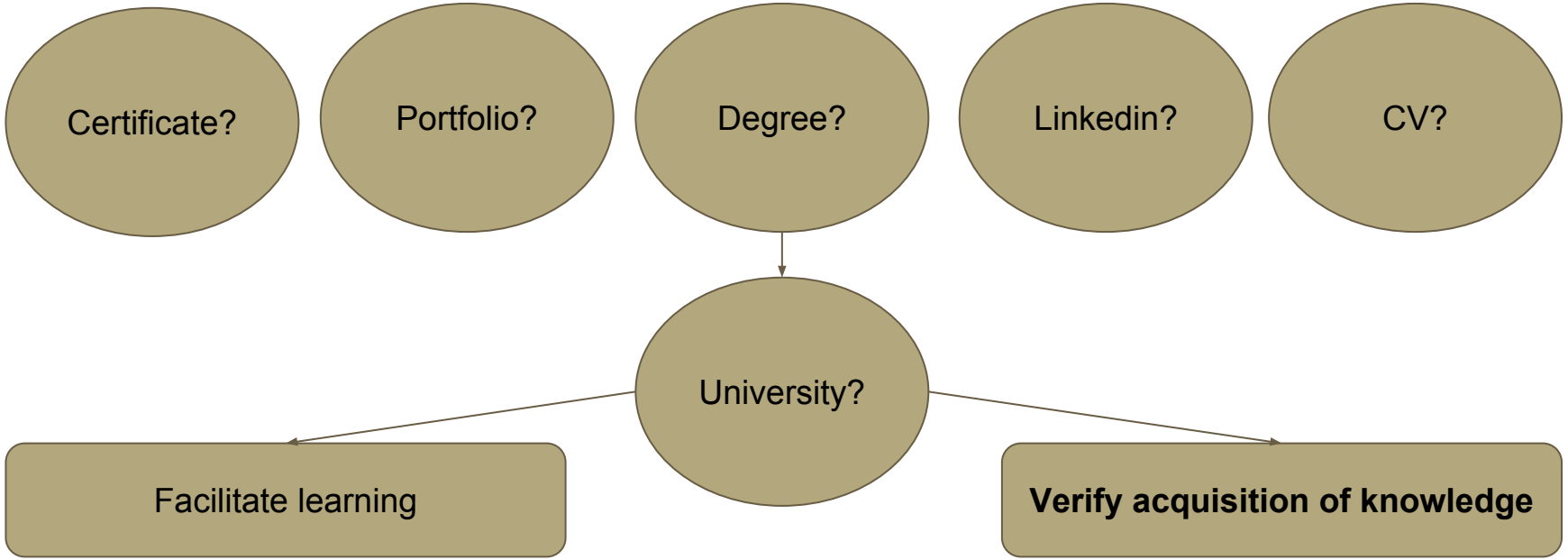
eScore

Verify your educational attainment.

How to know what others know?



