SIG Mobility and Digital Credentials EUNIS24 preconference workshop



EUROPEAN UNIVERSITY

ANALYSIS OF MISCONCEPTIONS

Misconception analyis: Educational identity problems will be resolved by the EU identity wallet

"Soon, with elDAS2 and the wallet ecosystem, we have a solution for identity that 'solves' our challenges with identity in education"

(minutes of a policy advisory board of an Education Department)

EU identity initiatives vs. (EU) educational initiatives

A fast review of the road towards credentials and wallets

European Union

- Electronic signatures
- Cross-border eID & Trust (eIDAS)
- EUDI European Digital Identity (eIDAS2, proposed)
 - EUDI Wallet a secure solution that basically allows any citizen to C Do they correspond? around proof of identity and other personal attributes and credentials
 - Legislation & Large scale pilots (LSPs)
 - ARE architectural reference framework

Educational sector

- Diplomas and certificates
 - Diploma supplement
- Open badges, microcredentials
 - Verifiable credentials
- - Cross-bolder student mobility
 - Life-long learning
 - Employment

Professional Vocational

Tertiary

Secondary Primary

What are the roles of a wallet?



A wallet uses the concepts of decentralizations for digital identity, credentials and other features

<image/>		Digital identity National ID Education ID 	 Proof: who am I? Identification Authentication
	CORNTRANT CORNTRANT	Credentials Educational credentials Other credentials (many!) 	 Verification (18+, student y/n, dyslexia,) Share data (diploma, badge, skill)
		 Features Digital signing and consenting Traceability of shared data 	 Proof: what I agree to Signing Consent

Why is it a misconception?



FOUR MAIN REASONS (elaborated in the next sheets):

- There is no such thing as a 'big unified identity system'
- Educational identity systems have additional requirements
- 'One identity rules them all' is at odds with privacy and security
- Not every identity use case will be covered by wallets

There is no such thing as a 'big unified identity system'



Distinction between 'foundational' and 'functional' identity systems (World Bank)

• Foundational identity system: 'an identification system primarily created to manage identity information

for the general population [usually a national identification system]

• Functional identity system: 'An identification system ... for a particular service or transaction [e.g. education, research]

There will be (at least) as many foundational identity systems as there are member states

- eIDAS will harmonize the technical format of the 'PID' and a minimum set of attributes
- A functional identity system must provide uniform identity *across* all existing foundational identities (inside

Educational identity systems have additional requirements

EUROPEAN UNIVERSITY INFORMATION SYSTEMS

A FOUNDATIONAL IDENTITY SYSTEM (e.g. national ID) IS NOT ENOUGH

- 'Mismatch' between scope of foundational and functional identity systems (see previous slide)
- Basic set of Personal ID attributes (name, birthdate, ...) is not sufficient
- Additional attributes that define role (student, researcher), affiliation, local identifier etc.
- Did someone say SCHAC or REFEDS?

One identity rules them all' is at odds with privacy and security



EUROPEAN IDENTITY SYSTEM ≠ EUROPEAN IDENTIFIER

- The prime goal of introducing a decentralized identity system *should* be to prevent traceability and **linkability** (read the W3C Verifiable Credentials standard)
- Technology and standards to limit linking identities and personal information to unique interactions or consented relations exist
- Reusing or scaling up existing national (education) identifier schemes is dangerous! (unless we

introduce adequate pseudonymization or anonymization as well)

Not every identity use case will be covered by wallets

EUROPEAN UNIVERSITY INFORMATION SYSTEMS

WALLETS WILL NOT BE UBIQUITOUS, and are no 'haarlem oil' (medicamentum gratia probatum)

- EU citizens are allowed to NOT use the wallet
- Non-EU users may have incompatible systems or no system at all
- No good fit with use cases that do not involve the user directly
- Previous generations of technical identity systems will only slowly (or never) disappear

Consequences of the misconception



NON-LIMITATIVE LIST

- Losing valuable time to learn, adopt and adapt
- Losing focus or delaying the real value of educational credentials
- Not taking ownership of what you have to organize, with the risk that you lose influence or control
- Not leveraging the data, standards and working solutions you already have
- Obscure the organizational challenges with too much focus on technology
- Suboptimal solutions that do not support the higher goal of educational interoperability

What could/should be done?



NON-LIMITATIVE LIST

• Map the roles and tasks as defined for the EU digital identity system to actors in our R&E system

(what should NRENs, individual HEIs, educational legislators etc do?)

• Discern the different areas where value for educational business processes can be expected (e.g.

enrollment processes, using educational identity, exchanging diplomas/microcredentials/skills)

- Reuse, refurbish, extend existing schemes for educational identity and information exchange (and limit the variation)
- Analyze the coherence between physical enrollment (resulting in issuing a student *card*) and digital enrollment (resulting in issuing a student *account*)

