Quality Indicators Implementation in Higher Education Institutions: some clues from the SMART-QUAL project

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Outline

SMART-QUAL

- Objective | Team | IO1

Guidelines (IO2.A1)

- Objective
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SMART-QUAL

Structured indicators to manage HEI Quality System

It addresses some existing important needs, namely:

- Lack of a comprehensive framework of harmonized quality indicators and benchmarks.
- Lack of internal QM systems' evaluation process by quality assurance agencies, based on common criteria and indicators

efforts of HEIs to implement internal QM systems may not be officially recognized

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SMART-QUAL

Structured indicators to manage HEI Quality System

Objective

To support HEIs in the implementation of effective internal QM systems by designing a set of quality indicators that can be implemented and thus help improve the internal QM systems.

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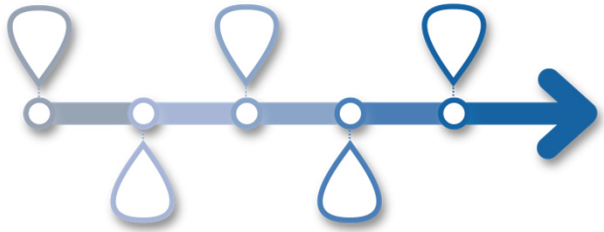
SMART-QUAL

- Duration

  28 months (September 2020 – December 2022)



- Funded by

  Erasmus+ (KA2 -Cooperation for innovation and the exchange of good practices – Strategic Partnerships for higher education)

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SMART-QUAL

Project coordinator:

- CONEXX-Europe (Belgium)

Project Partners:

- Politecnico di Torino (Italy)
- Studiju Kokybes Vertinimo Centras (Lithuania)
- Agencia per a la Qualitat del Sistema Universitari de Catalunya (Spain)
- Universitat Internacional de Catalunya (Spain)
- Universidade de Aveiro (Portugal)
- Agência de Avaliação e Acreditação do Ensino Superior (Portugal)
- Universidade do Minho (Portugal)
- Vrije Universiteit Brussel (Belgium)

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SMART-QUAL

Structured indicators to manage HEI Quality System

The indicators should be:

Short

Meaningful

Appropriate

Reunified

Transversal

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SMART-QUAL

IO1

Creation of a new and replicable QIS

Mission/ESG	ESG name/standard	Basic	Recommended	Total
Teaching & Learning		19	19	38
1	Policy for quality assurance	3		3
2	Design and approval of programmes	1	1	2
3	Student-centred learning, teaching, and assessment	2	5	7
4	Student admission, progression, recognition, and certification	3	4	7
5	Teaching staff	2	5	7
6	Learning resources and student support	2	2	4
7	Information management	1		1
8	Public information	1		1
9	Ongoing monitoring and periodic review of programmes	3	1	4
10	Cyclical external quality assurance	1	1	2
Research		5	5	10
11	Resources	2	3	5
12	Results and impact	3	2	5
Relationship with Society		4	6	8
13	Recruitment and social inclusion	1	2	3
14	Collaboration with stakeholders	1	2	3
15	Impact on society	1	1	2
Total		**27**	**29**	**56**

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SMART-QUAL

IO2 Guidelines to support the QIS practical implementation in the HEIs

IO2	
IO2.A1	**CONTACTING RELEVANT STAKEHOLDERS**
I02.A2	DESIGNING THE STRUCTURE OF THE GUIDELINES
IO2.A3	CONTENT PRODUCTION
IO2.A4	TESTING OF THE NEW SYSTEM AND PEER REVIEW
IO2.A5	GRAPHIC DESIGN OF THE GUIDE

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Guidelines (IO2.A1)

OBJECTIVE

- Try to understand, with the help of relevant stakeholders (from 33 HEIs of 4 European countries), the potential challenges inherent to the use of the QIS, namely:
  - ✓what data and resources are needed for its implementation,
  - ✓what is the relevant content that should be included in the guidelines.

