

University DAO

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End Student Debt. Own your University.

A novel yet flawed approach for the tokenization of higher educational institutions in order to end student debt and empower the ownership of an individual's university

1.0 - Intro, Pre-Face, & Political context:

Since the late 11th century [2], Universities have been local, centralized, entities, operating as the arbiters of truth, knowledge, and education. In the traditional University system we have today, Boards, Trustees, Presidents, and Regents among others control most of the governance structures employed within the primary educating systems of our world, ultimately marginalizing the very people the Universities serve in the first place, the Students. Sure, most Universities hold student body senates that influence the governance of universities, but in most cases, student bodies usually lack any form of formal authority to really make a difference on the Universities policies and initiatives [1].

On the other hand, student debt has reached \$1.75 trillion in the US alone [3]. The world needs an answer, our nation needs an answer, and our children, the ones who will bear the brunt of our failures, deserve to live in a world where education is accessible to all. Our education system has failed us, Universities and the general public expect the government to subsidize our higher education, yet, the very educational institutions themselves have done little to quell the true reason our debt rate has hiked, that is, that the tuition rates our Universities set for entrance to their institutions have increased over 100% in the past 20 years [4]. No amount of government spending can bandage a hole in the wall that keeps growing. But even then, sympathy must be administered to our failed institutions, for the hard problem they face, is that quality of education is directly proportional to the amount of money an educational system has to teach [5]. In some ways we can't blame Universities for charging more if it helps them provide a better education in the end.

So, as a result of the inherent hard problem of education, the government cannot physically solve the issue of student debt alone. In this frame, it is our belief that Universities themselves not only must do more to bring down the student debt ratio, but the US government must empower universities to solve the student debt issue themselves, through the creation, amendment, and reformation of legislation that is in favor of innovative approaches for educational institutions to do so.

Throughout the rest of this paper, we will present a novel approach for a higher educational system that unites the government and its educational institutions, together, with its financial markets, through the creation of UniversityDAO, a tokenized University that aims to end student debt and empower our nation's scholars to truly own their University.

With that being said, UniversityDAO is still largely in concept. Much of what is presented in this paper is subject to change and comes with its risks, assumptions, and

flat out flaws. We hope that the readers of this document will come together to not only critique and absolutely bash the approach we've crafted, but to come together in order to form a more perfect University system that solves the hardest problems of education we face today.

[NOTE: Before moving into the rest of this paper, the assumption is that you're somewhat familiar with the web3/crypto space. Before reading the rest of this paper, we urge you to get a primer in by reading the following pieces of scripture.

1. <https://www.fwb.help/> Take a look at friends with benefits and token gated communities as a whole
2. For a technical primer be familiar with the bitcoin and eth whitepapers. These are less necessary but give good context.
3. Be familiar with the relationship between the howey test and DAO's and why decentralization is one of the ways to defeat the howey test
<https://crypto.news/what-is-the-howey-test-impact-initial-coin-offerings-icos/>
4. The dynamic between Utility coins and security coins and the howey test
<https://bitnewsbot.com/utility-tokens-vs-security-tokens-the-howey-test-the-viable-choice-for-enhanced-protection-in-the-cryptosphere/>
5. A quick description of the current definition of a DAO
6. Have a general understanding of De-Fi and check out Uniswap and their whitepaper

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2.0 - UDAO Description:

UniversityDAO is a decentralized autonomous university where the students themselves own its birth and destiny. Students apply to UDAO, if they're admitted, they pay their tuition and in exchange they gain; 1. admission to their degree program and 2. their tuitions worth of University coins. When they graduate, if we can create a marketplace for liquidity, centralized or decentralized, students can sell their token on the market and go to school debt free.

Now, Lets unpack this.

3.0 - Tokenomics:

The minting schedule of UCOIN will be based on a Proof of Education Basis. Every semester, upon paying tuition, the student will pay their tuition in a currency

acceptable by UDAO (to begin, US Dollars and stablecoins) and will be administered their tuition's worth of UCOIN, in a locked wallet in their name that the student will only be capable of accessing upon graduation. We have chosen this mint cycle for two reasons. 1. By restricting access to the UCOIN's until graduation, students will be further motivated to graduate. 2. New UCOIN will only ever be minted upon admission and will only ever be sellable to the public (By a student) if a student graduates. This creates an incentive structure that forces financial markets to "liquidate" a student before they can have access to the token market UDAO creates. As more and more students get liquidated, the token will be more and more tradeable by anyone on the open markets for whatever reasons people on the open markets trade tokens for.

