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INSTITUTO UNIVERSITÁRIO DE LISBOA

Teaching Solidarity Economy in Portuguese High Schools through a game based on experimental, creative and playful methods

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Mestrado em Estudos de Desenvolvimento, Master in Development Studies

Supervisor:

Professor Doctor Rogério Roque Amaro, Associated Professor

ISCTE-IUL – Insituto Universitário de Lisboa

November, 2021



Departamento de Economia Política (ECSH)

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For my family.

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## Resumo

A questão central desta tese é como um jogo que ensina Economia Solidária em escolas secundárias públicas em Portugal pode ser desenvolvido utilizando métodos experimentais, criativos e lúdicos.

Portanto, a tese mostra as deficiências da Economia Capitalista e delineia de que forma uma Economia baseada na Solidariedade poderia melhorar essas deficiências. Enfatiza os diferentes aspectos da Economia Solidária e integra aqueles num contexto educacional, explorando métodos experimentais, lúdicos e criativos. Incorpora empoderamento e a cidadania activa e considera o currículo do ensino secundário das escolas públicas em Portugal.

A parte teórica da metodologia baseia-se na literatura científica sob a forma de livros, artigos científicos e websites. A metodologia empírica incorpora a observação participante, um questionário e uma entrevista, com métodos qualitativos e quantitativos para a recolha de dados.

A análise dos dados recolhidos mostrou que os estudantes melhoraram a sua compreensão e reflexão crítica sobre a Economia Capitalista e Solidária. Os estudantes consideraram o jogo mais fácil, mais interessante e motivador do que os métodos tradicionais de ensino. No entanto, vários aspectos relativos ao conteúdo, execução e condições de enquadramento do jogo precisam de ser melhorados. As recomendações políticas incluem uma continuidade nas acções que encorajam a cidadania activa, bem como a integração de métodos lúdicos, criativos e experimentais nas escolas públicas em Portugal. Recomenda-se uma parceria com universidades a fim de elaborar essas actividades e métodos. Além disso, as disciplinas do ensino secundário poderiam ser alargadas, integrando temas como a Economia Solidária, a sustentabilidade ou a saúde mental.

Palavras-chave: Economia Solidária, Jogo, Cidadania, Portugal, Educação

# Abstract

The central question about this thesis is how a game that teaches Solidarity Economy in public high schools in Portugal could be developed by using experimental, creative, and playful methods.

Therefore, the thesis showcases the deficiencies of the Capitalist Economy and outlines in which ways a Solidarity-based Economy could improve those shortcomings. It emphasizes on the different aspects of Solidarity Economy and integrates them in an educational context by exploring experimental, playful and creative methods. It incorporates empowerment and active citizenship and considers the curriculum of secondary education of public schools in Portugal.

The theoretical part of the methodology is based on scientific literature in form of books, scientific articles and websites. The empirical methodology incorporates participant observation, a questionnaire and an interview, with qualitative and quantitative methods for data collection.

The analysis of the gathered data showed that students improved their understanding and critical reflection about the Capitalist and Solidarity Economy. The students perceived the game as easier, more interesting and more motivating than traditional teaching methods. Nevertheless, various aspects concerning the content, execution and frame conditions of the game need to be improved. The political recommendations include a continuity in actions that encourage active citizenship, as well as the integration of playful, creative and experimental methods in public schools in Portugal. A partnership with universities is recommended in order to elaborate those activities and methods. Furthermore, the subjects in secondary education could be extended, integrating topics such as Solidarity Economy, sustainability or mental health.

Keywords: Solidarity Economy, Game, Citizenship, Education, Portugal

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## List of Abbreviations

Abbreviation	Meaning
CRESAÇOR	Cooperativa Regional de Economia Solidária dos Açores
CC`s	Community Currencies
COVID-19	Corona Virus Disease 2019
GDP	Gross Domestic Product
IMF	International Monetary Fund
RIPESS	Intercontinental Network for the promotion of Social Solidarity Economy
MC	Moeda Comunitária
MI	Moeda Internacional
OECD	Organization for Economic Co-operation and Development
RedPES	Rede Portuguesa de Economia Solidária
ECOSOL-CES	Solidarity Economy of the Center of Social Studies at the University of Coimbra
SAPs	Structural Adjustment Programs
WHO	World Health Organization

### Introduction

The world is facing multiple crises of social and environmental character. Many of these crises are rooted in the economic system our society is embedded in, which is a capitalist, neo-liberalistic market economy. The main concern of this globally established economic system is economic growth, profit maximization and personal benefit. The economic system of capitalism is causing social disparities and is exploiting the planet and its inhabitants in a way that is threatening the life on earth (Elsen, 2008, pp. 102-3). In global capitalism, political sphere is subordinated to the economic sphere as well as the well-being of the population is secondary to economic growth. The political sphere has to overcome this subordination and resist the, what Laville calls "sacredness of growth" (Laville, 2016, p. 264). Globalized capitalism also causes increasing unemployment or precarious employment, impoverishment as well as massive overwork that increases pressure and stress (Embshoff and Giegold, 2008, p. 15). Big parts of the population work in jobs they don't like, which do not add value to the society, just in order to sustain themselves. This economic paradigm also fosters individualization and egoistic behavior. As a consequence, loneliness and purposelessness as well as mental and physical health issues increase among the population. The values of solidarity and community are secondary in this economic system and shrink increasingly. Yet, cross-cultural studies on life goals show that people living in strong communities exhibit a higher wellbeing and less psychopathological behavior. The sense of community is an essential part that contributes to satisfy basic human needs (Klar, 2008, p. 114).

Therefore, a new form of organizing economic activities in a way that does not harm life on earth and that satisfies the human need of connection and community is demanded. There is a need to introduce a form of economy that can tackle those problems to heal both the society and the earth. This different form of economy could be the Solidarity Economy in which the focus of the economy lies on the common good. A Solidarity Economy also regards and includes social and environmental costs of economic activities that are usually externalized by the Capitalist Economy (Laville, 2016, p. 243). Solidarity Economy challenges the assumed autarchy of the capitalist economy through depicting its deficiencies and showing that alternative forms of economy are possible. The idea is the establishment of a new lifestyle and economy that gradually diminishes and reduces the dependency and power structures from a capitalist economy into a new form of economy, that is solidarity-based (Voß, 2008, pp. 62-3; Ronge, 2016, p.18). Solidarity economy is an ensemble of various initiatives, ideas and alternatives that are conducting economic activities based on solidarity values.

Solidarity initiatives are also reemerging and regaining importance in Portugal. Historically, community solidarity practices were very common in numerous villages in the countryside of Portugal that appeared as informal models of associations and self-help initiatives. But also new forms emerged due to economic difficulties experienced by the urban middle classes, most notably in the financial crisis of 2008. The established politics of austerity and the concomitant difficulties gave rise to solidarity and

exchange networks that were continuously growing. These solidarity networks had the ability to create other ways of producing and establishing new economic circuits based on trust and collective actions which strengthened the community when facing a crisis (Dos Santos and da Silva, 2014, p. 225; Hespanha *et. al*, 2015, p. 470). Moreover, the number of Solidarity Economy initiatives throughout the country were growing over the last few years (Dos Santos and da Silva, 2014, pp. 224-5). Nevertheless, those are still scattered and are not visible in everyday life, especially in the capital, Lisbon.

There is a need for further and stronger Solidarity Economy networks in Portugal, in order to combat the social, economic, and societal problems caused by the current COVID-19 health crises as well as previous crises. Moreover, in future further crises are likely to effect Portugal considering the unstable developments of the global economy and few well-paid employment possibilities for university graduates while the prices for housing are rising steadily since 2012. Furthermore, Portugal exhibits a relatively weak industry and a high dependency on tourism. In 2017, for example tourism and travel accounted for 48 % of the service exports (OECD, 2019a Oxford Dictionary, pp. 19-22). The country is also highly affected by the effects of climate change, due to increasing heatwaves causing wildfires. Furthermore, studies show that these heatwaves are likely to increase in number, time span and extent in the future (Parente *et. al*, 2018, p. 534).