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Guidelines (IO2.A1)

METHODOLOGY

- Construction of an interview script for conducting semi-structured interviews in the selected HEI.
- Selection of two stakeholders by HEI:
  - strategic stakeholder (e.g. member of the rectory team responsible for the implementation and promotion of the QMS),
  - operational stakeholder (e.g. member of the quality management office of the institution).
- Conducting the interviews.
- Content analysis and summary of information (filling out a form).

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Guidelines (IO2.A1)

METHODOLOGY

The team from the University of Aveiro conducted six interviews to stakeholders from three Portuguese HEIs:

- one of the first Portuguese HEIs to implement and obtain certification of its QMS by A3ES,
- another university with a QMS also certified by A3ES,
- a polytechnic school that has its QMS implemented and certified according to ISO 9001:2015.

The interviews were conducted according to the script, structured around the following two main questions:

i) What are the potential challenges to the implementation of the set of quality indicators included in the QIS?

ii) What do you believe might be relevant to include in a script with guidelines for the implementation of QIS?

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Guidelines (IO2.A1)

RESULTS: Characterization of the HEIs and interviewees

Type:	University	Organic unit (school or faculty)	Polytechnic School
Sector:	Public	Public	Private
Dimension:	12 737 students	10 468 students	591 students
Number of campi	3 campuses	3 campuses	1 campus
Date of foundation	1973	1911	2002
Comprehensive vs. specific	Comprehensive character	Specific character (architecture, engineering, science and technology)	Specific character (health school)
Strategic Stakeholder	Vice-Rector for Promotion of Quality	President of the Council for Quality Management	President of the Council for Quality Evaluation
Years of experience in QM	11	2	8
Operational Stakeholder	Senior advisor for quality and communication	Coordinator of the Area for Studies, Planning and Quality	Member and secretary of the Council for Quality Evaluation
Years of experience in QM	18	3	4

Guidelines (IO2.A1)

RESULTS: Responses from strategic stakeholders

Main challenges		
the production of indicators is more efficient when data is collected through an automated process, without the need for human intervention	it is complicated to implement a set of indicators when there is no formalized and instrumentalized way to collect the data and information needed to calculate them	having a more automated system, where there is no need to manually enter the data into the system
it would be relevant to have indicators within a system capable of making predictions about the future in order to anticipate or improve decision-making	the institution would like to have a business intelligence system, with real-time indicators calculated from existing data	
human resources and time are needed for the proper implementation of a set of quality indicators		

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Guidelines (IO2.A1)

RESULTS: Responses from strategic stakeholders

Recommendations		
it should make clear that the three areas are not unconnected and include indicators covering the relationship between them	it is very important that the QIS has a definition of the indicators, their nature (qualitative or quantitative) and information about the variables that need to be measured in order to determine the indicator	it is a good practice to define a kind of identity card for each of the quality indicators, with special attention to qualitative indicators, as they tend to be more subjective
for each indicator, minimum targets should be established and indications on how to understand if this indicator has been achieved and become obsolete should be included	define how indicators will be displayed after they are calculated	the hierarchy of indicators (basic and recommended) can be useful
	indicators should be defined to measure the goals and actions included in the institution's strategic plan	quality indicators are used to monitor the extent to which the objectives and actions set out in the strategic plan are being met

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Guidelines (IO2.A1)

RESULTS: Responses from operational stakeholders

Main challenges		
a difficulty involves the initial work and investment needed to automate data collection processes, as well as develop systems that validate and ensure the quality of such data	there are difficulties whenever it is necessary to collect information from dispersed sources, and the first challenge would be to implement the necessary processes for such data to be collected (regularity of that collection and how to get the information to the interested stakeholder)	systems used to manage this information should be integrated and, ideally, be automated or intelligent systems
Recommendations		
it is important to clarify the formulas for the indicators, create a dictionary of terms, define rules and indicate what data is needed to calculate each indicator	it is necessary to clearly explain the formulas as well as all the components that make up the indicator	there should be no subjectivity in the indicators and, even when there is a formula, it should be clarified
make the indicators known and disseminated, see how they evolve over time (improving or getting worse), set goals for them and analyze the pace of evolution	it is important to look at the evolution of the indicators over time to understand if they are evolving positively	setting targets for certain indicators is also extremely important, but the value of these targets should always depend on the institution's context and strategic objectives

