

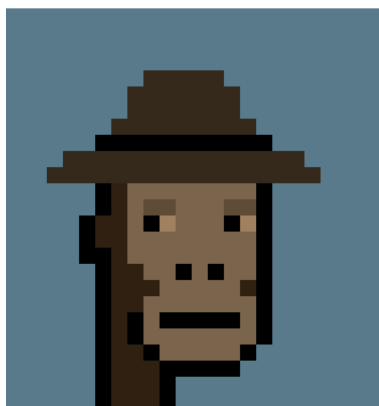
EMPOWERMENT THROUGH OWNERSHIP & IMMERSION

MORPHING MINDSETS WITH FRACTIONAL WEB3 ASSETS

Cryptocurrency



Original NFT



**Fractionalized NFT
(ERC Tokens)**

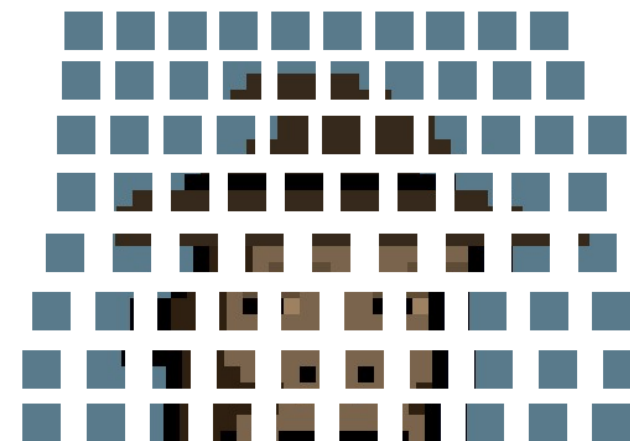


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INTRODUCTION

Children today are faced with an onslaught of choices, challenges, and confidence corrupters that earlier generations were not exposed to. These new stressors and pressures are incremental to the everyday realities, hurdles, and requirements that have historically been a part of the student experience, and educators are not immune to the new demands of these times. As the internet continues to evolve from Web 2.0 to Web 3.0, which will eventually become a blockchain-based internet of value, it is imperative that our most vulnerable students are adequately educated and empowered to take their seat at the table as this new web frontier (and monetary system) is being defined, developed, and divvied up.



Education is the most powerful weapon which you can use to change the world.

-Nelson Mandela

Nelson Mandela's iconic sentiment is particularly true when seeking to expand the mindset and advancement potential of children and students who come from disadvantaged backgrounds and environments. Psychologists have proven that our beliefs about ourselves (ability, potential, worthiness, etc.) play significantly in what we feel we can accomplish and attain in life, and often whether or not we even make an effort. As such, any attempts at delivering education solutions that disrupt harmful and self-sabotaging behaviors must effectively incorporate:

1. **Mindset & Beliefs.** Optimally, the goal is to develop students' understanding that their thoughts, emotions, and values influence their behavior and habits, and what they believe is possible for themselves and their community.
2. **Motivation Frameworks.** Employing motivation theory can help reframe focus from predominately examining the content of educational curricula to how concepts are presented, reinforced, and harmonized, with emphasis toward real-world relevance and elevated engagement.
3. **Purpose & Meaningfulness.** Identifying and promoting a sense of affiliation with others, with personal goals or interests, or with a larger body of knowledge to whom students feel, or would like to be, connected.
4. **Future Focus.** Leveraging content and curricula that positions students for success, rather than relying on legacy learnings that are familiar.
5. **Revolution.** The proposed solution is designed and destined to make a sustained difference in students' lives – to actually move the needle.

FUNDAMENTALS OF BELIEF

I volunteered at a school in rural Ghana while exploring Africa in 2017. After engaging the children with some ice-breaking questions, I quickly determined that their vision and imagination were limited by their experiences and beliefs. I had them try an expansionary visualization exercise to imagine their perfect birthday celebration. The students struggled to come up with ideas beyond their current and past experiences, and all suggestions and prompts fell foreign on their ears.

Environment and experience are key factors in belief formation. As such, creating sustainable change requires the introduction of something novel (Psychology Today: Core Beliefs).