On top of the minting schedule painted above, UDAO will create an Open University that does not require admission to enter. As of now, upon creation of our first degree program, Open University will be a subscription based model where anyone in the public can exchange the University Coins they bought on the market (subscription rate to be determined) to UDAO and will gain access to past lecture content, fireside chats the University hosts, and much more. Ultimately, Open University creates a deflationary mechanism for the coin as well as a utility offering made by the admit only programs, that of which, people in the public can access without going through the traditional admission requirements of Universities. As people pay the DAO in UCOIN for access to Open University, the DAO can then recycle those coins to the next cohort of admit only students, inherently reducing the amount of newly minted coins the dao creates.

3.1 - Improvements, Flaws, and considerations in tokenomic creation:

As the University grows, flexibility with the minting and accessibility schedule may be considered and we hope the community will propose more optimal minting schedules in the interest of our mission.

1. An approach that allowed students to sell their token before graduation was considered and provides the possibility for people to try college and see if it's for them. We believe that this approach, although student friendly in nature, is not University friendly and discourages the success of the University, at the very least, in the short term.
2. With government cooperation, we see an avenue where the initial public sale of the token by the student could be considered a tax deductible activity. It would give the public/financial markets the direct power to liquidate students.
3. Beyond Open University (and potential further offerings UCOIN can be exchanged for), UCOIN is a speculatively traded asset with inherent correlation

to the University. With government cooperation, we believe that by opening up speculative trade for the coin, demand for the coin will increase, and therefore liquidity of student debt will increase, effectively creating a University system where the government, the education institutions, and the financial markets of the country work together to end student debt.

4. Open University is a back of the napkin approach to making UCOIN deflationary. Other approaches are desired and we intend to create the opportunity for the public to propose improved tokenomic structures as to how to make UCOIN deflationary.
5. Open University is an attempt at taking the content that couldn't be created without the students in the first place, and leveraging it in a way that can ultimately give back some of the "take" that University systems employ against their students. As UDAO grows, we believe that more opportunities to distribute the take that universities employ from their students and faculty will reveal themselves for us to give back through.
6. The traditional concept of scholarship that Universities implement is directly complementary and serves as a deflationary mechanism for the coin. Out of the box, Universities could administer scholarship and either destroy the coin locked for the student, or recycle the coin for the next cohort. Furthermore, the University could simply buy back tokens on the market in the future and recycle them for the next cohort with whatever means of funding the university ultimately has.
7. UDAO intends to create an endowment. With government cooperation, we see opportunities to pay students a percentage of endowment profits both with or without reducing the token count they hold in their wallet in an attempt to create a learn to earn model versus a pay to learn educational model. We also see avenues where the public can stake their coins and earn a percentage of the endowment profits as a way to incentivize the market to liquidate students and buy the coin. Of course there are many types of endowments, but ultimately it would all be created in the interest of ending student debt and providing the absolute best educational experience possible.
8. Students must pay in USD and students will not be capable of buying coins on the market as their "tuition" because of the nature of Universities. Traditional currency must be injected into the University at the beginning to pay for the services of running the program. If students got admitted, bought Ucoins on the

market, and paid their tuition in UCOIN, the University would not obtain an injection of new capital to use to create the program, therefore there would be no money to teach the new admit.

3.2 - Speculative coin discussion:

As a framing question before diving into the speculative nature of the coin. One must ask, what increases or decreases the “value” of a University? Now, first, the coin itself will largely be correlated to the dollar value of tuition itself. The first “buyers” of the coin are paying tuition price, so therefore there will always be a form of peg to the upward or downward value of tuition for the University, similar to bitcoins relative peg to the price to mine. Of course, the university's value could go down. That being said, according to Harvard's 2005 fiscal report, their total net assets locked up to \$30.6B [9] and in their 2021 report, that was up to \$63B [10]. That's a 5% YOY return based purely off of total net assets accumulated. On top of their total net assets, Harvards endowment returned 33.6 percent on their investments after operating deductions for a total of 11.3b return on the year [10].

Generally speaking, Universities are largely low risk assets that students, faculty, and even the general public have never really had investible access to. It's like saying will Harvard go down in value or will the US Government go down in value? Maybe, maybe not, but as a market trader, it's up to me to decide if I want to buy the harvard token or the US Dollar in the speculative interest that I think it will go up. On top of this, the alternative offering of a university is to take your tuition money and the student never sees it again, offering a speculative asset highly correlated to the success or failure of a university is a better offering then nothing at all, assuming both institutions are obviously going to provide you an education.

