



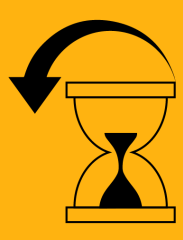











12 Principles of the Trusted Learner Network (TLN)

-  **Stores Learner Achievements**
-  **Safe + Secure Info**
-  **Always Up-to-Date**
-  **Issued + Maintained by the Entity**
-  **Presents Current Info First**
-  **Records Learner Consent**
-  **Shared Only Within the TLN**
-  **Co-Owned by the Learner**
-  **Open-Source Tools + APIs**
-  **IAM Tools Included**
-  **Non-Commercial Use**
-  **Network of Networks**

A foundational data structure in the TLN is the Trusted Learner Record (TLR). The underlying technology can be used for many other purposes, but ours focuses on the metadata that describe the learner, their achievements and abilities earned over a lifetime.

Access the full TLN paper at links.asu.edu/tlnpublic.

- A place to store assertions made about a learner's achievements by educational institutions, employers or other organizations who are partners in the TLN and use the TLR data model.
- The data in TLR are immutable. Once an accomplishment is asserted by a TLN member entity, it cannot be manipulated or changed.
- An issuer's assertion about an accomplishment can be supplanted by either an expiration or revocation if the record type supports such an update.
- A learner accomplishment is owned by the entity making this assertion. Ownership means the ability to view, share, or update said record.
- The business logic of the TLN always presents the most current view of a learner's record. The history ledger transactions are retained and can be viewed by the owner of those records.
- Sharing a learner record of accomplishment is dependent upon learner consent, which is recorded in the database. Learner consent can be revoked by the learner at any time.
- Learner records can only be shared with other members of the TLN. Sharing to off-chain and to non-TLN entities will be implemented at a later date as the required technology emerges.
- Learner accomplishments are co-owned by the learner. Co-ownership allows the learner to selectively share the metadata describing their achievements with others.
- The technology to participate in the TLN is not dependent on proprietary or commercial vendor products.
- Identity and Access Management is central to the confidence in and adoption of the TLN as a mechanism for the value of achievements associated with learning.
- All TLR sharing will require explicit permission by the individual and/or organization as part of the logic of the database and supporting applications.
- The TLN is not designed to be a hierarchical network with a single anchor entity. The network effect of the distributed database should naturally evolve into multiple networks to support cross-sections of different members.