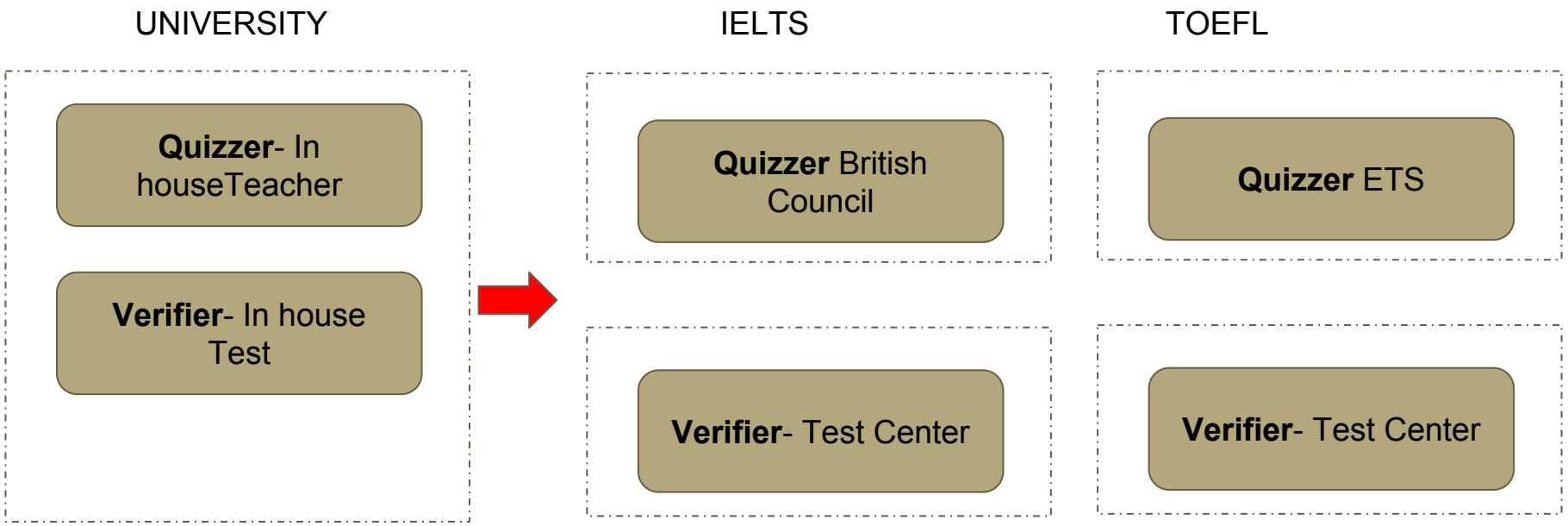
Institutional verification

- Associate, baccalaureate or graduate degrees
- Certificates, badges, and endorsements

What common “currency” is recognized by employers, academics?

- ECTS Credits, Cisco Certificate, IELTS/ TOEFL ...
- Transferable? Sometimes!

How Institutional verification works today



Fails because proprietary

Standardized - Fails because it is still proprietary

Consequence

- Huge cost on labor mobility
- Ever tried to work abroad?
- Exception is low skill labor and IT Sector

Solutions?

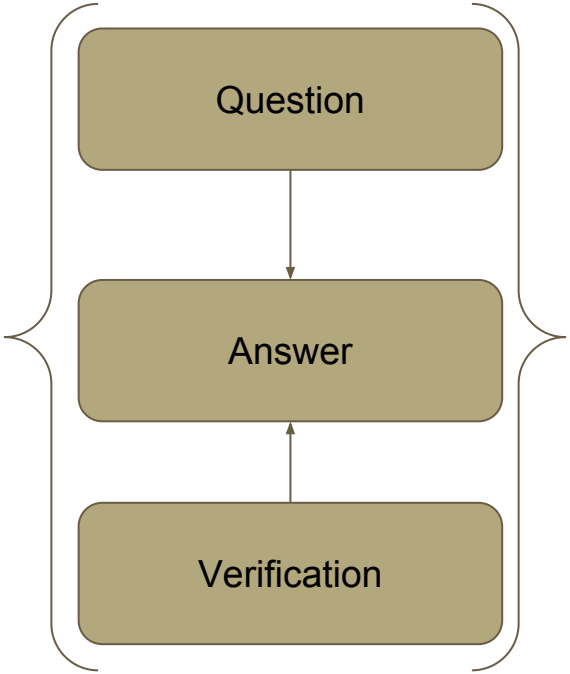
- Let's create new credentials
- Widely recognised and uniform
- US: K-12: Common Core State Standards Initiative
- EU: Higher Ed.: Bologna Accords

Real Solution = Universal Protocol

- NO CREDENTIALS ANYMORE
- Max. Transparency
- Min. Ambiguity
- Evolutionary
- Competitive
- Clear, verifiable
- Individual
- Decentralized

Atomize the degrees and certificates

Components of the Atom



=

Proof of Knowledge

Proof of knowledge (Public-key cryptography)

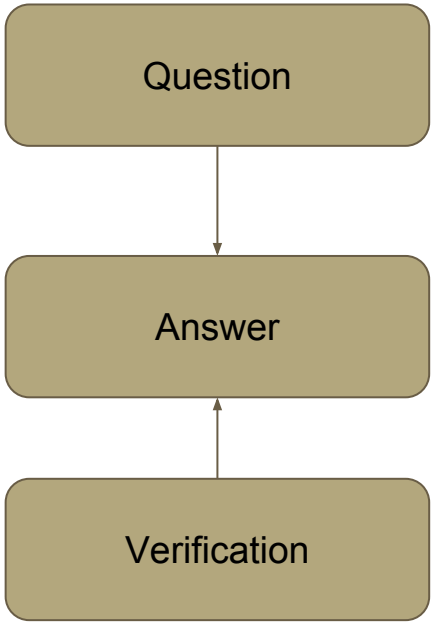
- Candidate signs msg. for interested parties (employer)
- Employer looks up all Q&A related to public key
- Provides chronological, in-depth review of the candidate's attainment

Think about a Khan Academy questionnaire being ported to the database and how candidates could be compared!