Guidelines (IO2.A1)

CONCLUSIONS

More relevant challenges to the implementation of the QIS:

- the need to invest in automated data collection and processing systems, enabling a faster and more reliable calculation of the indicators,
- these systems should also enable real-time monitoring of the evolution of indicators as a way to support timely decision-making,
- it should be noted that the development and maintenance of these systems require qualified human resources, as well as material resources.

Important aspects to consider in the guidelines for the implementation of the QIS:

- clarification of the indicators and how they are calculated,
- clarification also on where and when indicators should be applied and how they should be presented,
- definition of targets for the indicators.

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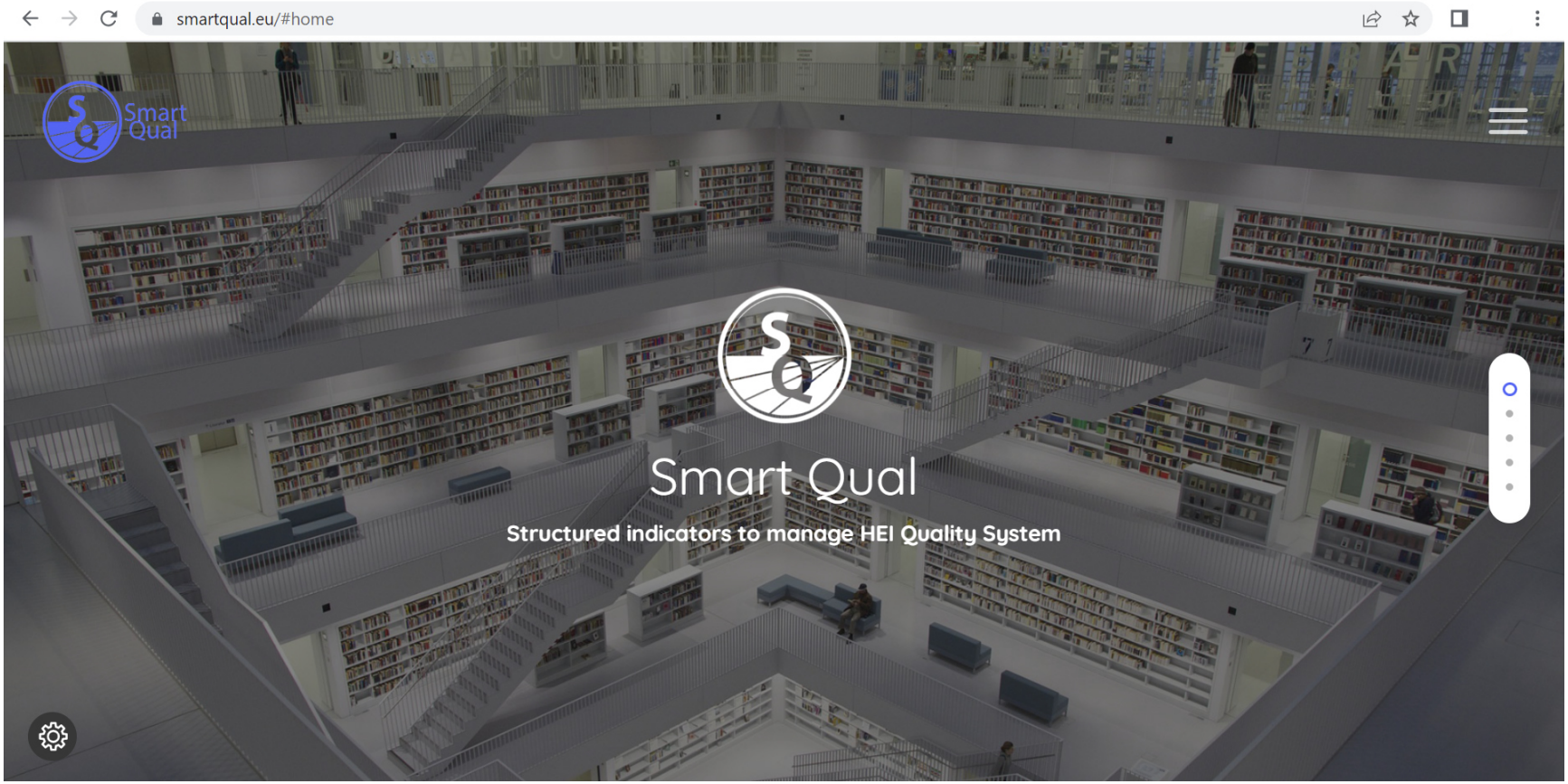
Current Situation

