

# Educational interoperability

A visual language

## Legislation

Policy and governance affects stakeholders across the ecosystem. It is produced and implemented at different levels:

International  
National  
Local

*Example:  
GDPR is European legislation that has a global impact. It is translated into national legislation and fuels the local privacy policy of an institution.*



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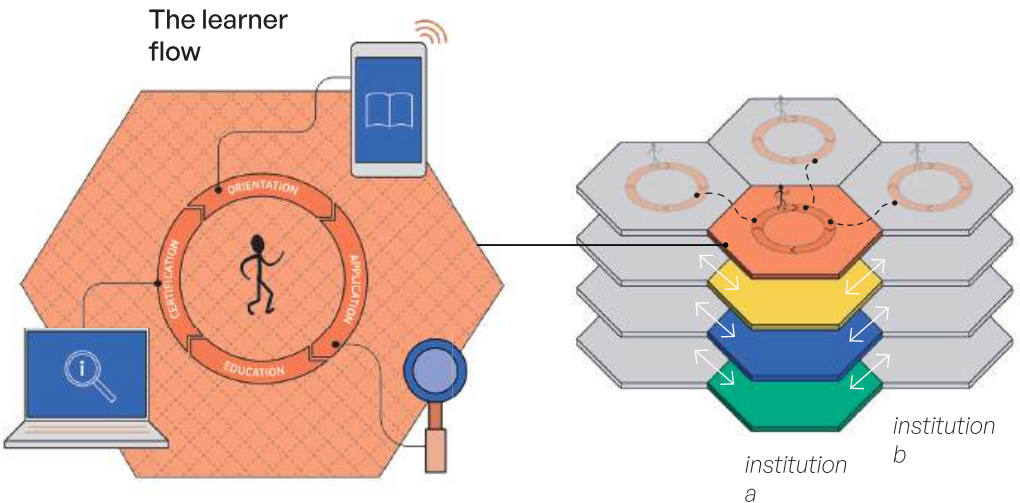
# The learner journey

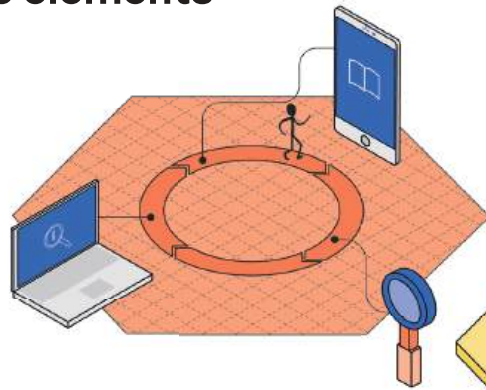
The ecosystem is built around the learner journey. If **interoperability** works well, the learner enjoys a smooth learning experience.



## What is interoperability?

Interoperability enables different systems, organizations, and processes to collaborate, exchange data, and understand information. Interoperability is a prerequisite for collaboration, while maintaining autonomy.

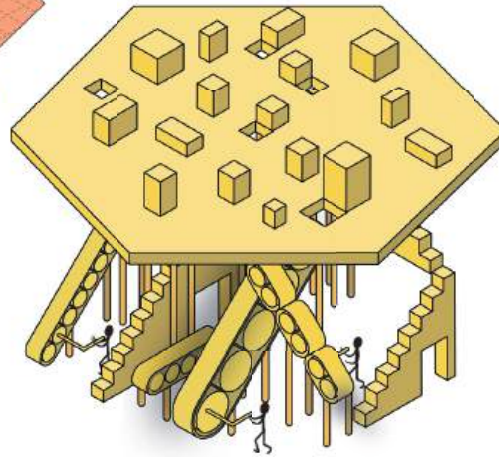




## Users & Services

Learner, teacher and staff work on their own device, and want a smooth user experience.

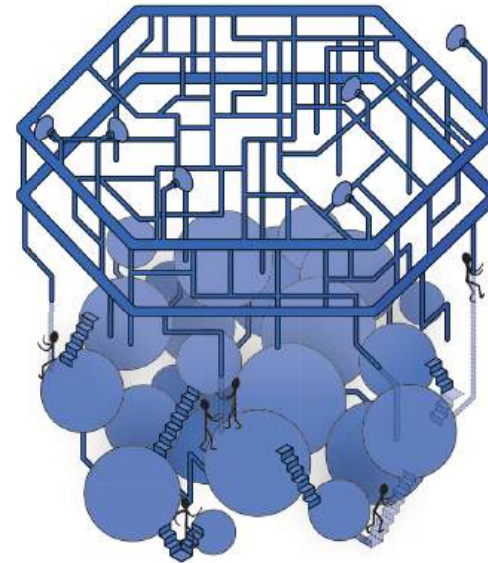
*Examples:*  
The learner searches for their favourite courses.  
Teachers can easily adjust their curriculum for next year's course.



## Organisation & Processes

Where the administrators and functional application managers work in the back-end of the systems.

