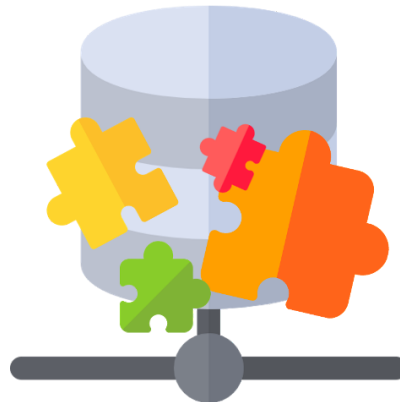


Digital Contents Reuse Strategy Contributing to Digitalization in Higher Engineering Education

The NaaS Ecosystem

Laurent Dairaine - ISAE-SUPAERO



ISAE-SUPAERO

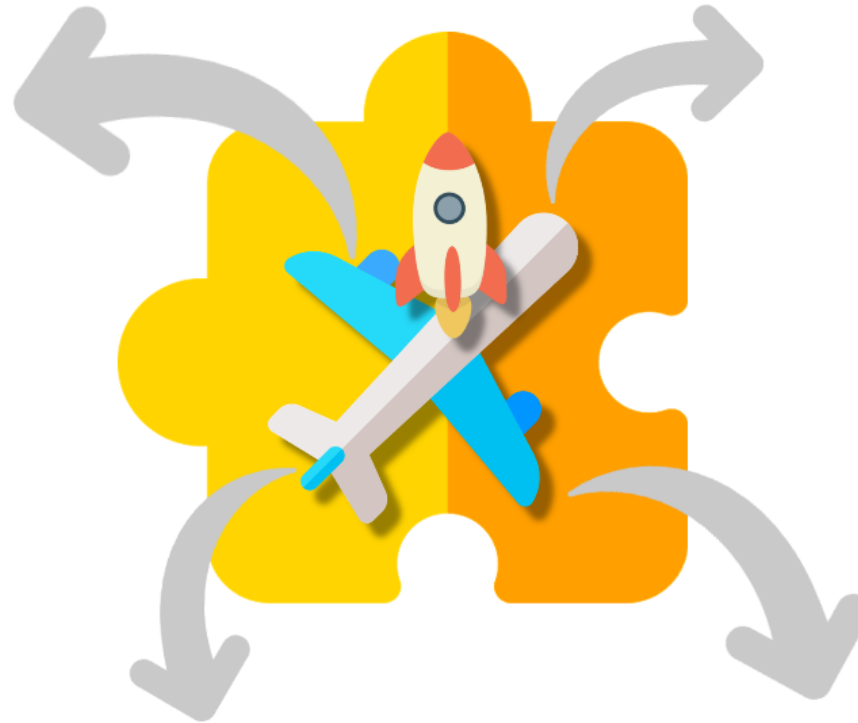
Institut Supérieur de l'Aéronautique et de l'Espace



Many types of Education programs

- ISAE-SUPAERO engineers (fr)
- Engineers by apprenticeship (fr)
- Master of Science (en)
- Advanced Masters (x11 en), (x4 fr)
- Certificates (x5 en)
- Continuous education, SPOC (fr, en)
- ECATA Program (jointly run by the leading aerospace industry and Universities)
- MOOC (x7 en, fr) hosted in Coursera & FUN-MOOC