Next, every admission cycle we mint new tokens, making the token inherently inflationary. That being said, minting tokens will only ever occur when the university a. Makes money from tuition and b. Admits a number of highly selective and intellectual candidates to join its university. These are inherently value adding assets to the University, so the argument is that although yes we're minting new tokens, the tokens themselves are only being minted in the event of new value being added to the University, which in turn will create an alumni network that itself will have value both through donations and sheer affiliation, which of course will increase the endowment fund that could be leveraged to invest, gain/provide return, and creating a staking mechanism for UCOIN that incentivizes the liquidation of a students education.

3.3 - Utility coin discussion:

At its heart, UCOIN is a token gated community. The obvious utility of the coin is that students who gain admission and purchase the coin from the University will receive an education in exchange. When the public purchases the coin from the students on the open market, the utility they receive is access to Open University if they choose to subscribe. As we evolve the further offerings we provide to both admit only students and Open University, the token will inherently see its own utility increase too.

4.0 - Ownership/Governance:

Alongside the UCOIN students will receive, they will also receive a token representing their governance vote in decisions that guide the University. First, students will be allowed to vote on initiatives and agendas that the Universities administration formulates. In order to run a University efficiently, we believe that some level of centralization will be necessary. Students and alumni will be capable of writing proposals to the DAO as to where they believe the University should not only guide funds, but focus its agenda on.

A model that we've considered is giving students more transparency and the majority of governance rights over where their explicit tuition treasury goes towards. It makes sense that if I pay tuition, I should be able to have a say in where my money goes. Implementation of this model still needs further analysis, but ultimately on the other end, we believe that there will be some forms of treasury that inherently will be less guided by students themselves. As the University grows, the dao will identify places where it makes sense to provide more and more decentralization and power to the students and professors.

5.0 - Educational experience:

UniversityDAO will ideally follow a similar educational experience as the traditional university system (degree programs, cohorts, etc). We believe that there is an opportunity to improve and redefine the flaws of traditional systems from the ground up, but we believe that it is imperative to retain many aspects of the traditional model of education in the interest of creating a tokenomic structure that existing universities can model.

5.1 - Campus:

We see an opportunity for a hybrid educational system where both metaverse land, and physical land could be adopted for the campus structures and tokenomics that students learn/engage within. In the case of metaverse land, VR headsets would likely

be baked into tuition costs so as to ensure accessibility into the virtual campus for all students.

6.0 - Goals:

The goal of UniversityDAO in the end is to

1. Create a University model and higher educational system where Universities are empowered to end student debt and/or drastically decrease the student debt ratio themselves, through tokenomics, perceived value that a university has over the years, and/or other innovative approaches that Universities can take that have not been considered in this paper or in the current political climate of the world
2. Create a University where students themselves are empowered to own their universities destiny.
3. Create a University model that we hope will be explored and adopted by the existing University systems of the world in the pursuit of ending the student debt crisis and moving closer to a free education system. A mission in which we as a DAO would be happy to collaborate on with other universities, governments, and stakeholders seeking the same goals we do and hoping to implement the model for themselves.

7.0 - Roadmap:

7.1 - Incorporate:

Upon launch of this whitepaper, the first plan of action is to assess and analyze the incorporation structure that is most suited for the mission of UniversityDAO. Based on the research we've done so far, a UNA, non-profit, or foreign foundation seem as though they're the best suited for our mission, however, each comes with flaws. Foreign Foundations would obviously create limitations in operating in the US, UNA's provide little to no liability protection for the members and leaders of the DAO, and flat out non profit incorporation comes with its regulatory complexities depending on how UCOIN would be perceived in a court of law.

We believe that long term, in order to perceive a world void of student debt, UDAO must become a non-profit, for the only way to end student debt is by creating a model that can be replicated and integrated into the existing Universities of our era, those of which the majority of, are non profits. It is in this dilemma that we would like to work with the US government, namely the Department of Education, IRS, and many others, in order to identify a legal structure that empowers a University model of our own.

7.2 - Raise funding:

Upon incorporation, the next plan of action is to raise donations (for the purposes of this paper, we've assumed that we've been incorporated as either a UNA or non-profit). First we would file to become a tax deductible entity under 501(c)(3). That being said, acquiring tax deductible status can be a lengthy process. In the meantime, we would like to put out an open request for fiscal sponsorship from an existing non profit entity, ideally in the web3/crypto or education space, so that we can raise donations as soon as possible.

Nevertheless, creating a University is hard. We do not believe that we should even attempt to create a University if we cannot raise the appropriate funding to do so. A new University being created in Austin, TX called the University of Austin raised \$10 million in 6 weeks and is aiming to raise \$250 million before they launch their first degree programs [6][7]. Harvard's net operating expenses chalked up to around \$5b for FY 2021, for further context towards the operating expenses of universities.