Therefore, my personal motivation is to make ideas and practices of Solidarity Economy more visible and approachable for everyone in the Portuguese society. From a political perspective, the thesis could provide recommendations on how these concepts and activities of Solidarity Economy could be integrated in the curriculum of public Portuguese secondary education. At the moment, different or alternative forms of conducting economic activities are not part of the curriculum of high schools. The secondary education curriculum rather focuses on the principles and functionalities of the capitalistic economic system. Furthermore, public schools in Portugal are still operating with traditional methods that have only little margin for critical reflection and alternative teaching methods, such as creative, playful or experimental learning in order to make the learning process more appealing (Teacher A, 2021, p. 102).

From the social perspective, this thesis bears the possibility to introduce the subject of Solidarity Economy in schools, which could enhance critical reflection about the current economic system and encourage sustainable and socially equitable solutions for upcoming crises. Hence, a critical mass could be developed, that has the abilities, confidence, and knowledge to recognize the urgency to get involved to establish solidarity-economy initiatives. Moreover, the school is also the place in which youngsters are shaped and directed towards certain values, modes of operation and possibilities for careers and their future.

The scientific interest of this thesis encompasses the question how Solidarity Economy could be taught in schools in a way that is appealing and interesting for the students, since there is only few or no research conducted on connecting Solidarity Economy with public education in Portugal and none which also integrates alternative teaching methods.

Therefore, the aim of this Master's thesis is to investigate how a game about Solidarity Economy can be taught in public high schools using experimental, creative, and playful methods. The central research question is accompanied by four specific research goals that include:

1. Incentivize knowledge and critical reflection about the current capitalistic economic system;

2. Increase knowledge and sensibility for Solidarity Economy among students in Portuguese High Schools;

- 3. Facilitate learning through creative, experimental and playful methods;
- 4. Incentivize empowerment, increase active citizenship of students.

The methods to answer the research question and to verify the specific research goals consists of a theoretical and an empirical part. First of all, the relevant literature was examined and written down in the theoretical part of the thesis. With the obtained information of the relevant literature, the game was developed. The game was then conducted with a class in a Portuguese high school, therefore, the used research methodology consists of action-research as well as the case study. Both, qualitative and quantitative methods were used. The main methods consist of a participant observation conducted by the researcher and a privileged informant, an interview and a questionnaire. The received data was then analyzed and used to evaluate and improve the game.

Importantly to note that the game is not able to represent Solidarity Economy in its whole complexity but is rather a simplified model trying to explain the general values, characteristics and dimensions. The aim of the game is to provide a general introduction of the different fields and practices of solidarity economy and to encourage curiosity towards the subject. Therefore, interaction and relationships of the different establishments between the local, regional, national and international level of solidarity economy are disregarded. The game is only representing the local level in which local and international solidarity and capitalist establishments are settled. Furthermore, there is no possibility for the players to engage in politics or to organize themselves to exercise political pressure. The game is simplified since it must be understandable for the students without previous knowledge about the different economic and political forms of engagement.

Initially, the main terms of Solidarity Economy are defined in the first chapter. In order to introduce the subject, Solidarity Economy will be defined, and a brief summary of the history will be given. Furthermore, the characteristics and values as well as the dimensions will be explored. Moreover, a summary of the developments of Solidarity Economy in Portugal will be given, since Portugal is the country in which the research will be conducted.

In the second chapter, an overview about empowerment will be outlined, including the different concepts of power, the dimensions and the general process of how empowerment occurs in groups or

individuals. Afterwards, the term citizenship will be defined in the third chapter as well as the scope in which citizenship can appear on the local, national and international level will be pointed out.

Thereafter, the term education will be explored in the fourth chapter including the concept of pedagogy and different alternative learning methods such as experimental, creative and playful learning. Within the fifth chapter, the school system in Portugal will be explained with a special emphasis on secondary education and the subjects of economy and citizenship and development. To conclude the theoretical part of the thesis, a recapitulation of the different subjects will be outlined in the sixth chapter, aiming to link the intersections of the theories and concepts explored.

The sixth chapter represents the methodology, which includes the analytical framework and the methods used for the data collection and examination. In addition, the game development will be explained including the rules and main features that determine the game and how the theoretical framework was incorporated.

After this chapter, the analysis of the data follows in the seventh chapter, hence the interpretation of the results obtained from the collected data. Furthermore, this analysis includes recommendations for improvements of the game that are based on the interpreted data. That chapter will also include a self-reflection and ethical consideration that were respected during the research. Finally, the results will be drawn and summarized in the conclusion.

The used methodology is based on a theoretical literature analysis of scientific articles, books and online papers as well as on empirical research that includes qualitative and quantitative methods for data collection and analysis. Furthermore, data is collected through participant observation, a questionnaire and an interview.

Difficulties that have been appearing during the research included the structuring and the balance of information of the first chapter about Solidarity Economy. There is a lot of information available, nevertheless was it difficult to weigh which information needs to be integrated and which should be left out. Furthermore, there were few scientific texts that clearly point out the values and dimensions of Solidarity Economy. It was also challenging to find an equal amount of information about the different dimensions, since there is few information about some dimensions, while there was an excess of information about other dimensions.

Regarding the game development, it was complicated to integrate all the important aspects and information about Solidarity Economy, while at the same time simplifying the information in order to make it accessible for the students. The challenge was to find a balance of integrating relevant aspects, making the game interesting and demanding for the students, without overwhelming them.

Moreover, another central problem was also to find schools and teachers have the time, openness and availability in conducting the game with their class.

Another issue was to make the students reflect critically about the Capitalist Economy and transmitting knowledge of about the Capitalist and Solidarity Economy while keeping the most possible neutrality in order to avoid influencing the answers of the students.

### CHAPTER 1 Solidarity Economy

This chapter will explain the different elements of Solidarity Economy, thus defining the terms Solidarity and Economy. Furthermore, it provides information about the origins of Solidarity Economy such as an historic oversight. Afterwards, the main characteristics and values are explained as well as the different areas and applicabilities in practice. A special emphasis is drawn upon Solidarity Economy in Portugal, since the practical workshop will be conducted in Portugal.

### 1.1. **Definition**

In order to understand the basis of Solidarity Economy, first the term of economy has to be defined. Therefore, this chapter provides the traditional and general definitions of the science and term of economy but also showcases other definitions that are highly dependent on the context and convictions. The other main term of Solidarity Economy is *solidarity*; therefore, it also has to be defined in the first place. Therefore, the difference between *democratic* and *philanthropic solidarity* is defined and which one is relevant for Solidarity Economy.

Defining the term economy, one of the most known and recognized general definitions of economy is the following by the economist Lionel Robbins (1935, p. 15): "Economics is the science which studies human behavior as a relationship between ends and scarce means which have alternative uses." Therefore, economy can be seen as a behavioral science on how humans interact and negotiate with each other to achieve their goals with scared resources. Furthermore, economy can be described as an activity to fulfill the basic human needs in order to sustain human lives and guarantee life quality (Ulrich, 2008, p. 11).

But the meaning of economy can also go beyond the definition of fulfilling the basic needs of human lives. According to Cambridge Dictionary (n.d.) the noun *economy* has two different meanings: One is the understanding of economy in terms of saving, which mostly refers to saving money but also other resources like time or energy. The other meaning conceives economy as a system, more particularly "the system of trade and industry by which the wealth of a country is made and used" (Cambridge Dictionary, n.d.). This definition represents the western, capitalist<sup>1</sup> viewpoint of the economy. The economics of capitalism highlights the role of property ownership, the self-interest of individual producers and consumers as well as competitive markets, in which the supply of the producers and the demand of the consumers seek equilibrium. Most of the capitalist theories emerged during the Industrial

<sup>&</sup>lt;sup>1</sup> Capitalism aims to create capital in form of money or objects that can be invested in different areas in order to gain yield returns and profits. Usually the capital and the yield return are reinvested to repeatedly receive additional profits. Furthermore, the generated profit by economic activity also flows to a considerable extent to the private owners of capital. This way of generating, investing and privatizing capital is embedded in a monetary, legal and property system that supports and enforce these capitalist structures and enables a capitalist form of society (Akademie Solidarische Ökonomie, n.d.a., pp. 4-5).

