Lesson Plan - Blockchain technology and Bitcoin

“Decrypting and understanding the digital goldrush or how to be more empathic with THAT friend who is investing his rent money in Bitcoin.”

Introduction

In the recent weeks, Blockchain technology and Bitcoin, the first cryptocurrency, have had their 10-year anniversary. Even after all these years, with the tech/digital currency becoming more popular in the general media news and overall culture during the past years, its inner workings and potential are still a hard topic to talk about without a high level of technical knowledge.

As such, and according to the original intention of the technology creation - the democratization of the financial system and a transparent economy, it is essential to be able to teach a non-technical audience for it to learn and be able to make informed decisions about adopting cryptocurrencies and the other potentials of a blockchain.

This lesson will inform the audience about what the technology is, its uses and how they can use it in their everyday lives, in a non-technical and accessible way.

Learning objectives

To teach how Blockchain technology works and its practical uses.

Lesson outcomes

At the end of my class, the students will be able to:

A. Use a simple blockchain wallet (for simplicity sake, an online bitcoin wallet) to manage their digital assets.

B. Employ Bitcoins or other similar cryptocurrencies in commercial transactions.

C. Describe in a higher-level and straightforward way (“layman’s terms”) how a blockchain system works.
A brief description of the audience

**Occupation:** Recent graduates working in a non-tech or business area. Also, those who may aspire to become entrepreneurs in the future.

**Education Level:** University graduates.

**Personality traits:**
- Determined,
- Curious,
- Ambitious *(but still looking for their path to success)*

**Audience’s learning goals:** To understand what exactly is the Blockchain technology they can finally understand the hype around it and discover the benefits for their future and possible careers as entrepreneurs.

**Possible barriers:** The audience will probably have a low to average software expertise on simple programs, with only a couple having basic programming or advanced technological knowledge. They may enjoy learning about new concepts and thinking abstractly but will probably get bored with low-level technical details.

**Familiarity with the subject matter:** The audience has probably heard and read about this technology in the media but has no idea about the technological or practical aspects of it.

My target audience’s objective is to understand what blockchain technology is and how it works, not to learn/employ low-level skills (i.e., to program a new cryptocurrency.) They want to develop trust in the technology and be able to use it on a primary user/consumer level. As such, my goal at the end is to get them prepared to perform operations on a practical blockchain application – like doing cryptocurrency transactions by themselves – as they ideally will after they leave the class.
## Lesson Description

<table>
<thead>
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<th>STAGE</th>
<th>TOPIC</th>
<th>MATERIALS</th>
<th>TIME ALLOCATED</th>
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| **INTRODUCTION TO BLOCKCHAIN** | • What is a blockchain?  
• The potential of Blockchain in other areas other than cryptocurrencies | • PowerPoint  
• Diagrams and images  
• Projector | 5 minutes |
| **INTRODUCTION TO A SPECIFIC APPLICATION OF THE TECHNOLOGY - BITCOIN** | • What is the general concept of a Bitcoin  
• Dangers and downsides  
• Positives, benefits | • PowerPoint  
• Diagrams and images  
• Projector | 5 minutes |
| **STUDENT ACTIVITIES** | • Create an account on a cryptocurrency wallet service online  
• In groups, share their digital wallet addresses and perform small Bitcoin transactions among themselves.  
• Produce a simple diagram of how their transaction process happened. | • CoinSquare’s Website  
• Students computers  
• Projector  
• Pen & Paper | 4 minutes  
*Part of this step will be simulated as the creation of wallets requires a process of ID verification which we will not have time for* |
| **CONCLUSION** | • A summary of the technology and what was talked about in the class. | -- | 3 minutes |
| **QUESTIONS AND ANSWERS.** | • The class debates about Bitcoin, if they are planning to acquire some and why.  
• Answer any question that may still exist | -- | 3 minutes |
Materials

- PowerPoint presentation with diagrams and graphics
- Projector
- The student’s own computers
- Student’s own pen & paper

Method of assessing if learning occurred

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<th>ASSESSMENT</th>
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Closing linking class activities and assessment to learning outcomes.

As the class will verify after doing the assessments, the process of working with cryptocurrencies is relatively simple even for those without a technical background. By having a practical experience of creating their own virtual wallets, performing a transaction and reflecting afterwards on how it occurred (by producing the diagram), they will effectively have gone through the whole process and analyzed it. At the end of the class, they will understand this complex subject.