UniversityDAO is aiming to raise \$50 million in donations (USD and Crypto accepted) from the people and the web3 community in order to ensure the growth and execution of the University in perpetuity. With this funding, the first plan of action will be to create UDAO management company in order to establish an endowment to invest out of. Although the numbers as of now are not final, we expect to allocate somewhere between 10-20 percent of the donations raised towards the development of the University programs/roadmap and the rest towards the endowment in perpetuity and for investing. In the beginning, UDAO's primary source of revenue will be gains through the investments of the management company. As a result, it will be critical to allocate a large amount of donations towards the investment side of the University so that it can allocate profits from investments towards the development of the University programs.

Through our existing research on endowment investing, we believe that there are avenues for us to establish a number of different endowment investing schemas. First, to our surprise and maybe to the public's surprise, Universities already create investment funds where you can donate money and they literally give you return on your donation[8]. Charitable remainder trusts, charitable gift annuities, and pooled income funds are all ways that existing endowment structures acquire donation and provide return in exchange, but each comes with its limitations. In an ideal world for UDAO, anyone of any working age of any monetary amount could donate or invest into our endowment fund and earn a percentage of return of the endowment on their donation/investment. As of now, the most flexible form of endowment structure that moves towards this mission seems to be the pooled income fund. On top of giving return on donations, we also see avenues where individuals can stake their UCOIN or other assets into our endowment fund and earn a fixed percentage of return, but undeniably, as we grow UDAO, we will need to acquire legal counsel to assess the best options for our mission and our tokenomic structure.

7.3 - Post Endowment and Degree Program Creation:

Upon establishing the UDAO Management corp, the next point of action for UDAO is to begin the creation of degree programs and educational offerings. In the short term and before our first official degree programs, we intend to explore the creation of a visiting fellows program similar to Harvard's Radcliffe Institute and experiment with cohort based coursework. During the creation of our educational offerings, we also intend to acquire physical and/or virtual land where our offerings would take place and intend to auction the naming rights of our first building. If all things go well, the final roadmap action for UDAO is to become the world's first on-chain, tokenized, and decentralized, **accredited** University.

8.0 - Closing remarks:

UniversityDAO is a dream. A dream of knowledge, A dream of legacy, of ingenuity, of innovation, of society, of pride, of culture, of justice, of freedom, and of truthful creed. It is in this dream that we believe in a world where the pursuit of education does not mean the destruction of financial liberty, a world where decreasing the student debt ratio is an inherent function of the quality of education an institution can provide, and a world where students are empowered to own their educational destiny.

With the cooperation of the government, existing educational systems, and the public, we hope to create a University system that **both** encourages government subsidization of education **and** empowers Universities to solve the student debt problem on their own.

As we create UniversityDAO, we aim to be one of the few crypto projects that seeks to unite the common world with web3. In order to do so, we would like to put out a formal request for advisors and contributors in/for

1. Educational and non profit law
2. Endowment investing/creation
3. Securities/DAO/crypto law
4. The Department of Education
5. SEC and CFTC
6. Politicians
7. University Presidents and Deans
8. Degree program creation
9. Educators/professors
10. Web3/crypto engineers
11. VC's
12. Web3/crypto Leaders

13. Crypto Whales
14. Economists
15. Donors of all kinds
16. And people of all kinds who seek to end or reduce student debt in the world

As mentioned before, creating a University is **Hard**, ending student debt is even harder, but we believe that we can unite the world together in order to create a new paradigm of university in this renaissance we call Web3. The world's university.

[1]<https://education.stateuniversity.com/pages/2014/Governance-Decision-making-in-Colleges-Universities.html>

[2] <https://en.wikipedia.org/wiki/University>

[3] <https://www.forbes.com/advisor/student-loans/average-student-loan-statistics/>

[4]<https://www.usnews.com/education/best-colleges/paying-for-college/articles/2017-09-20/see-20-years-of-tuition-growth-at-national-universities>

[5]<https://www.usnews.com/education/best-colleges/articles/how-us-news-calculated-the-rankings>

[6]<https://www.nytimes.com/2021/11/08/us/ut-austin-free-speech.html?smid=tw-nytimes&smtyp=cur>

[7]<https://www.forbes.com/sites/nicholasreimann/2021/11/08/heres-what-we-know-about-the-university-of-austin-the-self-proclaimed-anti-censorship-institution/?sh=283889ca51a8>

[8]<https://alumni.harvard.edu/giving/planned-giving/pay-income#CRTs>

[9] <https://finance.harvard.edu/files/fad/files/2005full.pdf>

[10]https://finance.harvard.edu/files/fad/files/fy21_harvard_financial_report.pdf