Revolution in Europe's 18<sup>th</sup> and 19<sup>th</sup> century by influential white, male political economists<sup>2</sup> (Sheppard, 2020, p.16).

But not all economies are based on capitalist forms of economy, especially in ancient cultures but also indigenous populations nowadays. The indigenous people of the Andes for example have a completely different understanding of economy. Their economies are not based on industry and banknotes, instead their local economies are originally more sporadic and based on exchange (CAOI, 2010, p. 27). The goal of their economy is not the creation of wealth, but the maintenance of harmony and reciprocity in society in accordance with the principles of *Buen Vivir*<sup>3</sup> (CAOI, 2010, pp. 34- 49). Subsequently there are many different forms of economy, depending on political convictions and value systems of societies. Besides of the industrial or market economy there are also other forms of economies such as the planning, circular, green, care or solidarity economy, just to mention a few. Therefore, it can be said that the understanding of economy is highly depended on the cultural, political and historical contexts and is also subject to constant change and redefinition.

Solidarity refers to the willingness to cooperate and help each other in a community or society (Embshoff and Giegold, 2008, p.13). But solidarity is neither necessarily just based on friendships or close relationships, nor is it an entirely strategic relationship. Solidarity is something in-between, that can be described as a multilateral relationship, which can be based on a common concern or shared political goals (Mueller and Prix, 2016, pp. 66-7). Solidarity describes collective action with the objective of creating and maintaining a society, in which the interaction between people is based on kindness, understanding and care for one another (Bhattacharyya, 2004, p. 14). Laville (2016, p. 79). For example, solidarity divides in two different forms: the *democratic* and *philanthropic solidarity*. The democratic solidarity is based on mutual help, auto-organization of movements while it guarantees the equality of all people involved. It also encourages the access to public spaces for all citizens and aims to strengthen democracy in political, economic and social spheres. Whereas the *philanthropic solidarity* is rather orientated on the individual and its actions. It is a form of solidarity that moves people to engage in the society voluntarily, motivated through their own altruism. The kind of solidarity that defines solidarity economy is the *democratic solidarity*. Because the aim of solidarity economy is to encourage the democratization of the economy in all its spheres, in order to stimulate collective interest and enhance social utility of economic activities (Laville, 2016, pp. 243-4).

Laville (2016) also highlights, that this democratization of the economy and society can be achieved when economic diversity is highlighted and when pluralistic forms of constructing economy can exist and cooperate with each other. Solidarity Economy also appears in various forms and encourages the

<sup>&</sup>lt;sup>2</sup> These political economists who developed theories about capitalism include Adam Smith, John Stuart Mill, David Ricardo, Bernard Mandeville, and Karl Marx as well as Ludwig von Mises, John Maynard Keynes and Friedrich Hayek (Sheppard, 2020, p. 16).

<sup>&</sup>lt;sup>3</sup> The principles of Buen Vivir highlight the importance of living in balance; in harmony with the cycles of Mother Earth, of the cosmos, of life and of history, respecting all forms of existence on this planet (CAOI, 2010, pp. 34-49).

pluralization of the economy. Furthermore, there is no uniform concept of Solidarity Economy, but various theoretical and practical projects that imbed alternative, common, corporate and social ways of conducting economic activities (Voß, 2008, pp. 62-3). A Solidarity-based Economy is a different way of producing, selling, consuming and living. Solidarity should also be reflected in everyday relationships and common processes of decision-making. People should recognize each other as subjects and be able to develop their creative potential through cooperation in non-hierarchical and self-organized environments. The collective organization of work also contributes to fighting social exclusion and the degradation of working conditions (Müller-Plantenberg and Stenzel, 2008a, p. 31; Mueller and Prix, 2016, p. 68; Voß, 2008, p. 63).

In contrast to the capitalist thought, Solidarity Economy does not underly the traditional logic of supply and demand and the maximization of utility that is determined by limited resources (Robbins, 1932 cited in Letmaître and Helmsing, 2012, p. 746). Instead, Solidarity Economy follows a *substantive understanding* of the economy, developed by Karl Polanyi, which incorporates all the phenomena that arise due to the interdependencies of humans and their environment (Polanyi, 1944 cited in Letmaître and Helmsing, 2012, p. 746). The Polanyian understanding of an economy does not only focus on monetary resources such as profits or market value of products and services. It also accounts for non-monetary resources that represent a certain social utility to the society such as voluntary work or gifts (Letmaître and Helmsing, 2012, p. 749). Therefore, it can be said that Solidarity Economy appears in various forms and encourages the pluralization of the economy. Furthermore, there is no uniform concept, but various theoretical and practical projects that imbed alternative, common, corporate and social ways of conducting economic activities (Voß, 2008, pp. 62-3). This is why Solidarity Economy does not only incorporate the economic dimension, but various dimensions such as the social, cultural or environmental dimensions that will be explained in greater detail in the following chapters.

In addition, a Solidarity-based Economy is a different way of producing, selling, consuming and living. Solidarity should also be reflected in everyday relationships and common processes of decision-making. The emphasis of this economy lies on the recognition of each person and the development of a collective creative potential through cooperation in non-hierarchical and self-organized environments. This collective organization of work also contributes to fighting social exclusion and the degradation of working conditions (Müller-Plantenberg and Stenzel, 2008a, p. 31; Mueller and Prix, 2016, p. 68; Voß, 2008, p. 63).

#### 1.2. History

In this chapter, the origins of Solidarity Economy will be outlined in a timeline as well as the associated challenges and achievements. This part will highlight the developments starting in the 19<sup>th</sup> century in Europe from the industrial revolution, trade union and cooperatives movements, the influences of utopian socialism as well as neoliberal policies applied in the 20<sup>th</sup> century. Furthermore, initiates from

the global south such as the Popular Economy or Buen Vivir are described as well as recent Solidarity Economy initiatives worldwide.

Solidarity Economy emerged in its early years, in the form of movements, associations and cooperatives. According to Laville (2016, p. 24) the invention of solidarity has its origins in the 19<sup>th</sup> century and can be defined as a force of social integration that opposes and resists the established logics of money and administrative power. It was also considered as a response to industrial capitalism, that confronted many workers with hardship and poverty, which was especially present during the industrial revolution<sup>4</sup> (Singer, 2002, p. 24). The revolution also gave rise to the formation of the labor movement consisting of labor clubs and associations of workers (Laville, 2016, pp. 56-7). The French revolution was also the initiator of various wars in Europe. These wars just came to an end in 1815, when Great Britain defeated Napoleon in Waterloo. After these years Great Britain had to endure an economic depression and misery (Singer, 2002, p. 25).

This trade union movement, that greatly influenced the development of solidarity economy

rose further in 1824. At that time, the *Combination Acts* that banned workers organizations, got abolished in Great Britain. Due to this revocation, trade unions were formed and, together with them, more cooperatives (Singer, 2002, pp.26-7). Just after 1848, gatherings of associations were also officially reallowed, press liberty was regained, and death penalty and slavery were abolished in most European countries (Laville, 2016, p. 58). This gave rise to a bigger variety of different collectives such as mutual insurance or credit societies, societies of resistance and solidarity and fighting against inequalities (Laville, 2016, p. 59).

One important figure of the cooperative movement was Robert Owen, a textile factory owner in New Landmark, Great Britain (Singer, 2002, pp. 24-5). He founded the one of the first cooperative villages called New Harmony in the United States in 1825. New Harmony also incentivized the establishment various other Owenist cooperatives, that were founded in the following years. The Owenist Cooperative Villages expanded in Great Britain as well as barter markets for cooperative production in warehouses (Singer, 2002, pp. 29-30). In London he also created a labor exchange platform, where cooperatives had the opportunity to exchange their products for fair prices in 1832. The exchange platform also issued their own currency, which was based on hours of work. The labor exchange was a great success and got adapted in further places such as Liverpool, Birmingham and Glasgow (Singer, 2002, pp. 30-1). Therefore, Owen played a big role in the promotion of the cooperative movement and thus, on the development of solidarity economy (Singer, 2002, p. 38).

