

# Cryptocurrency Lesson Plan 1:

## *Introduction to Cryptocurrency*



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## **Course Introduction**

Cryptocurrency is changing the way we live; it has revolutionized the financial institution. This course will provide you with the knowledge and understanding you need to thrive in the crypto world. Your presence in this class book shows that there must be something in your mind that has been craving knowledge and understanding about cryptocurrency. It is evident that you desire to grow so that you can live better and build your finances. If this is how you feel then rest assure that you are not alone. Thanks for mentally reaching out, as this course is a cryptocurrency training which would help you achieve your goal. This course will provide you with basic information about cryptocurrency and how it works, and an in-depth knowledge of a new revolution in the crypto world called Strayacoin.

## **About the Course**

The Cryptocurrency literacy training is a course dedicated to train you on the following topics;

- The evolution of money
- Currency exchange
- Foreign exchange
- What is cryptocurrency
- Brief introduction to bitcoin
- What problem does cryptocurrency solve?
- Different types of cryptocurrency
- PoW and PoS

## **Learning Objectives:**

To help students understand the working process of cryptocurrency and how to identify their usefulness.

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## **Lesson Plan 1: Introduction to cryptocurrency**

**Aim:** At the end of this module, students should be able to:

- Explain the evolution of money.
- Describe what a global currency is, and explain how currency exchange works.
- Identify the top cryptocurrency.
- Identify problems solved by cryptocurrency
- Differentiate between PoW and PoS

### **Introduction:**

Change is one constant thing, the world has changed, and the only those who adapt to this change will benefit from it. Money has evolved over the years; it is important to get the right knowledge about what money has changed into before investing in it. In this module we will be looking at the topic “Global Currency” and building a relationship between the global currency and our personal finances. This will be the first step in understanding what cryptocurrency really is and how it came to be. This is going to be an interesting call, as we will be carrying out some interesting activities.

Instructors note:

- Introduce yourself as the instructor, make the students comfortable by sharing your first experience with cryptocurrency.

**Quote image:** “An Interesting Fact You Need to Know About Cryptocurrency - The first Bitcoin purchase was for pizza.” — Mohsin Jameel

## The evolution of money



Money is one of the most important innovation of all times. For an invention to last for a long time, almost through out life time, it has to evolve. Just like cars and other inventions evolve over the years, money also evolves. We are presently in the age of digital currency. Before going fully into digital currency, it is important you know the origin of money and how it has evolved. This will help you understand and values digital currencies better.

Instructor's note:

- Present the video below to the class
- Watch this video to get more understanding about the evolution of money.
- Video link: <https://www.youtube.com/watch?v=TNjNaULISGs>
- After presenting the video, take questions from 3-5 students and give necessary explanation.

### **What's your definition of a currency exchange?**

We initially established some scenarios of currency exchange in the previous section, so you should have an idea of what it is already.

### *Reflective Question:*

Ask 3-5 students what they know about currency exchange.

A currency exchange is a business or financial institution that deals with the exchange of one currency for another currency. The exchanger must have the legal right to do this. Most banks offer this service as part of their services and you can also see other financial institutions that offers a currency exchange service fully. The profit of currency exchange comes through adjusting the exchange rate or taking commission.

### **What is foreign exchange?**

This is the exchange of one currency for another or the conversion of one currency into another currency. The foreign exchange market is also recognized as the global market where currencies are traded virtually around the clock. It is estimated to be the largest and the most liquid financial market in the world. From the definition above, we understand the term foreign exchange also means currency exchange.

### **What is exchange rate?**

An exchange rate is the value of one nation's currency vs the currency of another nation. For instance, let's take the Nigerian Naira vs the United State Dollar; 1NGN= 360\$. The exchange rate of USD in Nigeria is therefore 360.

### **What is Cryptocurrency**

These are currencies only available in a digital or electronic form, and not in the physical form. Recall in the previous section where we talked about money as a currency. We established the fact that a currency must be accepted for exchange before it can be considered as a currency. This is to tell you; digital currency also serves as a means for legal exchange in the digital world. It is a decentralized currency; hence it cannot be controlled by any physical government. This is the main reason some countries stand against it. However, the digital currency has been accepted vastly in the virtual world, and the virtual world is vast becoming the most visited market place. It will be a very wise decision to buy into this idea early.

A cryptocurrency, broadly defined, is virtual or digital money which takes the form of tokens or "coins." While some cryptocurrencies have ventured into the physical world with credit cards or other projects, the large majority remain entirely intangible. The "crypto" in cryptocurrencies refers to complicated cryptography which allows for a particular digital token to be generated, stored, and transacted securely and, typically, anonymously. Alongside this important "crypto" feature of these currencies is a

common commitment to decentralization; cryptocurrencies are typically developed as code by teams who build in mechanisms for issuance (often, although not always, through a process called “mining”) and other controls.

Cryptocurrencies are almost always designed to be free from government manipulation and control, although as they have grown more popular this foundational aspect of the industry has come under fire.

## **Bitcoin (BTC)**

Bitcoin is a form of electronic cash (digital currency). It is the mother of all digital currencies, and it is used as the benchmark of all digital currencies. Bitcoin is decentralized and can be sent from user to user on the peer-to-peer bitcoin network without the needs of intermediaries. Bitcoin was founded by Satoshi Nakamoto in 2009 using the C++ programming language.

We have a long and growing list of digital currency, here are the top 10 digital currency presently in the world.