- Site: https://smartqual.eu/



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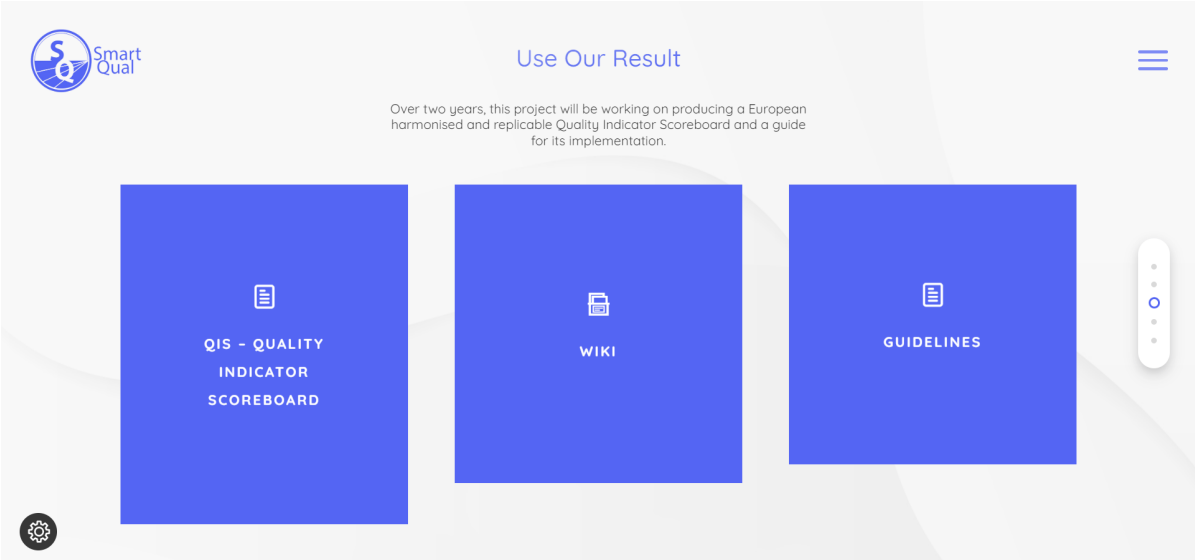