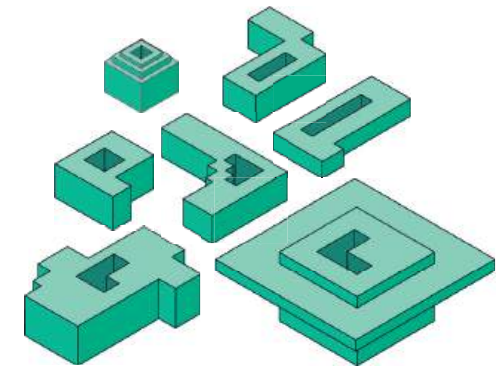
*Example:*  
The functional application manager makes sure the right courses are in the catalogue.



## Applications & Information

Where IT staff manage identities, access and databases.

*Example:*  
The identity & access manager ensures that users have correct permissions and roles to work within the system.



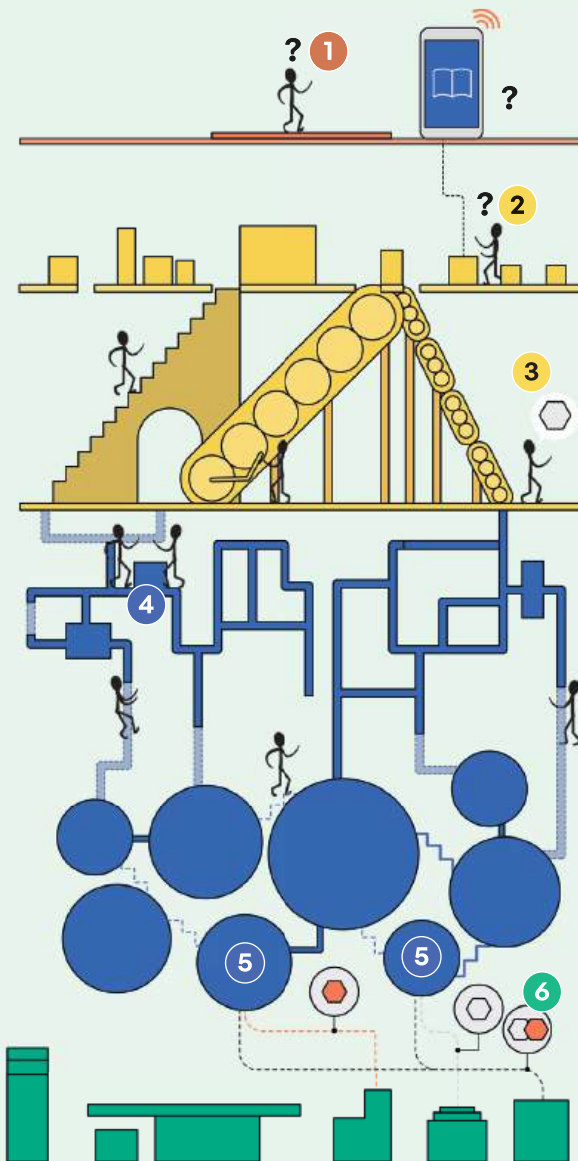
## Standards & Technology

Where IT staff manage connectivity, computing, and storage, and oversee operations.

*Example:*  
The architects assess which (open) standards are suitable for the desired landscape based on the IT vision of the institution.

# Use case challenge

side view



- 1** Learner wants to review courses offered by multiple programmes.
- 2** At the university's top level, agreements need to be made regarding necessary accreditation, fit in mutual curricula and costing.
- 3** Academic services liaise with partners to determine which information can be obtained, and what types of applications are in use.
- 4** Integration architects investigate how the different applications can work together and how information can be obtained through standardised APIs.
- 5** The system administrator indicates that the information is in the wrong format and therefore cannot be exchanged with other applications.
- 6** Together, they decide to implement a common data standard for the course information.

## Why a visual language?

The educational innovation team at SURF has developed this visualisation of educational interoperability to facilitate discussions about the digitalisation of education. Interoperability is a complex and abstract concept that is challenging to convey through spoken language alone. However, it is crucial that we engage in these conversations.

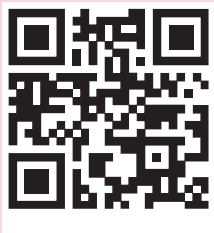
Join us now in developing a visual language for educational interoperability!

## COLOFON

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More info: [surf.nl/en/interoperability](https://surf.nl/en/interoperability)



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**For questions/information**  
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## Who is it for

The visual language is designed for everyone involved in educational projects related to digitalisation. From business analysts to architects, and from policy advisors to functional application managers. It can help you in conducting a thorough analysis of issues and facilitate discussions about specific decisions.



## What's next?

We will continue developing various communication tools. Stay updated on the latest developments by visiting our website [surf.nl/en/interoperability](https://surf.nl/en/interoperability) or by signing up for our newsletter at [interoperability@surf.nl](mailto:interoperability@surf.nl).