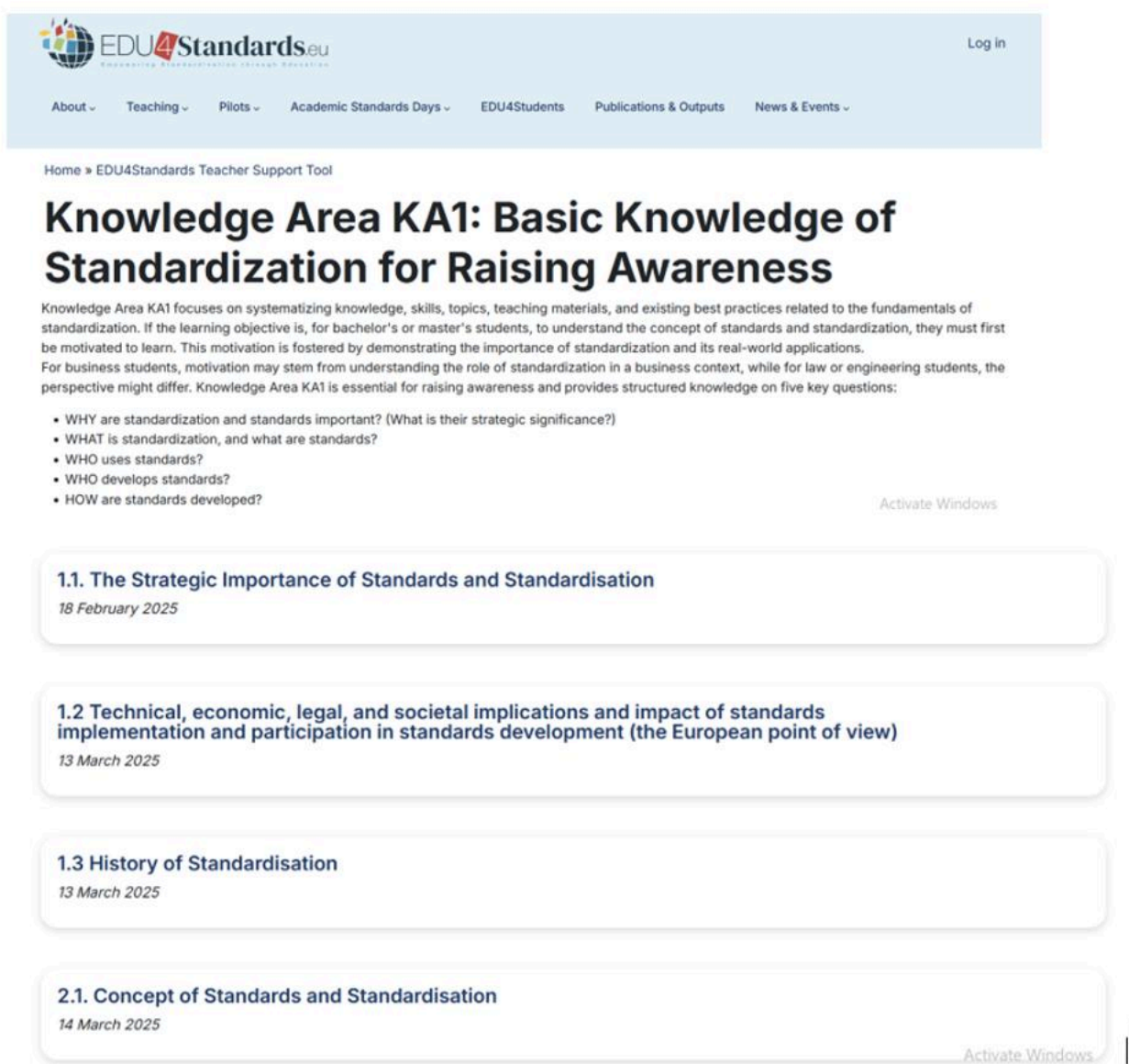
The screenshot shows the introduction page of the EDU4Standards Teacher Support Tool. At the top is the EDU4Standards.eu logo and a navigation bar with links: About, Teaching, Pilots, Academic Standards Days, EDU4Students, Publications & Outputs, and News & Events. Below the navigation bar is a large heading "EDU4Standards Teacher Support Tool" and a red icon depicting two people. A paragraph explains the tool's purpose: "The EDU4standards.eu Teachers' Support Tool, based on the ITCoS, aims to serve as a focal point or central hub - a foundation for exchanging information, best practices, and experiences, as well as teaching materials related to standardization. Its purpose is to support educators in improving existing courses (or parts of them) on standardization or in integrating standardization topics into courses across various disciplines. This tool provides key concepts, recommended resources, support materials, and best practices for tailoring a course or course components on standardisation." Below this is a prompt: "Explore the tool by clicking on the **four knowledge areas** below!". At the bottom, there are four colored boxes representing the knowledge areas, each with a "Learn more" button:

- Basic knowledge for raising awareness on standardisation (dark blue box)
- Standardisation interdependencies and roles in contexts (red box)
- Strategic use of standards (light blue box)
- Strategic participation in standards development (dark blue box)

Figure 2. The introduction page of the EDU4standards.eu Teachers' Tool

Step 3.3: Search the topics and choose what you need

By clicking on the box of knowledge areas of your interest you can find short explanation about the knowledge area and topics.