What We Believe Trumps What We Know

Children tend to do as we do, not as we say. For example, children from disadvantaged families often observe struggle, poor financial decision-making, and impulse spending. This often translates into them operating from a core place of fear, lack mentality, and self-sabotage.

Beliefs are thoughts we continue to think and project onto reality. Core beliefs begin forming in early childhood. Because of this foundational programming, many people (adults especially) struggle to reconcile new information with their core beliefs. Many of us have knowledge of what to do but often fail to execute. For example, we know what foods are healthy to eat, that we should exercise, floss daily, etc., but many don't. Why is that? It comes down to our belief systems.

Meaningful change requires shifting limiting beliefs and self-sabotaging behavior. Many beliefs are structured to protect us from fears we've adopted and developed. Common limiting beliefs include "I'm not worthy (underserving)" and "there isn't enough (lack)." Shifting limiting beliefs requires that we introduce awareness to our recurring thoughts, choices, emotions, habits, and core beliefs. Awareness brings recognition of choice that then offers informed decision-making.

The goal is to achieve social-emotional self-awareness, which means having the ability to observe and process our thoughts, emotions, and values in real time, as well as knowing how those factors influence our choices and behavior, and what we believe is possible.



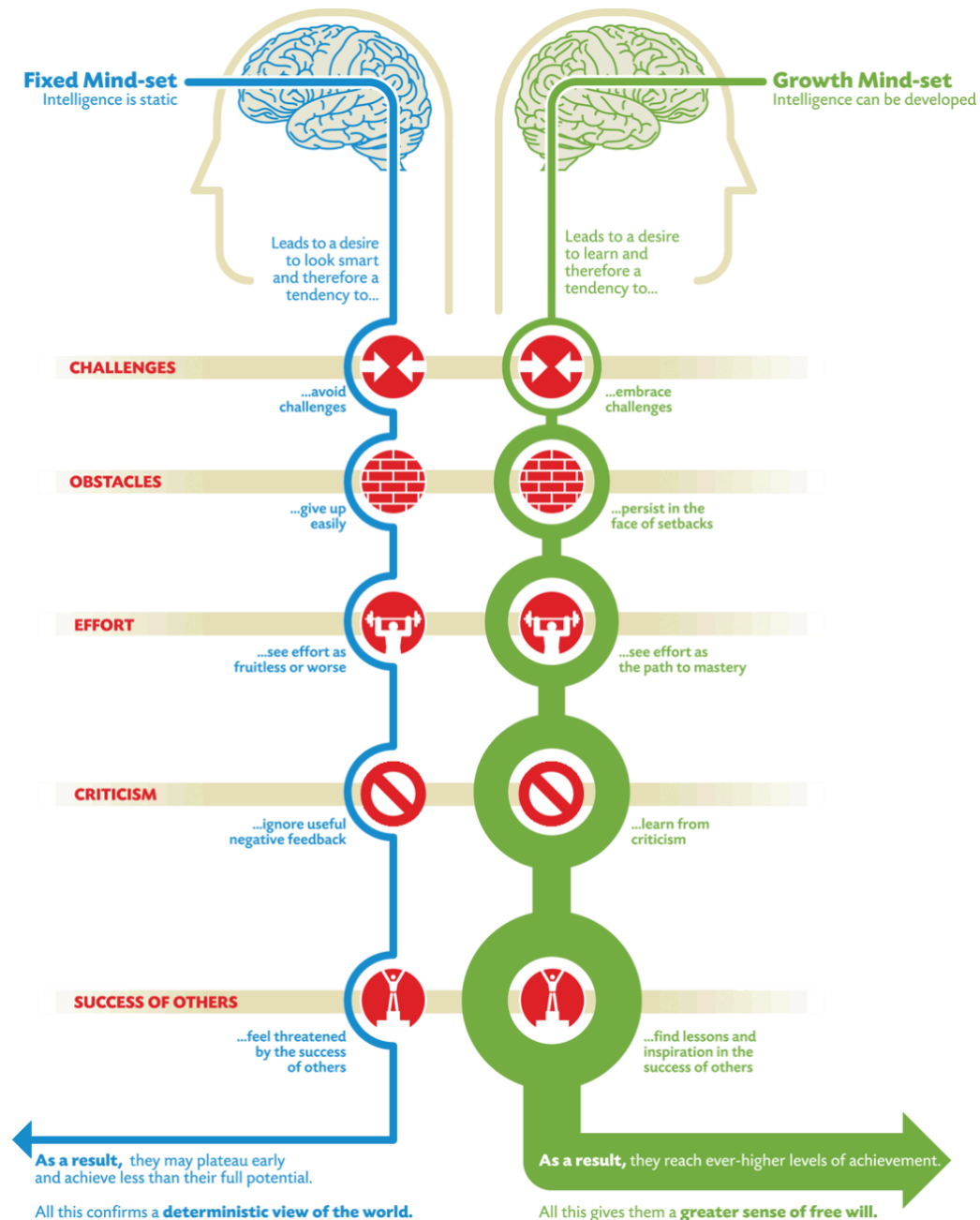
NEW APPROACHES ARE NEEDED

Positive effects on learning and literacy may depend more on how education imparts crucial foundational skills and affects cognitive abilities than on the way it teaches specific knowledge (Cole & Shastry, 2009). This may be particularly so for trauma-affected individuals.

Incorporating mindset-awareness prompts into financial literacy curricula is a necessary, but often overlooked, aspect for true understanding and influence on habits, behaviors, and overall impact of financial education efforts (OECD, 2019).

There tend to be two primary mindsets on opposite ends of a continuum, growth and fixed, with most people falling somewhere in between having what is described as a mixed mindset. Fundamentally, those with a fixed mindset believe that intelligence cannot be developed, whereas someone with a growth mindset believes that hard work and effort can lead to expansion and greater achievement. Fixed mindsets are fear-based. Most people tend to have a mixed mindset, meaning they have a fixed mindset about some things and a growth mindset about other things that they have had positive experiences with over time. These core beliefs are rarely conscious.