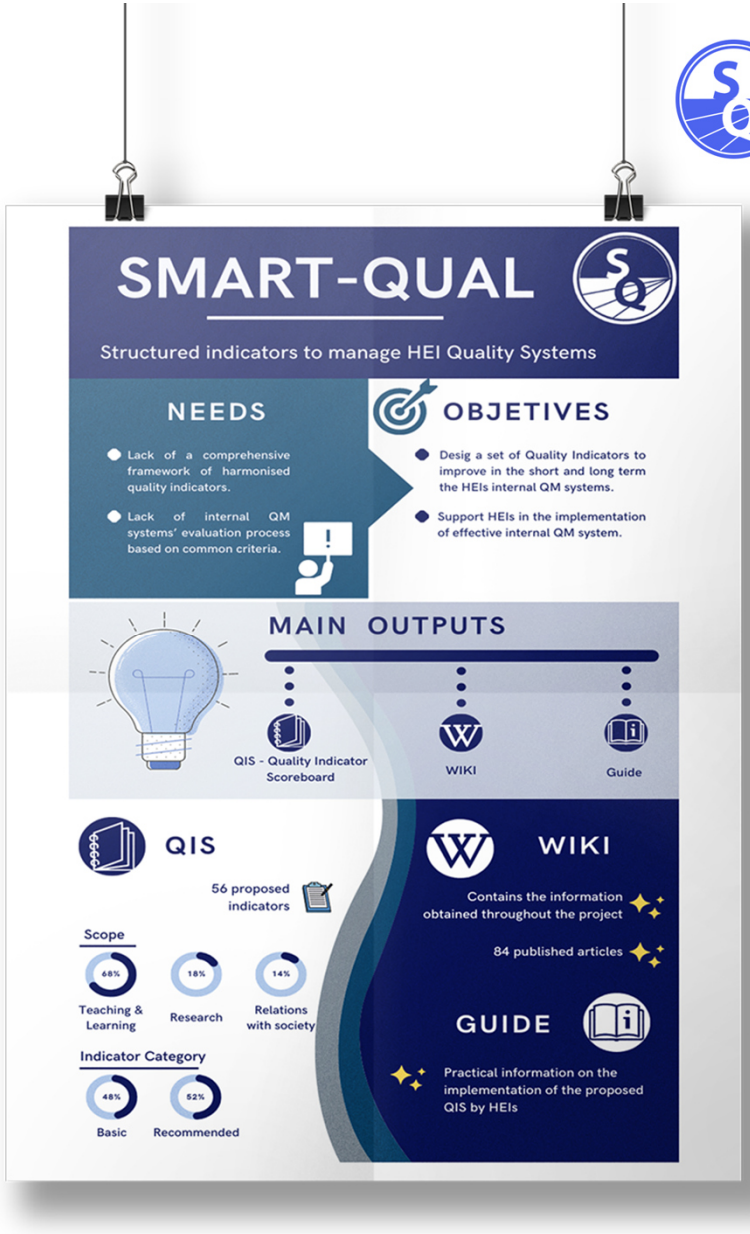

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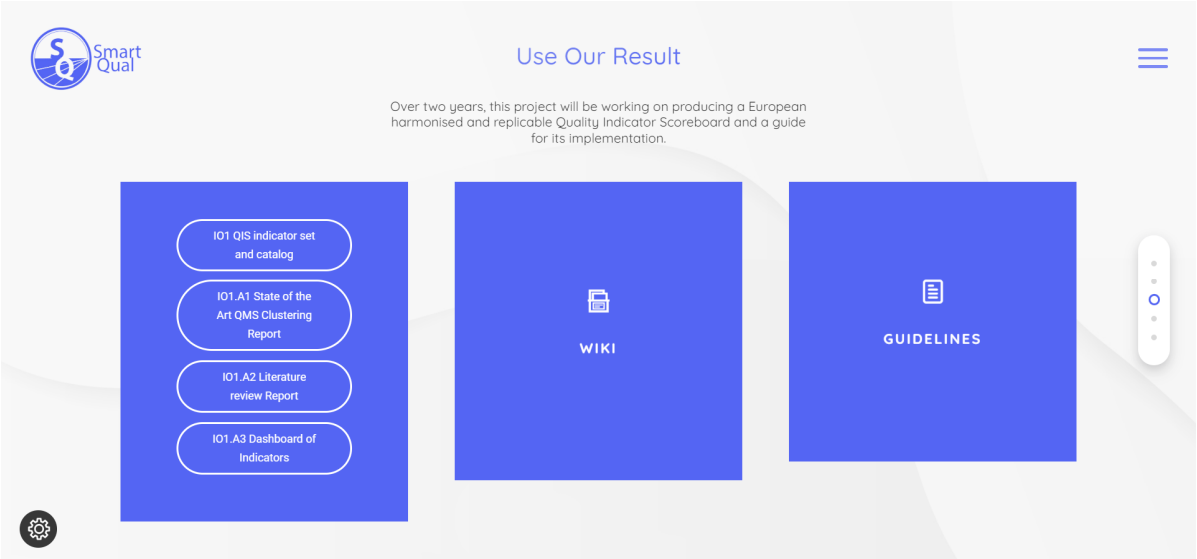