Content Reutilization with Aerospace Digital Nuggets



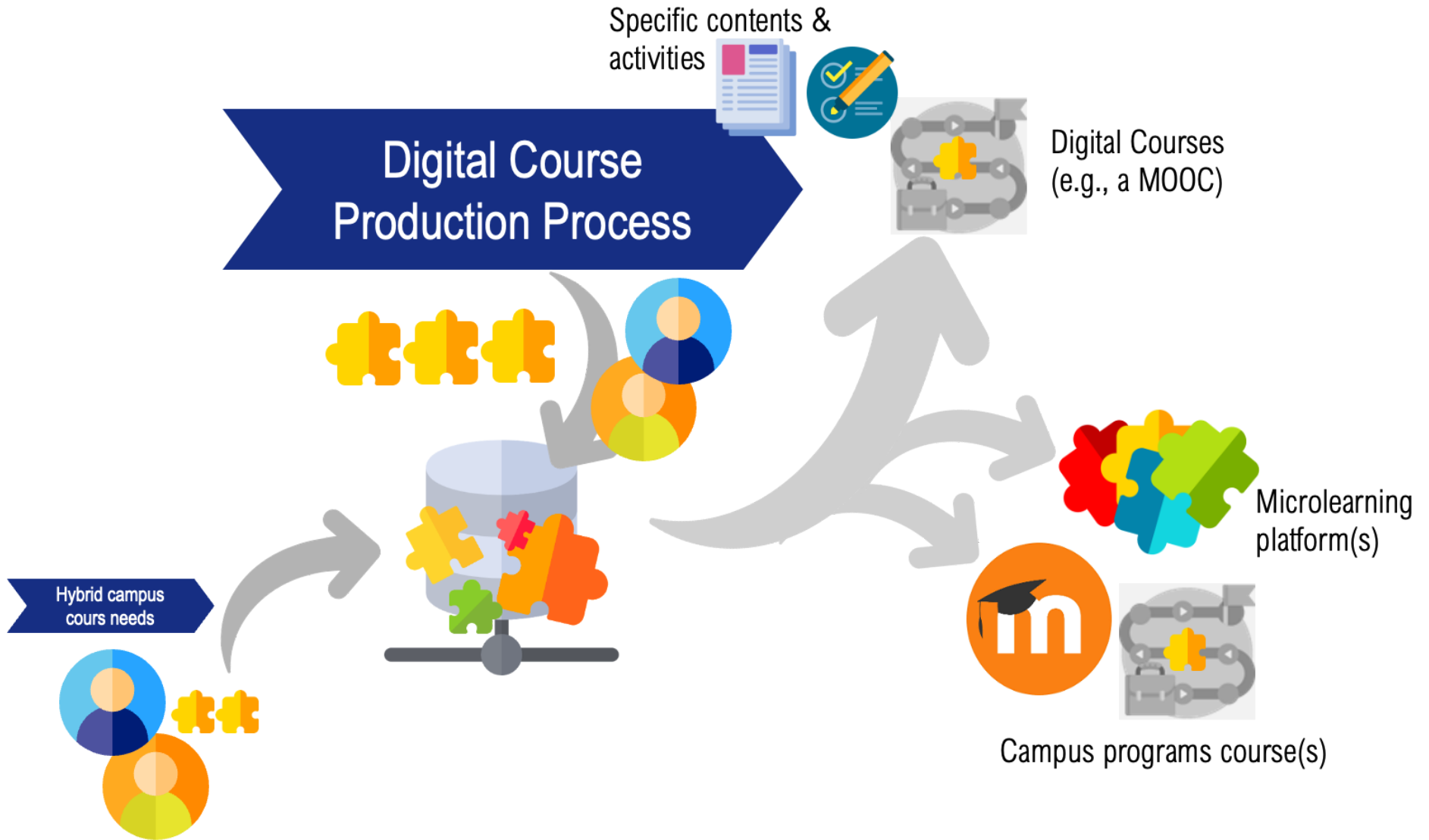
Challenges with Digital Content Management

- Production workload
- Maintenance
- Digital asset management
- Intellectual property management
- Content diffusion and security matters
- Learning analytics for adaptive education
- Digital assets under usages risks

Content management requires an institutional strategy that is part of the digital learning transformation

Reuse strategy for digital content

- Build a pool of online reusable micro-resources
- Addressing other identified challenges
- Strengthening the content production engineering with reuse in mind



The NaaS Ecosystem

Nuggets as a Service





Digital Nugget (H5P open format)