The movement of *Utopian Socialism*, of which Owen was also a part of, was also considered an important milestone for the development of the Solidarity Economy. Utopian Socialism is a social

<sup>&</sup>lt;sup>4</sup> The Industrial Revolution started in Great-Britain and was marked by the modernization of working processes through machines and work in fabrics. Rules or protection mechanisms for the workers were absent, therefore workforce was subject to exploitation. Families suffered from health conditions as well as high mortality due to exceedingly long workings days and child labor (Singer, 2002, p. 24).

critique of capitalism and the industrial society. This critique pointed out the main principles and characteristics of an ideal and egalitarian society but without explaining the means to achieve such a society. The three main socialist utopists were Saint-Simon (1760-1825), Charles Fourier (1772-1837) and Robert Owen (1771-1858) (Barros, 2011, pp. 239-241).

Another important figure that shaped Solidarity Economy was the Russian geographer Piotr Kropotkin, that lived in the 19<sup>th</sup> century. He opposed the views of Darwinism, arguing that mutual support was the main factor in the evolution of species and not competition between species. He showed that the solidarity between species determined their survival and an improved adaption to the natural environment (De Paula, 2016, p. 9). The 19<sup>th</sup> century was generally marked through a new wave of solidarity in form of associations and collectives that were based on mutual help, common production and collective utilization of commodities (Laville, 2016, pp. 61-83). These associations arose in several forms such as trade unions, people's banks, associations for women's and minority's rights, equal payments and networks of reciprocity and were based on auto-organization and the equality of its members (Laville, 2016, pp. 61-83).

In the 20<sup>th</sup> century, the crisis that appeared in 1973-1975 had its causes among others in the rigidities of state policies that resulted from the *Fordist-Keynesian*<sup>5</sup> period. The crisis also gave rise to *neoliberal*<sup>6</sup> ideas and the election of politicians in Europe and the United States such as Margaret Thatcher and Ronald Reagan in 1979 and 1980 respectively (Harvey, 1989, pp. 64- 167). Some of the main economic principles, that were highly influenced by neoliberalism were written down in the so-called *Washington Consensus* and were adopted by governments around the world (Laville, 2016, pp.166-7). These dynamics also influenced the solidarity associations. Corporations and firms were now considered to solve social and societal problems, due to the assumed efficiency of the market. Associations could only survive if they withstood the competition of the free market and were mostly supported through donations of firms and subventions of the multinationals. This made associations were completely dependent on private donations. The subordination of the associations movement under the capitalist logic weakened the movement drastically (Laville, 2016, p. 174).

At the same time, the World Bank offered loans to many countries in the global south in order to encourage them to engage in global trade. Despite the loans their own products were not able to compete with the advanced and cheaper foreign products (Stiglitz, 2002, pp. 6-7), which resulted in high indebtedness. They were unable to pay these debts back, therefore the International Monetary Fund

<sup>&</sup>lt;sup>5</sup> Kenyianism is an economic theory named after John Maynard Keynes. In contrast to the classical economics - that the markets would need government intervention to stabilize capitalism in order to get out of the crisis. *Fordism* was another important capitalist period, which was based on the economic ideas of Henry Ford. One main idea was to provide all workers with more income and free time, so that they would also be able to afford more, therefore spend more and stimulate mass production (Harvey, 1989, pp. 125-129).

<sup>&</sup>lt;sup>6</sup> This era of neo-liberalism was marked by elevated international free trade, competition, more privatization and less welfare state (Harvey, 1989, pp.164-167). Neoliberalism is the reemergence of liberalist theories that advocated for a free market, limited state intervention and saw the individual as a utility maximizer and were greatly influenced by the economists Hayeck and Friedman (Laville, 2016, pp. 166-167).

(IMF) instructed them to apply the so-called Structural Adjustment Programs (SAPs). These SAPs enabled the IMF to take over control over the respective economies to make sure that they meet their interest payments (Mander and Goldsmith, 2001, pp. 32-58). These problems caused by neoliberal politics and its consequences gave rise to strong solidarity networks. In Latin America problems such as the debt crisis, social deregulation and military dictatorships left countries in devastating economic conditions, that excluded almost half of the population from the formal economy (Laville, 2016, pp. 120-121). This gave rise to a popular economy<sup>7</sup> that also influenced the appearance of a Solidarity Economy, since solidarity is also a basic aspect of Popular Economy (Razeto, 1999, p.6). In Latin America for example, local solidarity networks were a necessity to maintain economic activities for the marginalized (Laville, 2016, pp. 120-1). Solidarity Economy also started to gain importance on a political level in Latin America. In 1988 the National Council of Solidarity Economy was established in Brazil (Laville, 2016, p. 281).

In the 1990s the indigenous concept and way of life *Buen Vivir*<sup>8</sup> that inheres principles of Solidarity Economy became a political movement encouraged by Latin American indigenous groups. The upcoming movement was related to the global discussions regarding development and sustainability. It was rooted in discontentment with the current development regime and the ideas of the emerging political ideas of neoliberalism (Vanhulst and Beling, 2004, p. 56). In Ecuador and Bolivia, the protection and valuation of solidarity principles that are part of the indigenous concept Buen Vivir were even integrated in in the constitutions of those countries in 2008 and 2009. Unfortunately, both governments are still engaged in activities that disregard those principles, such as the Amazon oil extraction or large-scale mining (Chuij, Rengifo and Gudynas, 2019, p. 113).

In Europe, there was new rise in self-organized collectives and initiatives at the end of the 20<sup>th</sup> century in response to the challenges of the modern world such as the inequalities and ecological damages through economic activities. The movement was concerned to finally integrate a social dimension to the economic sphere. Those initiatives appeared in form of fair trade, solidarity finances and social currencies, similar to the associations of the 19<sup>th</sup> century (Laville, 2016, p. 241).

In order to expand and promote the alternatives of Solidarity Economy that exist around the world, international and national conferences and meetings are taking place since the end of the 20<sup>th</sup> century. For example, since 1997, the Intercontinental Network for the promotion of Social Solidarity Economy (RIPESS) organizes international meetings for solidarity economy in the global south and north every four years. These meetings bring associations, researchers and activists together to form an international

<sup>&</sup>lt;sup>7</sup> Popular economy combines labor, technological, organizational and commercial resources and capacities of a traditional nature with others of a modern type. Popular economy has a very heterogeneous character and incorporates various activities aimed at ensuring subsistence and daily life. It operates by seeking opportunities in the market, the public sector, activities by non-governmental organizations or in mutual services of reciprocity and cooperation in society (Razeto, 1999, p.6).

<sup>&</sup>lt;sup>8</sup> Buen Vivir is an indigenous concept that is about life in harmony. The harmony with oneself (identity), with the society (equity) and with nature (sustainability) (Hidalgo-Capitán and Cubillo-Guevara, 2017, p. 6).

network and create a space of learning, cooperation and exchange of relevant information (RIPESS, n.d.). Other examples are the congress *Solikon* in 2015 and »Wie wollen wir wirtschaften? Solidarische Ökonomie im globalisierten Kapitalismus« (How do we want to conduct economics? Solidarity economy in a world of globalized capitalism) congress in 2006 with 1400 participants and speakers from Argentina, Belgium, Brazil, France, Great-Britain, India, Italy, Canada, Poland, Zambia, Spain, and Venezuela (Embshoff and Giegold, 2008, p. 11).

#### 1.3. Characteristics and Values

This chapter aims to outline the main values and characteristics of Solidarity Economy. The underlying characteristics melt with the main values and can't always be clearly distinguished. Therefore, this section aims to provide a broad overview on characteristics and values that are considered fundamental to create a Solidarity Economy that enables a solidarity society and lifestyle. In order to understand the characteristics and values the fundamental principle of solidarity in an economic context should be explained. The main principle is that Solidarity Economy conducts economical activities based on social utility and not on profit. This is also what distinguishes Solidarity Economy from the capitalist logic because it follows the conviction that the economy should serve the people instead of vice versa (Voß, 2008, p. 64). Generally, Solidarity Economy aims to pursue solidarity goals through economic activities (Embshoff and Giegold, 2008, pp. 13-4).