Many people experience **financial trauma**, and those from disadvantaged environments have disproportionately higher rates of fixed and mixed mindsets about finances and money matters. And, because of what they have seen, been told, and have experienced, traumatized individuals process financial literacy and future-focused instruction differently than those who primarily have growth mindsets (OECD, 2019). Meaningful financial literacy instruction **MUST** incorporate mindset and belief-system methodologies, as this will help foster enhanced self-awareness and confidence that builds belief that some measure of expansion and success are possible.



MOTIVATION FRAMEWORKS

Reliable patterns of beliefs and behaviors have been discovered that guide student engagement and can help shape educational initiatives (Ryan & Deci, 2016). These frameworks include: Attribution Theory, Goal-Oriented Theory, and Self-Determination Theory. Applying motivation theory can help reframe focus from predominately examining the content of educational curricula to how concepts are presented, reinforced, and complemented with a focus toward real-world relevance and student engagement that is impactful and sustainable.

Researchers generally agree that learning is most productive when students are self-regulated and challenge-seeking (Ryan & Deci, 2016). A meta-analysis of over 100 studies on using incentives as motivation found that intrinsic motivation is associated with greater levels of effort, satisfaction, and learning. In fact, some believe that incentive rewards (extrinsic motivators) suppress intrinsic motivation, particularly for otherwise interesting tasks (Deci, Koestner, & Ryan, 1999).

Unfortunately, although young children tend to act from intrinsic motivation, by the teenage years, and into adulthood, we progressively face external (extrinsic) influences to engage in activities that are not inherently interesting. These influences, coming in the form of career goals, societal values, promised rewards, deadlines, and penalties, are not necessarily bad, but ultimately subvert intrinsic motivation (Ryan & Deci, 2020). Thoughtfully employed extrinsic factors can, however, be very effective motivating tools (Deci, Koestner, & Ryan, 1999; Moos, 2010).

According to expectancy-value theorists, motivation requires more than just a conviction that one can succeed; one must also expect some immediate or future personal gain or value (Cook & Artiino, 2016). Self-determination theorists posit that the fulfillment of three primary psychological needs will foster intrinsic motivation and positive achievement outcomes:

1. **Autonomy** – Opportunity to choose and engage while being acknowledged without judgment; an independent pursuit that can be affected by structure and feedback
2. **Competence** – Actual, or perceived, ability to complete the stated task or achieve a goal; the feedback students receive about the purpose of an activity, and the role of “failure,” can significantly impact personal theories and impressions about intelligence and goals
3. **Purpose/Meaning** – Requires a sense of affiliation with others, personal goals or interests, or a larger body of knowledge to whom one feels, or would like to be, connected (Ryan & Deci, 2020; Kazakoff, 2021).