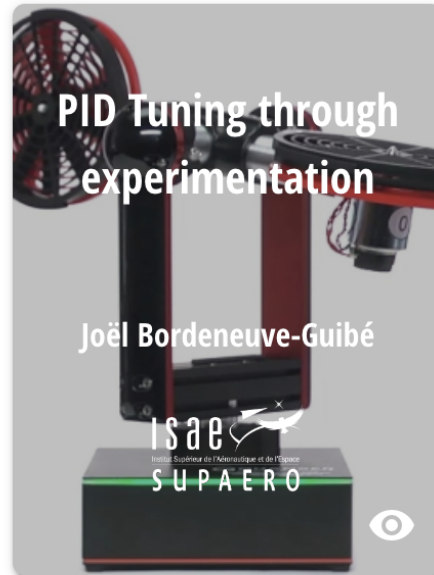
Theoretical contributions
Video, text, slides, etc.



Interactive Formative Evaluation
Quiz, Exercise, Digitalized Lab, etc.



Go Nugget Example 1



Go Nugget Example 2



Learn Engineering with scientific digitalized experiments

Interactive Remote Experimentation for Active Learning

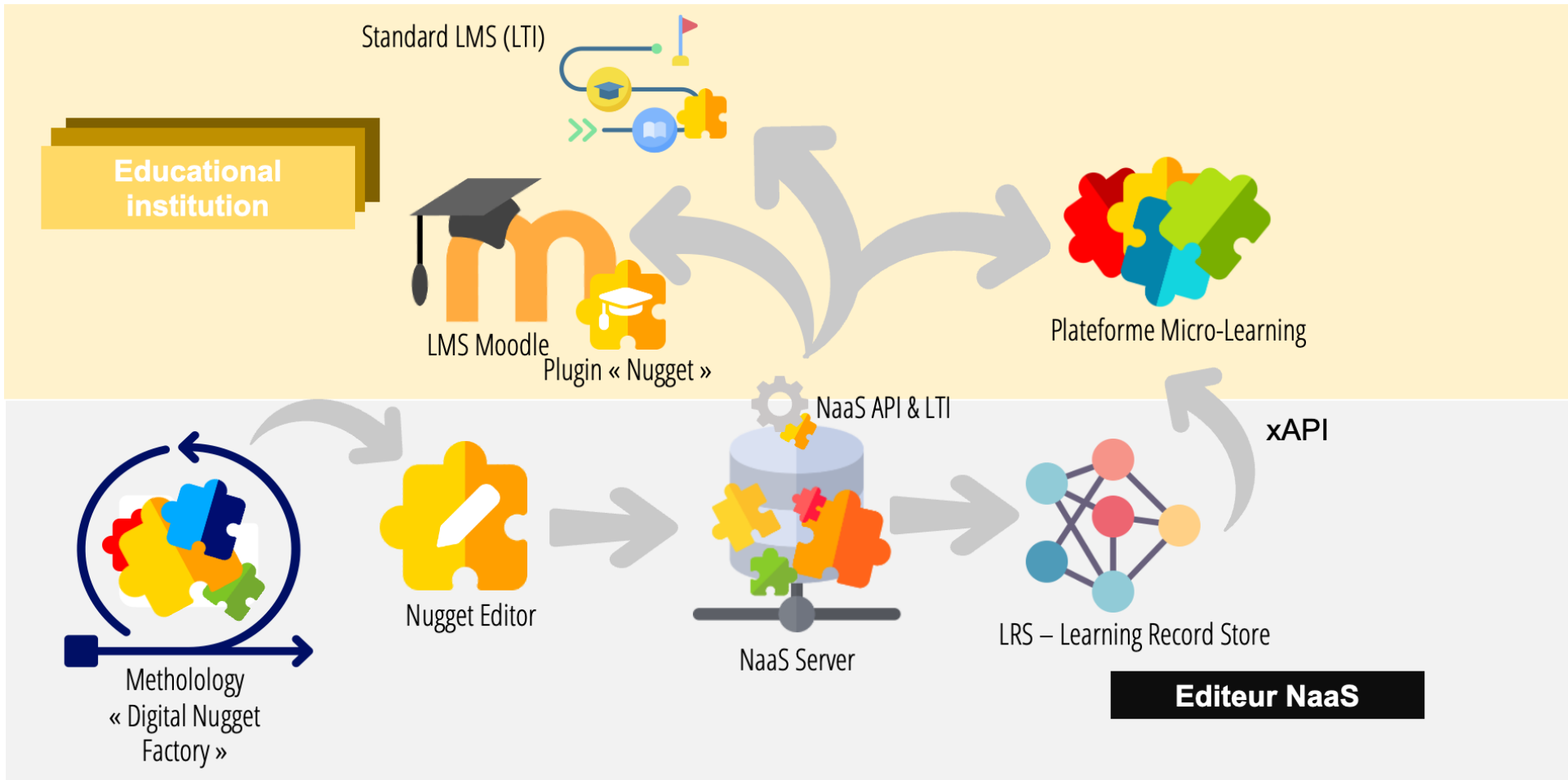
ABOUT IREAL

GIVE IT A TRY!



