



backpack  
Education Data Privacy Redefined

CUTTING-EDGE SECURITY STARTS HERE.

## Blockchain 101

Blockchain is a digital ledger in which a growing list of entries (called “blocks”) are recorded chronologically and can be shared by a community. Blockchain data is not housed in a single location - but it is a “distributed ledger” managed across a peer-to-peer network that adheres to a special protocol for inter-node communication and validating new blocks. This technology is data security reinvented. More than Bitcoin or other cryptocurrencies and other financial uses, blockchain brings new data security to all kinds of private records like healthcare and education.

## The Benefits for Education

Blockchain’s holds tremendous potential - for transcripts, attendance, tuition payments... even diplomas!

- ▶ Blockchains make data integrity a steady state - not merely a goal
- ▶ Blockchain provides seamless tracking of student learning progress - from K through higher ed
- ▶ Districts and universities control awarding credentials. Students own their blockchain data forever - to provide future access to higher ed, prospective employers, etc.
- ▶ No one can delete or tamper with blockchain data - if record has an error a new, corrected record must replace it

## This is a monumental shift. Where do we begin?

Our FocalPoint’s Backpack initiative helps educators learn and become proficient in blockchain. As mastery is gained, new components can be added to students’ blockchain Backpack. Let’s get started: micro-credentialing can add certificates to students’ transcript, diploma or GED.

- ▶ Micro-credentials verify students’ proficiency in skills they can share with prospective employers
- ▶ Badging motivates students - improving engagement and outcomes
- ▶ Leveraging Backpack helps students experience all the benefits blockchain can provide them



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## Here's a blockchain Backpack example application...



### Certificate of Completions verified

FPBlockchain leverages the power of Ethereum blockchain technology as a means to identify and verify student course completions. Upon completion of each course, a student earns a personal, non-fungible ERC 721 token and certificate in their FPBlockchain.

### Decentralized Networks

- ▶ Immutable
- ▶ Tamper Proof
- ▶ Secure



No central point of failure and security by cryptography, and applications are protected against fraud and attacks.

**ethereum**

FocalPoint leverages Ethereum to build decentralized applications. Instead of launching new blockchains for each app, FPBlockchain puts all education blockchains on an Ethereum platform.



### Blockchains

- ▶ Trustless
- ▶ Global
- ▶ Permanent

Every block of data is stored all across the network, leading to a world-wide environment where all is secure and everyone permitted is in the know.