Therefore, Solidarity Economy can be seen as a contrast to the Capitalist Market Economy - which is based on competition, individual responsibility and maximization of profits (Embshoff and Giegold, 2008, pp. 12-3). The aim is to invert the capitalist logic: Instead of outsourcing and obtaining goods and services from the market, solidarity economy aims to insource. Economic activities can be insourced by managing economic tasks autonomously or with the help of the community instead of purchasing it from the market. This reversal of the capitalist logic can be observed in different economic areas. For example, the practice of buying can be replaced with borrowing and giving away what is no longer needed while the practice of consumption can be replaced with "pro-sumption", where the end users are involved in the process of creation and production. Through this practice, capitalist economy can gradually be deconstructed and transformed into more solidarity forms of economy (Ronge, 2016, pp.18-21). Therefore, solidarity initiatives aim to expand and simultaneously protect themselves from destruction through institutions and infrastructures. Political pressure is needed to change the dependency structures that define the imperial lifestyle<sup>9</sup>. Hence, political and economic institutions as well as material infrastructure need to change in order to become more solidarity-based, sustainable and fair (Ambach *et al.*, 2019, pp. 69-79).

<sup>&</sup>lt;sup>9</sup> The imperial lifestyle is referred as a lifestyle that results from the capitalistic growth-paradigm, where people, nature and animals are exploited for profit. It also categorizes and splits people and sets up hierarchies that are also maintained by social and political structures (Ambach *et al.*, 2019, p. 17).

Solidarity economy should maintain the focus on *community orientation*. The aim of community orientation is the general improvement of living conditions of the community, solidarity-focus in relationships, respect for different cultures and sexual orientations as well as the support of structurally weak regions (Müller-Plantenberg and Stenzel, 2008a, pp. 31-2). Another fundamental characteristic of solidarity economy is cooperation. It highlights that cooperation and mutual help are more important than competition. It is expressed through the cooperation of people in society, within solidarity organizations as well as between these organization. The Solidarity Economy associations cooperate to reconcile and divide funding opportunities as well as the mutual support with regards to content, finance and logistics (Harney, 2016, pp. 87-8). A further aspect of solidarity economy is *self-government*. This means that entities of solidarity economy should be self-determined. This includes that one person equals one vote in the democratic decision-making process within a group or association. Selfgovernment also includes that the interaction between people should not be based on hierarchic structures (Müller-Plantenberg and Stenzel, 2008a, pp. 31-2). Equal participation is expressed through the *democratization* of decision-making processes. It highlights that all people that are affected by a certain decision should have the right to co-determine this decision. Hence, democratization requires a redistribution of power and resources so that people can enjoy equal access to the decision-making process. On the one hand, this should empower and include concerned subjects that are interested in participation. On the other hand, the participation should not be an obligation (Ambach et al., 2019, pp. 18-9). Democratization also requires *re-localization*, that implies, that decisions shouldn't be outsourced to higher authorities and instead be conducted as local as possible. Big institutions should therefore not dominate but connect, coordinate and enable the communication between local entities (Ambach et al., 2019, pp.18-9). Further, it also emphasizes on the re-localization of production and resources, that should also be obtained as local as possible (Ambach et al., 2019, p. 32)

Solidarity Economy also incorporates the value of *Communing*, which is the common use of property and goods. Commons are goods that are produced, used or managed in common from a certain community. Communing contrasts purely private and exclusive property and guarantees equal access to commodities and thus requires less commodities. Commons can also inflict conflicts between the involved parties; therefore, the management of these commons should be organized in a long-term democratic manner (Ambach *et al.*, 2019, p. 20).

The principle of *reproduction* implies the valuation of reproductive care-based activities. These activities are essential to conserve and maintain life and imply for example reproductive activities such as care work for elderly or sick people, childcare, household activities and work that guarantees the preservation of nature. In the capitalistic system, these activities are often subordinated to paid work that is designated as productive work. This allows the exploitation and outsourcing of costs towards nature and people. Therefore, Solidarity Economy is concerned about integrating and valuing productive and reproductive activities should enjoy recognition based on the improvement and preservation of lives and nature and not on the profit it produces (Ambach *et al.*, 2019, pp. 20-1).

*Ecological awareness* also plays a fundamental role when talking abou the characteristics of Solidarity Economy. An ecology-minded approach should take into account caution in the usage of materials, energy, water and land as well as its integration into regional cycles (Müller-Plantenberg and Stenzel, 2008a, pp. 31-2).

Therefore, the awareness on *dependence* can be considered essential in creating an economy that enables a solidarity lifestyle. Human beings are entirely dependent on nature, more precisely humans are a part of nature and not separated from it. This understanding is utterly disregarded in the capitalist economics, since it creates a division between humans and nature. This allows economic activities to exploit nature without acknowledging its effects on human existence. A Solidarity-based Economy disapproves this way of conducting economic activities and advocates to integrate the understanding of dependence in the economic model and bans its exploitation and manipulation (Ambach *et al.*, 2019, pp. 21-2). Another value is *sufficiency*. It aims to satisfy human needs with less resources and requires a value shift from the pursuit of consumption and greed towards aspiring frugality. This also implies that social groups that use a lot of resources and provoke a high ecological footprint, should reduce and reorganize the way they use resources (Ambach *et al.*, 2019, p. 22).

### 1.4. **Dimensions**

This chapter will outline in which form solidarity economy can appear in different areas of society and life. Furthermore, the different forms will be explained and substantiated with examples.

Solidarity Economy incorporates various dimensions, which promote solidarity in all expressions of life including humans, other living beings as well as nature itself. Therefore, Solidarity Economy is composed of a combination of its eight dimensions or projects that incorporate an *economic, social, cultural, environmental, territorial, scientific and political* perspective (Amaro, 2009, p. 22). These dimensions will be explained in further detail in the following section:

The *economic* project consists of the production of goods and services, job creation, income distribution, satisfaction of consumption needs, savings and investments. These can appear in the form of the gift or reciprocity economy, the market economy, and the economy of redistribution of resources that is usually redistributed through the state. The economic dimension also includes very diverse areas such as productive, reproductive, creative, and cultural activities (Amaro, 2009, p. 22).

Looking at the area of employment and the organization of enterprises for the production of goods and services, it becomes clear that the current economic system fosters a big variety of employment that does not serve any social purpose and doesn't contribute to the well-being or the advancement of the society. Hence, much of the human potential and intellect is spend on tasks to optimize profitmaximization instead of solving the world's problems connected to climate change, poverty or inequalities (Ambach *et al.*, 2019, pp. 64-5). Furthermore, the production of goods and services also underlies the capitalist logic of generating profit which results in planned obsolescence, overconsumption, waste and the exploitation of nature and workers. Therefore, Solidarity Economy aims to enhance job creation in sectors of social and ecological benefit and where urgent solutions are needed (Ambach *et al.*, 2019, pp. 64-5). Firms and businesses can be founded based on the principles of a Solidarity Economy. In these solidarity enterprises, all members work jointly together and obtain some sort of economic gain through their activity (Müller-Plantenberg and Stenzel ,2008a, pp.31-2). Solidarity enterprises are collective associations, like clubs, collectives or barker markets, where its members collectively execute and administrate activities and results. Those activities are not sporadic but have a permanent character. For example, activities like organizing collective help for a removal would not count as such an activity. Solidarity enterprises realize economical activities such as production, purchase, exchange or sale of goods and services, credit fonds to promote solidarity consumption. These enterprises can be individual enterprises a fusion or a network of more enterprises, clubs, associations or collectives that function on a local, regional or international level (Müller-Plantenberg and Stenzel, 2008b, p. 15). A solidarity enterprise should respect and incorporate some of the previously mentioned characteristics and values (Voß, 2008, p. 64). Nevertheless, it is not necessary to meet all criteria at the same time (Müller-Plantenberg and Stenzel, 2008a, pp. 31-2).