Using a blended motivational approach that rewards students (extrinsic) for navigating a journey they are interested in and want to take (intrinsic) may prove best for achieving optimal student learning and responsiveness (Moos, 2010).



WHY WEB 3.0 & WHY NOW?

Web 1.0 was the dawn of the internet. It was essentially a read-only global library. Web 2.0 (Web2) emerged with the advent of the first social media platforms. (MySpace, Facebook, etc.) Web2 is read and write, and is what we have existed in up until the past few years. Web2 allows users to contribute information and content to help create the internet we all use – from personal websites, to social media, to online commerce, and beyond.

Web 3.0

Web 3.0 (Web3) is the continued evolution of Web2 that is now read-write-OWN. Infrastructure and protocols are being laid for Web3 to become a blockchain-based, decentralized internet with ownership and agency of, and the potential to monetize:

- Personal Data & Content
- The Evolving Internet & Tech (including AI, AR, & VR technologies)
- Cryptocurrency (in the form of coins, tokens, and decentralized finance)

Beyond ownership and agency, people and progress are demanding transparency and accountability in banking and monetary policies that affect us all. The past two decades of economic crisis and financial calamity require a provable ledger for an accurate accounting – an open, immutable database. Legacy financial systems and inflationary monetary policies have been proven problematic, and will be hard-pressed to see us through this impending reset.

The underlying fuel of this internet evolution is blockchain technology, and Web3 will help develop and deliver innovative and empowering ways to incorporate blockchain-based tech into our daily lives.

From new ways of transferring value (crypto), to smart contracts that self-execute to reduce confusion and performance failures, to decentralized finance and fractional-asset ownership that helps equalize access to funding and community growth, the global shift is occurring and anyone left out will likely be left behind. The goal is to have the competence and confidence to capitalize on the evolving web, and not only be a casual consumer.

THE KEY FEATURES OF WEB 1.0, WEB 2.0 & WEB 3.0

Web 1.0 (1991 - 2004)

- ✓ The first stage of www evolution
- ✓ Basic (mostly read-only) web pages
- ✓ Millions of users
- ✓ One directional
- ✓ Static pages (same content for all users)
- ✓ Content ownership by the creator of the website
- ✓ Websites only displayed information

Web 2.0 (2004 - Present)

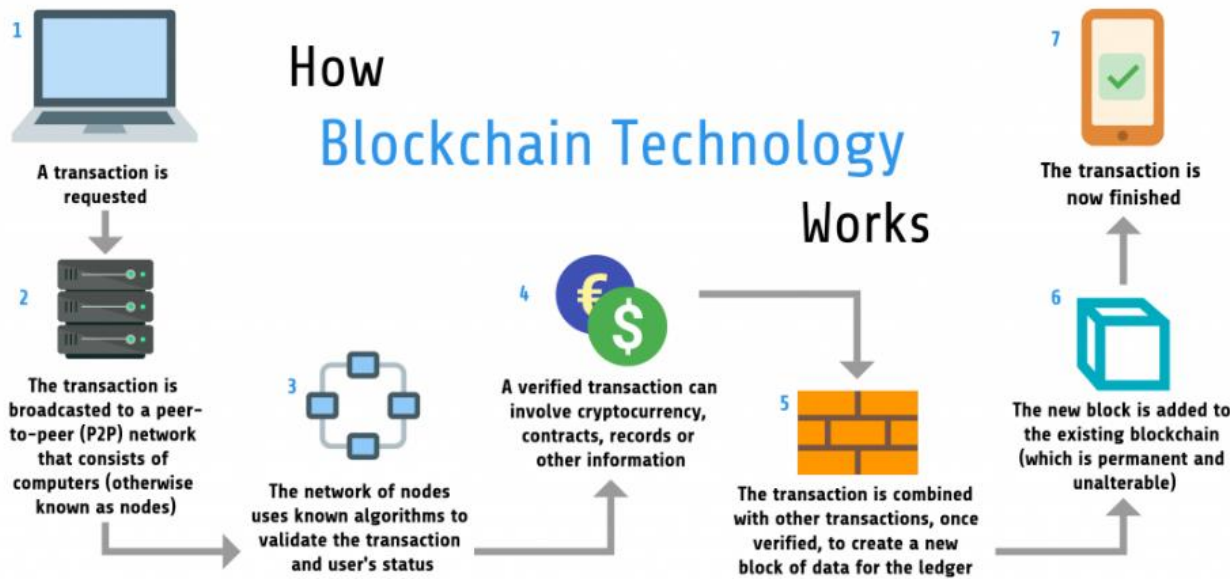
- ✓ The second web version
- ✓ Widely read and write web
- ✓ Billions of users
- ✓ Bi-directional
- ✓ Dynamic pages (content customized as per users)
- ✓ Highlighted user-generated content