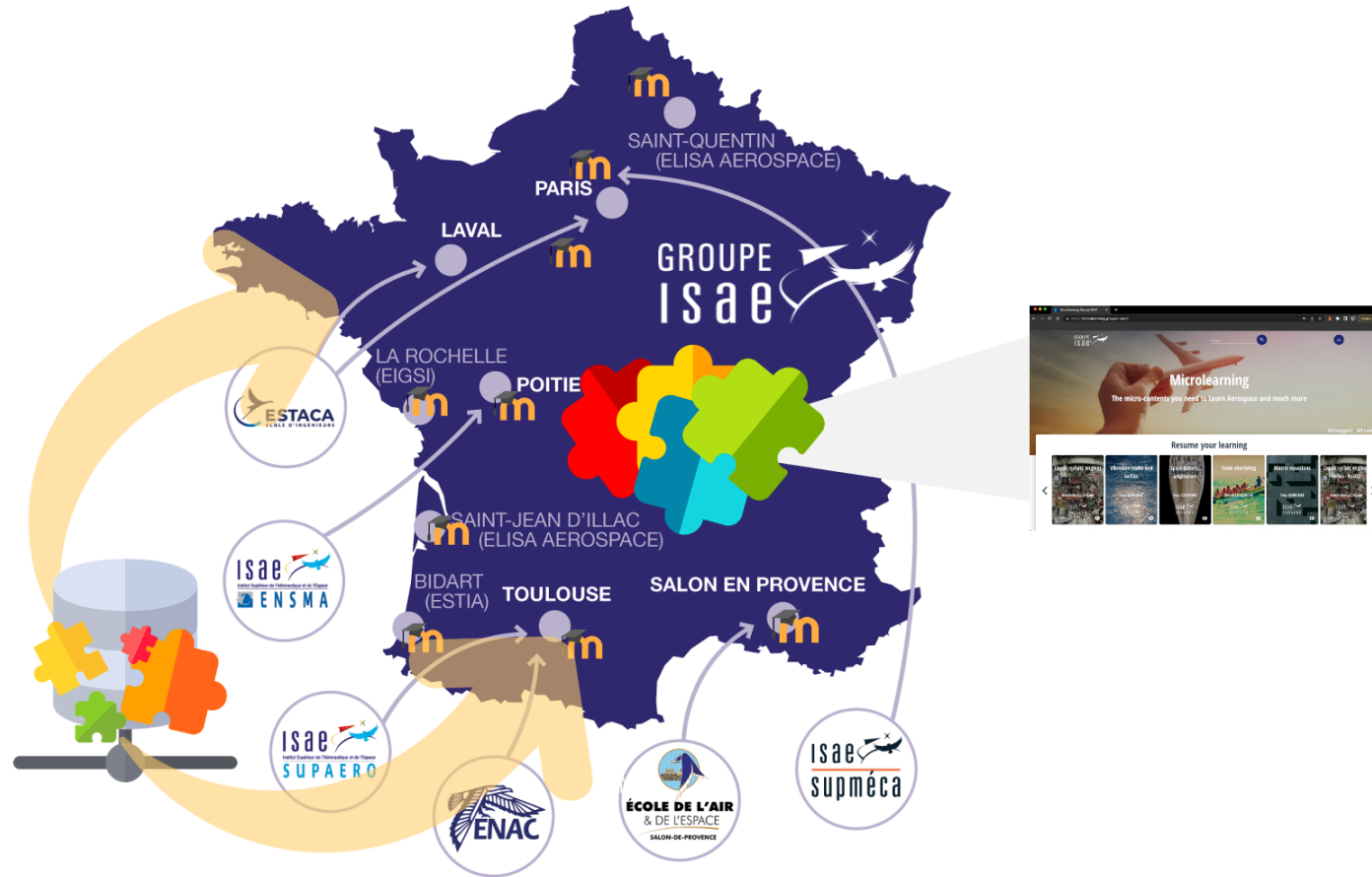
Go IREAL Platform

NaaS Overall Architecture



Implementing the strategy

Example 1. Implementation for Groupe ISAE

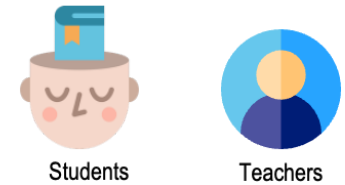
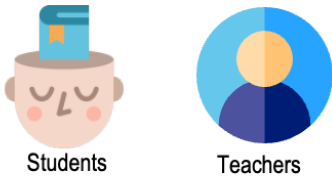


Go Microlearning Platform

Example 2 : The Aviation and Climate Course