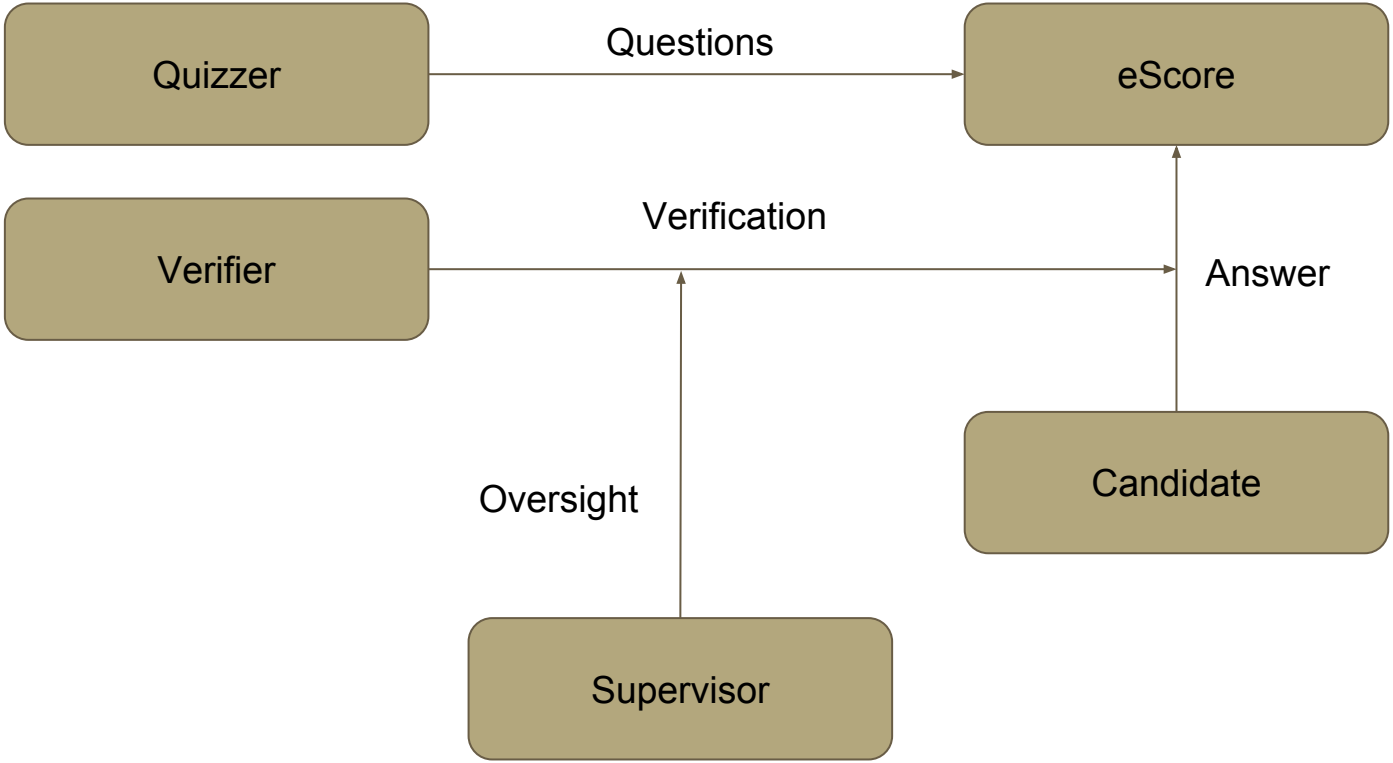
Data at rest (Blockchain)

- Everybody can publish a question
- Everybody can publish an Answer
- Everybody can verify every Answer

Everybody? Why bother?



Here it comes...



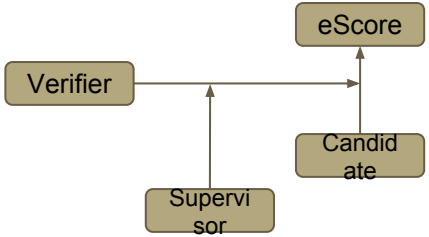
Prevent Cheating = Surety bond

- Everybody can be a verifier, free market
- What if candidate and verifier collude?