Web 3.0 (Present)

- ✓ The updated version of the present web
- ✓ A read-write-interact web
- ✓ Trillions of \$
- ✓ Multi-user virtual environment
- ✓ Portable, personal and executable web
- ✓ No more content ownership (anyone can contribute)
- ✓ Multiple applications can access content

CRYPTOCURRENCY

Cryptocurrencies are mediums of exchange, created and stored electronically on blockchain networks, using cryptographic techniques to verify the transfer of funds and an algorithm to control the creation of monetary units. Verifying transactions is called mining. Bitcoin and Ethereum are well-known examples.



Blockchain

Blockchain is an open-ledger database that is viewable by all. It uses cryptography for security, which is where cryptocurrency derives its name. Blockchain is the tech that drives cryptocurrency. Experts view blockchain as incredibly disruptive technology, with cryptocurrency being only one application of its broader potential.

Future-Focused Facts

Cryptocurrency is being adopted at a rate between 80-100% per year, which is faster than internet adoption rates in the 90's and 2000's. Web3 integration will accelerate global crypto adoption, as will Central Bank Digital Currencies (CBDCs). CBDCs are blockchain-based currencies being developed by global central banks to replace physical fiat currencies. As of January 1, 2023, several retail CBDCs are launched and active, including The Bahamas, Eastern Caribbean Central Bank, Jamaica, and Nigeria. China, Canada, India, France, and other world-population leaders are actively piloting their own CBDCs.

The transition to digital currencies is no longer an if, but when. And, like many things, there's an undeniable segment of the population that are being used to "test" these emerging technologies as retail consumers with no apparent or communicated intention to empower them to do anything other than be users. There appears to be nothing being done to position these populations to capitalize from blockchain technology and digital currencies to improve their present position or global potential, and help bridge the digital and socioeconomic divides.

NON-FUNGIBLE TOKENS

Non-fungible tokens (NFTs) are blockchain-based cryptographic assets containing unique identifiers and metadata that distinguish them from other NFTs. NFTs differ from fungible tokens like cryptocurrencies, which are identical to each other rendering them ideal as a medium of exchange. NFTs, on the other hand, are not identical and, therefore, have varying values depending on their individual characteristics or underlying physical asset, rarity, utility (if any, such as membership perks, loyalty programs, in-game value, metaverse item), and subjective appeal (for example, artwork, limited number collection, well-known artist or entertainer association). NFTs are created through a process called minting, whereby NFT information is published on a blockchain. Minting incorporates smart contracts that assign ownership and manage transferability. A smart contract is a computer program that automatically executes Web3 actions pursuant to predetermined terms. Known NFTs and spaces include:



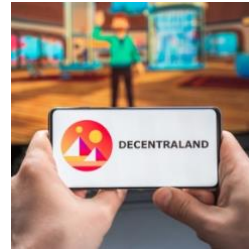
CryptoPunks



World of Women



Bored Ape YC



Decentraland



The Sandbox



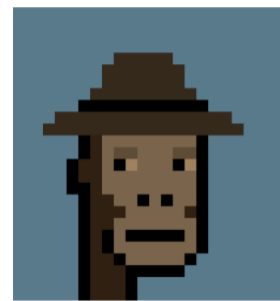
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Practical NFT use cases include supply chain, gaming, X-to-Earn (X2E), real-world assets (RWA), NFT rentals, real estate, Soulbound tokens, & more.