In practice, it is also difficult to draw a clear line between solidarity economy and market- or statebased economic activities. The boarders between those activities are often blurred and appear in hybrid and transitory forms, like self-determined or ecological companies, democratic family businesses or conventional firms with special support for women (Embshoff and Giegold, 2008, pp. 13-4).

When having a closer look at the current capitalistic monetary system, it reveals that money is not backed and covered with a real service or value but can be created and multiplied by mere debt and repayment of interest rates (Fischbeck *et al.*, 2010, pp. 2-3). Furthermore, loose regulations and restrictions allow big banks and global financial corporations to gain money based on speculations while escaping taxes through offshore tax heavens or through other jurisdictions (Arruda, 2010, pp. 3-4). In the United States, the speculative economy exceeds the real economy by 34.76 times (Arruda, 2010, p. 7). Another problem is that the credit protection of the banks is not backed with a real economic coverage of loans, but only with an expected repayment. The inability of repayment among individual debtors causes chain reactions of the inability to repay among other debtors and then also among banks, like in the financial crisis of 2008 (Fischbeck *et al.*, 2010, p. 7). Financial crisis can threaten the real economy because it can cause stagflation<sup>10</sup>, deflation<sup>11</sup> and even economic depression (Arruda, 2010, pp. 14-5).

There is a need for a new global, financial system that incorporates the local level in the national, continental and global spheres (Arruda, 2010, p. 16). This includes the prohibition to transfer public funds to financial institutions and the abolition of speculation mechanisms such as derivatives, future markets and fiscal heavens and favourable jurisdictions. Instead, the national financial structure should

<sup>&</sup>lt;sup>10</sup> Rising prices combined with stagnation of the industrial economy which leads to the suspension of workers and therefore, higher unemployment (Arruda, 2010, pp. 14-5).

<sup>&</sup>lt;sup>11</sup> Constant falling prices through overproduction and surplus supply caused by the loss of purchasing power of citizens and national currencies (Arruda, 2010, pp. 14-5).

be rebuilt to serve the needs of the people. The transition to sustainable degrowth for wealthy elites and sustainable growth within the natural and intergenerational limits for the marginalised and oppressed societies is needed (Arruda, 2010, pp. 16-20). This should be complemented with an effective redistribution of income and wealth. A decentralized monetary system in which savings and loan institutions self-managed through ethical and community banks could contribute. These banks could issue complementary community currencies to foster the real, local economy (Arruda, 2010, pp. 16-20). These so-called *community currencies* (CC)<sup>12</sup> could enable a more community based, self-organized and decentralized way of finance. These currencies are created by non-state actors and function as alternatives to money that is created by the central banks. CCs aim to establish an economy that is more local, convivial, and sustainable, that focuses on the needs of communities rather than the GDP growth (North, 2019, pp.92-94). One example for community currencies originates from a low income, marginalized favela called Palmeiras in the southern region of Fortaleza, Brazil (Martins, 2011, p. 35). The community currency *Palmas* from the local Bank Banco Palmas increased the local circulation of the currency and therefore economic activity which contributed to better employment possibilities (Martins, 2011, pp. 79-98). Hence, the standard of living improved since the new possibilities facilitated access to medicines, cooking gas, food and other basic needs (Martins, 2011, pp. 43-4).

The *social* dimension aims to contribute to the social cohesion of the society. Through this dimension, Solidarity Economy aims to create jobs for people on the margins of the labor market and society but also helps to satisfy the basic needs of people with limited purchasing power, whose needs are not covered through the market. Furthermore, the social dimension also encourages the promotion of equal opportunities, especially between the different genders and offers activities to fight poverty and social exclusion. This dimension can be incorporated through concrete actions to tackle those social problems but also through the internal organization of Solidarity Economy associations. This can be conducted by solidarity organizations or groups of people or in partnership with the regional and local government (Amaro, 2009, p. 23).

The social dimension of Solidarity Economy can incorporate the area of housing in cities to promote inclusion and the social right of housing. Housing is often exclusive and very expensive in cities. Hence, large shares of the monthly income must be spent on housing. Other problems concern evictions, homelessness and large-scale investors that see housing as a source of profit and often control the rents of entire neighborhoods (Ambach *et al.*, 2019, p. 44). Opportunities for decent housing are very

<sup>&</sup>lt;sup>12</sup> Seyfang and Longhust (2013, pp. 69-70) classify four different types of CCs: The most common form are *service credits*, where services are exchanged through time credits. People receive time credits for each hour they help someone or provide a service and can convert them, when they need a service from another person. Another form are the *mutual exchange* currencies, where one person's credit equals another's debit. These credits are usually provided interest free and can be spent in the respective area that accepts the currency. The third form are the *local currencies*, that are usually paper based or digital, are backed by the official state currency and circulate in a specific region or community. The fourth type are the *bartermarkets*, that are focused on exchanges of goods and services within a specific event, that is normally temporally limited and does therefore not need to create a mainstream currency.

unequally distributed among the population; while some people own big houses with garden, other people have to life in small apartments. This is why solidarity economy provides housing solutions that are more inclusive, community-oriented and affordable such as co-housing, communes, ecovillages, more generation houses or tiny houses, that are based on an ecological way of construction. In some housing alternatives, solidarity encompasses all areas of life, like in communes, where inhabitants share income, costs and wealth. Other community-based housing alternatives don't share everything but offer more community spaces like cafés, seminar or workshop rooms, guest houses (Ambach et al., 2019, pp. 45-6) or community gardens for the inhabitants. The idea is to replace anonymous housing with a form of housing that is smaller, livelier and has a reduced ecological footprint. Another way to organize housing collectively is through housing syndicates or cooperatives. These syndicates purchase houses that are transferred to collective property and could prevent the investments of large-scale investors (Ambach et al., 2019, pp. 46-7). This allows the democratic self-management of the housing projects that prevent speculations, resale and the generation of private profit. When older housing projects are paid off, a solidarity transfers of rent income allow the purchase of new houses for the project. Hence, rents are not decreasing with time but enable the creation of a sustainable solidarity fonds that expand the solidarity housing project while diminishing the supply of houses on the capitalist market (Möller, 2016, pp. 77-8). Solidarity housing promotes the transfer of private luxury into public luxury in from of more public gardens, parks, playgrounds, museums and public pools. These private goods can then be managed by all inhabitants which enables them to get directly involved in the city planning (Ambach et al., 2019, pp. 48-9). Another area that incorporates the social dimension is the area of care work. As it was already outlined in the previous chapter solidarity economy validates reproductive and care-based activities. Reproductive services either take place in private spheres or are offered as a service on the capitalist market, and thus underly the capitalist logic. The incorporation of care-based activities in a capitalist system often undermines the original values of care such as empathy, trust and closeness. It also results in shortages, that are expressed through a lack of time to adequately take care of patients (Ambach et al., 2019, pp. 25-6) as well as in the underpayment of those jobs. Furthermore, care-work is traditionally predominantly conducted by women (Laville, 2016, p. 136) until today. A study of the World Health Organization about gender equity in the health workforce, that analyzed 104 countries, found out that in 2019, 70 percent of health and social work is conducted by women (WHO, 2019, p. 1). This is another factor that contributes to the gender wage  $gap^{13}$ , which is currently located at 12,9 percent in OECD countries (OECD, 2019b). Laville (2016, p. 136) highlights that care activities shouldn't be externalized to the favor of the state or the market. In order to fight gender inequalities, these tasks should be based on shared responsibilities between the public sector, the market and social society as well as equal divisions between men and women in families. Solidarity solutions for care can

<sup>&</sup>lt;sup>13</sup> The gender pay gap defines the difference of median earnings of women relative to the median earnings of men in certain regions or countries. The data includes full-time employees as well as self-employed workers (OECD, 2019b).

appear through mutual support, exchange of services for example in from of housing or working projects. Many solidarity-based solutions and care-services that are based on exchange emerged in Japan, due to the increase of elderly in the population (Embshoff and Giegold, 2008, p.16). Another example is the healthcare organization Buurtzorg from the Netherlands. They have an emphasis on community care and offer nurse-based care services that is patient-oriented. This system aims to empower nurses and focuses on the patients' personal needs and desires (Buurtzorg, n.d.).