LMS: Distant and self-paced learning



1

2

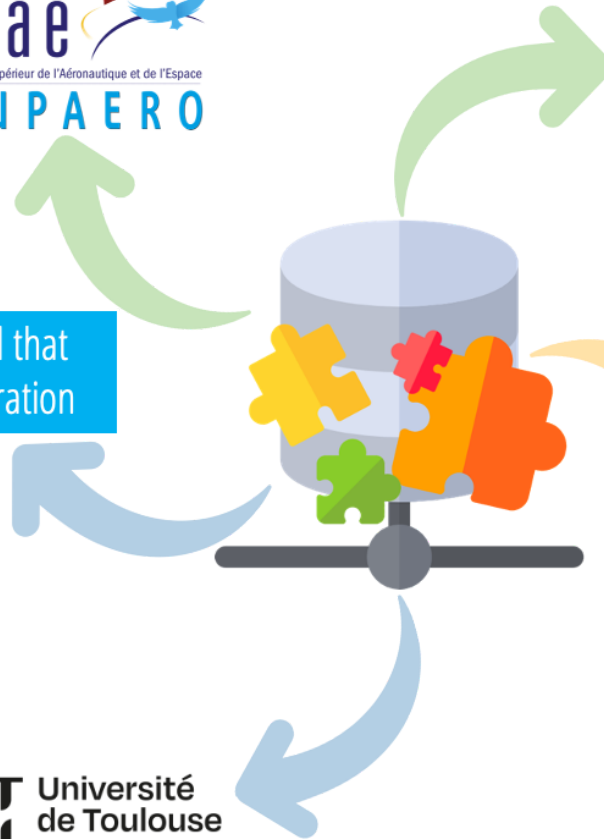
3

Go

Conclusion & Future Orientations



Several new projects proposal that include interuniversity cooperation



European Space University for Earth and Humanity



Thank you.

<https://online.isae-superaero.fr/naas>

<https://microlearning.groupe-isae.fr>