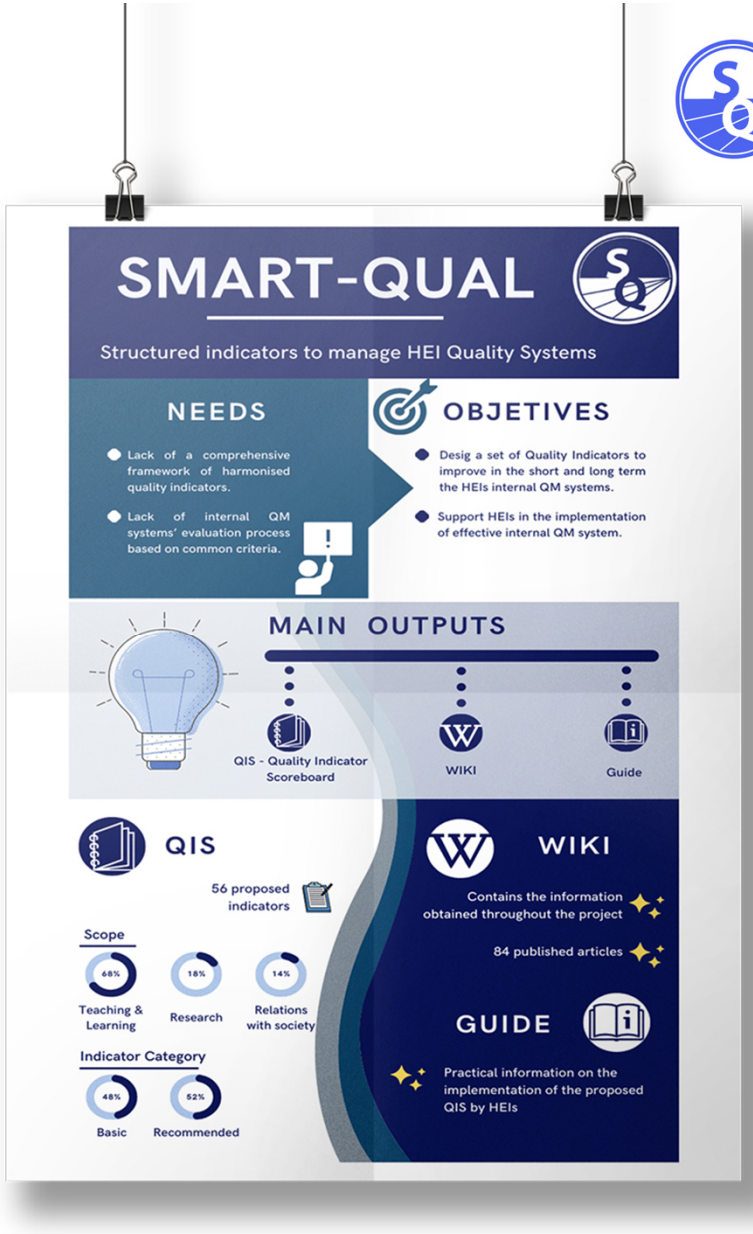

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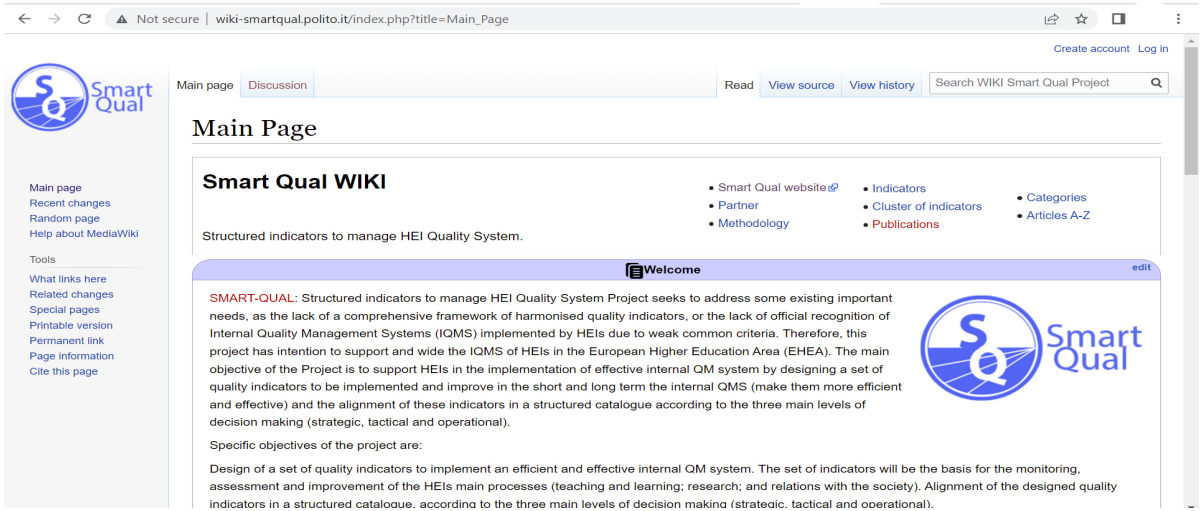