Solidarity Economy is also a *cultural* project incorporating and promoting different cultures, heritages, values, and local identities. A special emphasis lies on those at risk or in a situation of marginalization or disappearance. This happens increasingly through a process of standardization of culture and values through economic globalization. The social dimension aims to help marginalized people and cultures to regain visibility, social and political recognition as well as to strengthen of their economies (Amaro, 2009, p. 23).

Solidarity Economy therefore fights against stigmatization and exclusion of marginalized members of the society (Coraggio, 2011, p. 221). The Solidarity Economy perspective also includes a moral responsibility to honor and share different cultural creations such as language, music, stories, thoughts and abilities. These were over many years created and developed in different civilizations as the product of collective imagination, experimentation and creation and should therefore be conserved and valued (Miller, 2010, p. 4). Thus, Solidarity Economy includes all citizens while valuing their heterogeneity and cultural diversity. It focuses on the well-being of the entire community while also emphasizing to solve the particular problems of the marginalized groups with special attention (Coraggio, 2011, pp. 206-7). The dignity for all citizens should be guaranteed while considering universal needs such as material satisfaction but also particular needs that appear from the cultural context such as recognition and self-perception within the community (Coraggio, 2011, p. 196).

A further dimension lies in the *environmental* dimension seeking to combine economy with ecology. The environmental project is conducted through the promotion of organic farming or the use or production of renewable energies. It also emphasizes the importance of recycling and raises awareness about the connectedness and relationship of human beings with nature. It promotes and stimulates new consumption behaviors as well as ecological or sustainable forms of tourism as well as new, more sustainable and innovative management of natural parks or protected areas, just to name a few (Amaro, 2009, p. 23). Another example for the environmental dimension is solidarity agriculture. Solidarity agriculture is a form of agriculture promoted by solidarity economy initiatives, at which agriculture becomes an experimental space for the community, and everyone can participate in the food cultivation process. Food is produced cooperatively, and the harvest is shared by its members. Solidarity agriculture escapes the capitalistic paradigm of food production based on growth, efficiency and competition. Instead, it is oriented on the social worth and respects natural cycles, uses organic pesticides, fosters biodiversity and aspires independence from big agricultural producers (Ambach *et al.*, 2019, pp. 33-4). Solidarity agriculture projects can be permaculture projects which emphasize

alimentation sovereignty and encourage people to grow their food together respecting ethical principles of care, sufficiency, and communing. Permaculture also allows the soil to regenerate itself while producing a higher quantity and quality of harvest in small territories (Ambach *et al.*, 2019, p. 33). Therefore, permaculture projects often appear in from of community gardens. These gardens are mostly established by groups of people to create a green space to grow food and to enhance community activities. Community gardens consist of places where people unite to interact, create and grow together as a community (Nettle, 2016, p. 1). Hence, community gardening don't have to be only considered as an ecological but also as a social project. Moreover, solidarity agriculture can also appear in food corps, where the food is directly bought from the producers and not sold through an intermediate such as a supermarket. Therefore, the food from those small, regional producers is affordable and reasonable for low-income households. Furthermore, it requires less packaging and produces less plastic (Ambach *et al.*, 2019, pp. 35-6).

Another area that incorporates the ecological dimension is transportation. The transportation system in the global north is still strongly based on individual means of transportation, which are very resource intensive. The high volume of traffic, especially in the cities causes a high amount of car accidents as well as air pollution trough nitrogen oxides and particulates. This also contributes to climate change and threatens human health. Furthermore, dumping prices for flights and cruise ships reinforce this phenomenon additionally. Solidarity Economy solutions are concerned to create a transport system that is accessible and affordable and does neither contribute to the destruction of nature nor to the discrimination and exploitation of people and nature. Therefore, there is a need of new infrastructure and city planning that is based on reducing the circulation of cars and is focused on people and bicycles, like in Copenhagen. Moreover, there is a need for affordable public transport with regular circulation and bus stops that are easy to reach. An improved rural infrastructure with more shops and grocery stores could reduce the volume of traffic and shorten travelling distances (Ambach et al., 2019, pp. 38-40). Moreover, the organization of work could be structured in a different way to reduce traffic through enabling home office and the regionalization of work, thus the creation of work in the countryside. For long distance travels, on the one hand, trains should be subsidized by the state and should enable travels with a regular schedule as well as providing more night trains. On the other hand, subsidies on flights should be cancelled while establishing a tax for kerosene. Furthermore, new ways of travelling should be promoted such as short-distance backpacking, bicycle travels or interrails (Ambach et al., 2019, pp. 41-2).

The ecological dimension also incorporates the energetic sector. Energetic solidarity solutions aim to overcome problems related to energy production from coal, gas or atom energy. Especially the energetic sector showcases big inequalities between the global south and the global north, since the global north consumes high amounts of energy that is based on resources from the global south. This type of energy consumption is also responsible for many other problems such as land grabbing, violations of human rights, the degradation of the environment as well as the unresolved problems of atomic waste disposal (Ambach *et al.*, 2019, p. 55).

Solidarity Economy also promotes regenerative energies. Nevertheless, it must be mentioned that regenerative energies also require raw materials such as tin, wolfram or gold from the global south for the building of the required devices. Furthermore, social and ecological costs as well as the degradation of landscapes, through wind power stations for example, have to be considered. Nonetheless, it is still representing a more sustainable alternative to fossil fuel-based energy. But it is necessary to establish social and ecological standards for solidarity energy production which includes the use of resources, the use of energy and disposal and recycling infrastructure (Ambach *et al.*, 2019, pp. 55-6). This can happen through the solidarity collectives or associations that aim to democratically control and enable participation in the decision-making process of the energy sector. The association *Energietisch* demands ecological energy production through renewable energies for the entire city of Berlin. They also demand the direct election of a renewable energy counsel and annual assemblies of citizens in different municipalities to orientate the energy supply on common welfare instead of profits (Ambach *et al.*, 2019, pp. 57-8).

Solidarity Economy also consists of a *territorial* project, which emphasizes the local community and aims to strengthen the sense of belonging and fostering local development of the region. This can imply, for example, that local firms and organization that preferentially hire people from the community and to favor and support local suppliers and customers. The focal point of the territorial project is the promotion of the local economy with its local values and cultures. This could, for example, imply the participation and involvement in community events, the cooperation with partners from the region and the development of projects that are in the interest of the people living in the community (Amaro, 2009, pp. 23-4). Therefore, community currencies can be an example of how the territorial dimension can be forested, since it fosters the local economy and territorial development. Another example for the territorial dimension is the collective *about blank* in Berlin, which functions as a bar or night club (Müller and Prix, 2016, p. 49). The collective cooperates only with local partners from the region that are self-determined collectives which support social or ecological purposes. It is not sponsored by multinationals and does not make advertisements for their main suppliers (Müller and Prix, 2016, pp. 65-6).

Another dimension of Solidarity Economy is *management*, because Solidarity Economy projects also need an efficient management and the adoption of specific management methods like general management, human resources, commercial, production or financial management. Furthermore, adequate management in solidarity organizations or firms is especially important to guarantee the economic-financial viability and sustainability. Management should not be used to betray the solidarity mission of the organization but rather to develop new concepts and management tools with broader indicators and formulas for accounting and evaluation. Most notably, indicators that measure beyond the economic-financial scope and include social and environmental issues (Amaro, 2009, 23).

The club *about blank* in Berlin is also an example for solidarity-based management of an organization. In that club, wage differentials within the blank are low and the wage policy is made open and transparent. All profits generated by the club are reinvested into increasing wages and in necessary acquisitions for the business. There is no skimming of excess profits and bigger decision about investments and recruitments are taken in plenary. The about blank also defines itself as a feminist collective that aims to empower women (Müller and Prix, 2016, pp. 59-60). It is also organized in working groups for the different areas like gastronomy, accountability or human resources. Employees are able to work in many different areas that are organized autonomously. Important decisions for the whole collective are made in the weekly assembly of the collectivists and employees are represented through the club counsel (Müller and Prix, 2016, pp. 51-53).