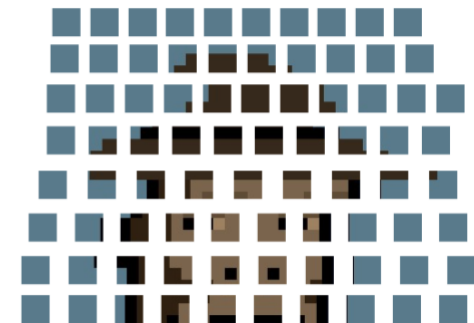
Fractional NFTs

NFT fractionalization is the act of democratizing high-value NFTs by dividing ownership into smaller fractions making it possible for many people to co-own a single NFT. When an NFT is fractionalized, the original NFT is secured in a digital vault and a specified supply of fungible tokens are minted that represent ownership over the secured NFT. Fractional NFT owners have no commercial ownership rights to the original NFT, no publicity rights, and no rights to contract with regard to the original NFT.

Original NFT



**Fractionalized NFT
(ERC Tokens)**



DICED DIGITAL

Diced Digital is a Web3-focused learn-to-earn portal that transforms disadvantaged 7th to 12th graders through fractional asset ownership. Our mission is to empower students by bridging trauma-informed, practical financial literacy and future-focused Web3 protocols (blockchain, crypto, NFTs) with often-overlooked mindset and belief system awareness. We aim to exceed state, federal, and equity standards (Baily & Wogan, 2022).

Methodology & Strategy

- Provide a future-focused Web3 experience with learn-to-earn curricula that informs and expands
- Crypto, NFT, & Metaverse incentives shift student mindsets from “liability managers” to “asset owners”
- Fluctuating market values of digital-asset payouts help maintain student interest and engagement
- Fractionalized, blue-chip NFTs propel students into elite peer groups with highly successful owners
- Mindset focus raises awareness to blind spots and belief systems that limit learning and embodiment

Student Benefits

1. Digital-asset ownership delivers exposure, inclusion, self-esteem, and asset appreciation potential
2. Diced Digital instantly dismisses the “Can I?” question and helps alchemize underlying unworthiness
3. Blockchain-inspired infrastructure accentuates constructivism and cognitivism learning dynamics
4. Confidence-building, practical curricula merged with cutting edge Web3 protocols provides:
 - a. Education that is exciting and relatable for personal growth and inclusion into an inevitable web3 world
 - b. Exposure to emerging asset classes and alternative, in-demand career paths, like: blockchain developer or engineer, smart contract engineer, web3 site developer, crypto or NFT strategist, decentralized finance operations, web3 asset storage and security, etc.
 - c. Expansion of mindset and belief systems about what is possible and personally accessible now, and in the future
5. Digital-asset incentives “held in trust until age 18 or graduation” instills delayed gratification, and promotes market observation and strategy
6. Proximity is Power: Ownership & immersion launches students into the Web3 conversation and alters their narrative about future stakeholders
7. Students’ ability to say “IAm a crypto owner” or “IOwn Bitcoin” lifts them into a new mindset that promotes pride, purpose, and possibilities
8. Self-awareness and belief-system guidance stimulates self-identification and regulation of students’ thoughts, actions, habits, and emotions



SUMMARY

Simulated-Web3 Experience: Diced Digital is primed for transformative impact as we challenge and inspire students through our Web3 experience to learn financial literacy and emerging technologies while earning fractional crypto and NFT assets.

Mindset & Beliefs Focused: Through compelling learning modules and mindset-awareness prompting, students are primed and engaged for elevated learning comprehension and real embodiment of expansionary topics and technologies.

Dynamic Delivery: As demands on life and learning continue to undergo radical transformation, we empower educators with cutting-edge curricula in uniquely immersive and engaging ways for greater student support and motivation for improved outcomes. Let us help position your students for a bolder, brighter future.

Trauma-Informed financial education seeks to incorporate an understanding and recognition of the physical, psychological, and emotional trauma caused by living in lower-income environments, and how those experiences affect learning, health, and financial decision-making.

Contact us today for more on how our Web3 learn-to-earn experience can help catapult your students over the digital divide toward new possibilities while helping to improve mental and emotional awareness and disposition.

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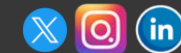
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