The screenshot shows the EDU4Standards.eu Teacher Support Tool interface. The header includes the logo, navigation links (About, Teaching, Pilots, Academic Standards Days, EDU4Students, Publications & Outputs, News & Events), and a Log in button. The main content area is titled "Knowledge Area KA1: Basic Knowledge of Standardization for Raising Awareness". Below the title is a paragraph explaining the focus of KA1 and its relevance for different student groups. A list of five key questions is provided, followed by four expandable topic boxes. The first three boxes are for "1.1. The Strategic Importance of Standards and Standardisation", "1.2 Technical, economic, legal, and societal implications and impact of standards implementation and participation in standards development (the European point of view)", and "1.3 History of Standardisation". The fourth box is for "2.1. Concept of Standards and Standardisation". Each box shows a date and an "Activate Windows" watermark.

Home » EDU4Standards Teacher Support Tool

Knowledge Area KA1: Basic Knowledge of Standardization for Raising Awareness

Knowledge Area KA1 focuses on systematizing knowledge, skills, topics, teaching materials, and existing best practices related to the fundamentals of standardization. If the learning objective is, for bachelor's or master's students, to understand the concept of standards and standardization, they must first be motivated to learn. This motivation is fostered by demonstrating the importance of standardization and its real-world applications. For business students, motivation may stem from understanding the role of standardization in a business context, while for law or engineering students, the perspective might differ. Knowledge Area KA1 is essential for raising awareness and provides structured knowledge on five key questions:

- WHY are standardization and standards important? (What is their strategic significance?)
- WHAT is standardization, and what are standards?
- WHO uses standards?
- WHO develops standards?
- HOW are standards developed?

Activate Windows

1.1. The Strategic Importance of Standards and Standardisation

18 February 2025

1.2 Technical, economic, legal, and societal implications and impact of standards implementation and participation in standards development (the European point of view)

13 March 2025

1.3 History of Standardisation

13 March 2025

2.1. Concept of Standards and Standardisation

14 March 2025

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Figure 3. The Knowledge Area 1 Page

Step 3.4. Exploring the topics

By clicking on topic of your interest you will find information structured according to table 1.



The screenshot shows the EDU4Standards.eu Teachers' Support Tool interface. The header includes the logo and navigation links: About, Teaching, Pilots, Academic Standards Days, EDU4Students, Publications & Outputs, and News & Events. The breadcrumb trail reads: Home » EDU4Standards Teacher Support Tool » Knowledge Area KA1: Basic Knowledge of Standardization for Raising Awareness.

2.1. Concept of Standards and Standardisation

Short instruction

Generally, and highly simplified, the story goes like this. Some actors (e.g., companies, alliances of companies and organizations, research institutes, universities, and many other types of organizations) have a problem and need, for many distinct reasons, to find a solution with others. Some organizations

The ILOs examples

K6.1., K7.1.

Recommended Teaching Case studies/Serious games/Other

Recommended duration of tutorials: from 30 minutes to 90 minutes

1. Serious Game: Standard Park (BSI)

Keywords: Standardisation, Standards

About: This game acts as an introduction to standards and standardisation for participants who have had no or truly little prior experience with the topic. It is a board game driven by the drawing of cards, in which players get to see the benefit of both applying standards and participating in a standardisation

Good practice

There are plenty of definitions of standards and standardisation. It is a challenging task to teach and understand the endless definitions. However, such richness in definitions of standardisation and standards can be a base for good class experience. Class discussion on the definitions (old and new ones) provided by formal organizations for standardisation, including international standardisation organizations (ISO/IEC/ITU), European standardisation organizations (CEN/CENELEC/ETSI), and National Standards Bodies (e.g., BSI, DIN, AFNOR, etc.) might be a good starting point. For example, the definition which describes a standard as a document, established by consensus, and approved by a recognized body (ISO/IEC, 2004),... can be used to explain that not all standards are documents, established by consensus, and approved by a recognized body (Hesser et al., 2010) which can lead to other definitions provided by other organizations for standardisation (e.g., professional, industry, and business associations, consortia, and fora working in different fields). Enabling students to critically analyze different definitions significantly raises their understanding of the topic.

Recommended sources

If you are new to the topic, the basics can be found at:

- <https://hsbooster.eu/training-academy/what-standardisation-and-what-are-standards>

Other sources relevant to the topic:

- Grillo, F., Wiegmann, P.M., de Vries, H.J., Bekkers, R., Tasselli, S., Yousefi, A., van de Kaa, G. (2024). Standardisation: Research Trends, Current Debates, and Interdisciplinarity. *Academy of Management Annals*, 18(2), 788-830.
- Baron, J., & Spulber, D. F. (2018). Technology Standards and Standard Setting Organizations: Introduction to the Searle Center Database. *Journal of Economics and Management Strategy*, 27(3), 462-503. <https://doi.org/10.1111/jems.12257>.
- De Vries, H. J. (1999). *Standardisation: A Business Approach to the Role of National Standardisation Organizations*. Springer Science+Business Media, LLC. <https://www.springer.com/gb/book/9780792386384>.

Figure 4. The topic page of the EDU4standards.eu Teachers' Support Tool

Step 4: Contribute to the the EDU4standards.eu Teachers' Support Tool

If you would like to contribute to any of the existing topics (Recommended Teaching Case Studies, Serious Games, Other Good Practices, or Recommended Sources), please feel free to share your ideas, comments, impressions, or suggestions. We will review all contributions and act accordingly. After every topic you have this box, just click it and leave the comment.

Would you like to improve this content? Leave a comment!

If you would like to propose a new topic, you are more than welcome to do so. Simply register on our website and leave a comment.

Your input is highly valued and will help us refine and expand the content to better serve the standardisation education community.



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