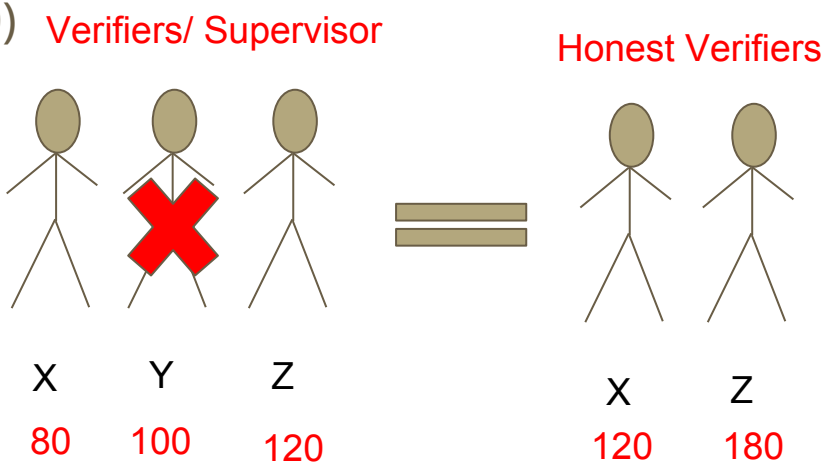
Reduce incentive to act dishonest by rewarding verifiers that act honest!

- A verifier can post collateral into multisig. account to signal commitment
- Multisig. Account can only be accessed by majority of verifiers weighted by their own collateral

Prevent Cheating - Example



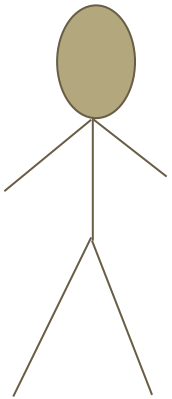
- 3 verifier, X(80), Y(100), Z(120); SUM(300)
- 2/3 Multisig
- Y is found to be dishonest
- X + Z transfer 300 to new account
- Y's 100 are distributed among them
- All of Y's verifications lose credibility



Conclusion: Candidates will seek out highly reputable (possibly multiple) Verifier for max. credibility.

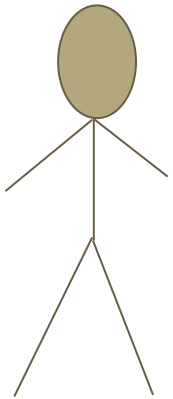
How does it work again?

- Alice has educated herself
- Nobody believes her
- Elvis the Employer requires a certain knowledge: a high score in his SAT test has been a reliable indicator of good performance.



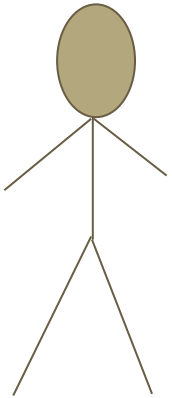
Things learned:
- Fact 1
- Fact 2
- ...

I need SAT score of 95.

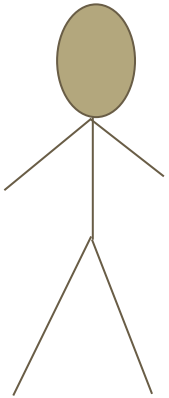


How does it work again?

- Alice meets bob who is happy to verify her knowledge
- They agree on test, bob documents everything and is liable in case Alice acts dishonest.

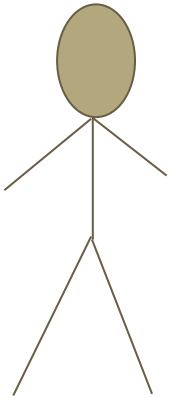


Smart Amateur Test (SAT)
- Question set 1
- Question set 2
- ...

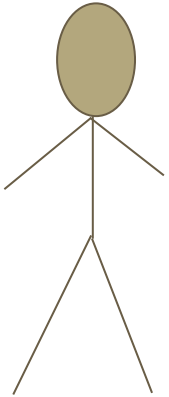


How does it work again?

- Alice sits the test
- Bob signs off on each answer



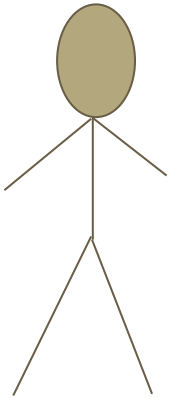
Smart Amateur Test (SAT)
Q1: What is 2+2?
Q2: Capital of Andorra?
Q3: What is the ultimate Q., and what is it's anwer?
Qn: ...



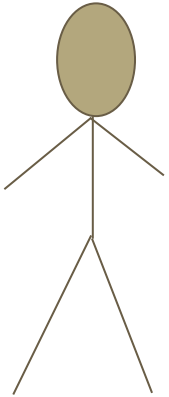
Smart Amateur Test (SAT)
A1: "4"
A2: "Andorra la Vella"
A3: "What is the ultimate Q., and what is it's anwer?"
An: ...

How does it work again?

- Alice can now prove her knowledge
- Elvis hires her



SAT Score : 98!



Awesome!

Questions?

Thanks for your attention!