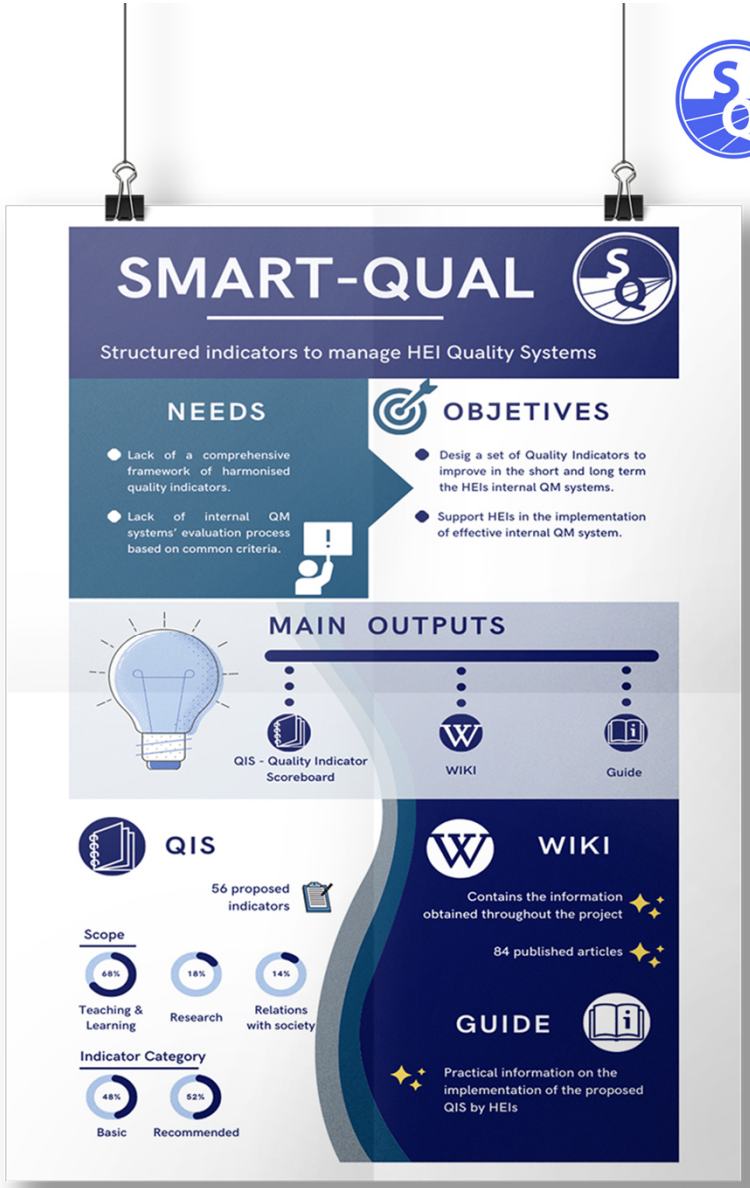

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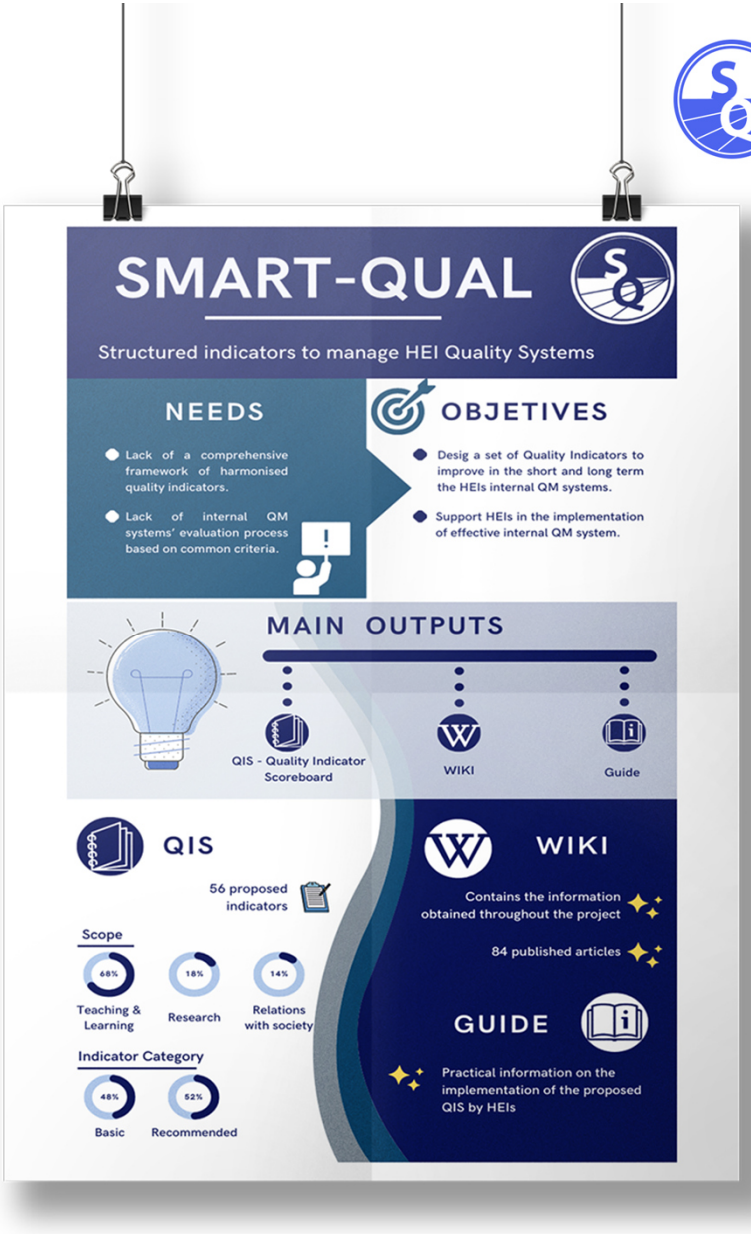

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Future Work

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Thank you for your interest!

Any questions?

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