- Litecoin (LTC)
- Ethereum (ETH)
- Zcash (ZEC)
- Dash (DASH)
- Ripple (XRP)
- Monero (XMR)
- Bitcoin Cash (BCH)
- NEO (NEO)
- Cardano (ADA)
- EOS (EOS)

## **What problem does cryptocurrency solve?**

Cryptocurrency has been in existence since 2009, however it was not as popular as it has been the last few years. News about cryptocurrency and blockchain is everywhere these days because people now realize its importance, and have experienced it solve major problems faced by fiat currency. This section answers the question of WHY, *“why do we really need cryptocurrency”*.

**Trustless immutable:** Cryptocurrency is a trustless system, in the sense that, you can trust the system without needing to trust the party you are in transaction with. For instance, if you are to send some cash to someone, who promises you a great reward after some time, you may not trust the receiver, but you can trust the system, because if you are dissatisfied with the outcome of the transaction, or get scammed, you would get your money back right away. This is what it means to have a trustless system in blockchain.

**Fungible:** In the crypto world, tokens are king. There are two forms of tokens; fungible, and non-fungible tokens.

Fungible cryptocurrencies represent all the tokens available on the market. They are digital currency that have a uniform price among all the tokens available. For instance, bitcoin is a fungible cryptocurrency, because 1btc is equal to another 1btc. To be clearer, at this time, the market price of one BTC is equivalent among all BTC's in the market today. This is what it means to have a fungible currency. On the other hand, non-fungible tokens are designed to be special, many factors are considered when evaluating the price of each asset. For instance, diamonds come in different sizes, grades and cut. So, the price of one diamond, may not be equivalent to the price of another.

**Decentralized:** One of the most exciting fact of cryptocurrency is that it is totally decentralized. Decentralization simply means, different parties can come together to make independent decisions without the control of a government or central authority. The decentralized nature of bitcoin means that it does not rely on a central point of control. This makes the system fairer and more secured. This nature eliminate unnecessary charges incurred by central authorities during transactions.

**Inflation:** The value of a fiat currency today cannot have the same value it has years ago. A fundamental problem with fiat currencies is that the government of a nation can manipulate interest rates and issue bonds to stimulate the circulating money supply of any currency. This is just a temporary solution to a present situation, but the additional supply dilutes the purchasing power of the holders of the currency. Inflation is a form of taxation, utilized by the government to fund political campaigns. Unlike fiat currencies, cryptocurrencies have a fixed supply that cannot be diluted. This eliminates inflation, as once the coin reaches its maximum supply, its value drives up.

**Foreign exchange fees:** Remember we explained what currency exchange means in previous section. Imagine how much money is lost by changing your money from one



currency to another whenever you travel to a new country. There are 180 currencies recognized in the world, and they are artificially constrained by geographical borders. Cryptocurrencies has solved that problem, because they are not restricted by the borders of a nation.

**Threat of confiscation and privacy of asset ownership:** People face the threat of having their properties and saving being seized by the government, especially when they live under autocratic rule where properties can be confiscated. This is a general problem for most people around the world. Most wealthy people now run offshore bank accounts to secure their hard-earned wealth. Not everyone has access to the offshore banking industry today. Cryptocurrencies provide a non-sovereign censorship resistant store of value that is not possible with fiat currency.

**Stamp out embezzling and improve trust in charitable donations:** Financial transparency within private institutions has been achieved easily with cryptocurrency because of blockchain technology.

**Equality in money management:** An obvious advantage of cryptocurrency is the fact that it eliminates the use of middlepersons in financial transaction. For instance, banks close down during holidays and offer limited services, this will not be an issue for a crypto holder, since there is no need for a middle man or institution to facilitate transaction. Also, transferred money can sometimes take days to reflect on the receiver's account. Unlike fiat currency, cryptocurrency wallets are simple and fast to operate.

### **Are all cryptocurrencies the same?**

This question may have been in your mind, since the beginning of this course, and it is a valid question. It is easy for a beginner, to believe all cryptocurrencies are the same because they all use the blockchain technology. Well the right answer is “NO”, they are not the same. Let's look at some of the differences.

### Bitcoin

Bitcoin is decentralized, meaning it does not rely on a bank or third party to handle it. With Bitcoin, transactions are between users (peer-to-peer). This makes it possible to carry out transactions without identifying yourself. Bitcoin transaction uses what is called PoW meaning Proof of Work.

## Ripple

Unlike bitcoin, ripple is not decentralized, it is centralized. Ripple is a blockchain, created to be used by banks to make easy and faster payments. It is often called the banker's coin.

## What is Proof of Work?

When carrying out a transaction using bitcoin, a block is created and sent to the blockchain, miners/nodes then verify this block with the algorithm called PoW. In Pow, the first miner to verify the block is rewarded with new coins.

## Altcoins

Presently, we have over a thousand altcoins in existence. Majority of altcoins are just alternative versions of Bitcoin with minor changes, this has made it even harder to identify the differences in cryptocurrency. It is important to know that some altcoins are very different from bitcoin, and have different algorithms. For example, Factom is an altcoin that uses PoS (Proof of Stake). Miners are not involved in transactions like this, instead there are stakers. These are the people that verify transactions for rewards, just as miners do in PoW. This algorithm uses much less electricity because miners are not involved. The stakers are selected one per block.

## **Key Takeaway**

Money evolved; it is important to follow the trend.

## **Activity:**