Furthermore, Solidarity Economy is a *knowledge* project since Solidarity Economy underlies a constant learning process. It is a concept that is subject to permanent reconstruction, improvement and revision. Therefore, it emphasizes the development of different practices as well as the theoretical knowledge around the subject and to promote action- research in that field (Amaro, 2009, p. 24).

At the moment solidarity and cooperation are not addressed in the subject of economics in public education. Therefore, it is crucial to establish such spaces of knowledge and networking for cooperative education in from of conferences, workshops, social meetings, classes or to spread information through public media sources. These networks can facilitate a cooperation with academic intuitions that could help to expand solidarity economy in the academic field but also to integrate it in the broader structures of education. These collaborations could also encourage new innovations in the field of solidarity economy and to enhance entrepreneurship in that field. The opportunities for the creation of new innovations is immense if the different initiatives such as community currencies, cooperatives, solidarity agriculture projects as well as mutual help between neighbors would collaborate more intensely and share information (Miller, 2010, p. 9).

Solidarity Economy also exhibits a *political* dimension. The political dimension can be understood in two ways: The first is the *internal political* dimension, in which Solidarity Economy organizations should be organized in a democratic, collective and solidarity-based way, where each person equals one vote in the decision-making processes (Amaro, 2009, p. 24). The internal political dimension of a solidarity-based enterprise or association is organized according to the solidarity principles which allows democratic employee participation, fair salaries, good working conditions and self-determination. Within the enterprise, employees could also get the chance to rotate the work fields, such that unpleasant work is not consistently conducted by the same person (Ambach *et al.*, 2019, pp. 64-5). Another example is the *Mondragón Corporación Cooperativa* in Spain where employees decide collectively about decisions in the cooperatives. Profits are invested in better working conditions and higher salaries; thus, capital is seen as collective property. For example, there exists a solidarity fund supporting the cooperative in difficult times (Ambach *et al.*, 2019, p. 65). The other political dimension, is the *external political* dimension, referring to the responsibilities of the organizations on a wider political level. This means that organizations assume co-responsibility in the regulation and solving of social, environmental, economic, cultural, territorial or scientific problems of their local society. They conduct activities and establish partnerships with the democratic state or other actors, such as companies through enabling and promoting new conceptions and practices of solidarity-based Corporate Social Responsibility (Amaro, 2009, p. 24). The external political dimension encompasses the values and norms as well as networks and relationships that the organization fosters, and which enables the organization to encourage public political action. This public action can incorporate different spheres such as the empowerment of workers or engagement for the common good in the public sphere. Therefore, is the external political dimension directly linked to the cultivation and promotion of (active) citizenship (Letmaître and Helmsing, 2012, p. 749). The subject of citizenship which incorporates the political dimension of Solidarity Economy is highlighted and explained in greater detail in the following chapter.

### 1.5. Portugal

This chapter highlights Solidarity Economy in Portugal since the workshops will be realized in the Portuguese context. This chapter will give a brief overview on the history and current developments of the initiatives and research in Portugal. In the Portuguese context, however, Solidarity Economy is still a recent term and therefore not frequently used. In Portugal, Solidarity Economy constitutes of a set of collective economic arrangements of production, consumption, commercialization and credit in rural and urban environments. These initiatives are mostly managed by the citizens themselves under the principles of self-management, cooperation and solidarity (Hespanha et al., 2015, p. 466). In the past, community solidarity practices in the form of informal models of associations and self-help initiatives very common in many villages in the Portuguese countryside. Many of those provided for example common community equipment such as ovens and washing facilities as well as commons in agricultural production. Nowadays, many of these expressions of community life do no longer exist as before. Nevertheless, it must be mentioned that these collectives offered a realistic and successful opportunity for the villagers to cope with difficulties through their own principles of economic organization. Nevertheless, solidarity initiatives are reemerging and regaining importance in Portugal. Those are inspired by the example of the old community formats but also by new, more recent experiences that emerged from economic difficulties experienced by the urban middle classes and by an increased critical awareness of citizens towards consumption, that gave rise to collectives of community exchange platforms (Hespanha et al., 2015, p. 470).

In Portugal, Solidarity Economy especially developed in the end of the 1980's in the autonomous region of the Azores, at the end of the 1980s. This was especially due to problems concerning poverty and social exclusion in that region. Some regions of the Azores were poor fishermen lived faced serious problems such as lack of education, health care, adequate living and housing conditions, prostitution,

crime, marginalization of mentally disabled people as well as low incomes. Furthermore, the problems of unemployment intensified increasingly, which gave rise to various programs to tackle those issues (Amaro, 2009, pp. 19-21). Due to this situation, the region of the Azores was offered community funds and professional training. These initiatives came from civil society organizations in São Miguel where some were also linked to the catholic church. In the 1990s economic activities should be created that should address these problems while integrating the marginalized and disadvantaged groups. In this context, the term Solidarity Economy was the first time adapted in Portugal by cooperatives and social organizations (Amaro, 2009, pp. 19-21).

Furthermore, in the crisis of 2008 and its associated politics of austerity gave rise to a network of solidarity and exchange that were continuously growing and spreading (Dos Santos and da Silva, 2014, p.225). The growing number of Solidarity Economy initiatives throughout the country over the last few years can be observed in various fields. This trend can be observed in the different forms of Solidarity Economy that are emerging in the communities; in scientific research carried out in universities and study centers and in various public initiatives to discuss the subject (Dos Santos and da Silva, 2014, pp. 224-5). Other examples appearing in the field of Solidarity Economy in Portugal are consumer groups and cooperatives, collaborative networks of local production, urban gardens and edible gardens, fair trade stores, informal mutuals, time banks, community land and vacant lots, links between local producers and consumers, and commons of communities to name a few (Dos Santos and da Silva, 2014, p.225). Furthermore, since 2008 there is also a significative raise in exchange circuits including local currencies in Portugal (Dos Santos and da Silva, 2014, p.218).

These initiatives of Solidarity Economy in Portugal appear in form of different organizations such as cooperatives, mutuals, individual institutions of social solidarity, foundations, various kinds of associations, misericórdias, waste management communities or social and social integration companies (Namorado, 2009, p. 68). Nevertheless, there are still a lot of initiates that are subject to a certain invisibility in the public sphere (Hespanha et al., 2015, p. 466). This is mainly since a large proportion of solidarity initiatives in Portugal have an informal character. Many of those informal initiatives are not registered in form one of the referred organizations due to the lack of resources. This constitutes a further hindrance in identifying and monitoring the exact numbers and forms of Solidarity Economy in Portugal (Hespanha et al., 2015, p. 467). Hence, there is a need for a clear self-identification of all organizations belonging to the area of Solidarity Economy to gain visibility conjoined resistance against the capitalist paradigm. The increased visibility could then contribute to a better juristic embedment for solidarity organizations, more specific supportive public policies and a clearer definition of the conceptualization of Solidarity Economy in Portugal (Namorado, 2009, p. 71). Moreover, Solidarity Economy in Portugal needs to stabilize and define its field. This is due to several factors, such as the few numbers of academic works and researchers, the lack of organized instances such as forums, government sectors or social movements that promote and support Solidarity Economics (Dos Santos and da Silva, 2014, pp.224-5).

These problems are started to be addressed by various organizations and collectives throughout Portugal. The Autonomous Region of the Azores established a 2nd degree federative structure called Cooperativa Regional de Economia Solidária dos Acores (CRESACOR), which already involves 24 registered member organizations by 2009. Furthermore, a center for Solidarity Economy Studies called Centro de Estudos de Economia Solidária do Atlântico exists in order to deepen the research in the area (Amaro 2009: 21f). Furthermore, a national network for Solidarity Economy Rede Portuguesa de Economia Solidária (RedPES) was established in 2015. It was founded in order to connect and support organizations, informal groups and individuals who identify with the concept and practices of Solidarity Economy. It also works to define and strengthen the identity and operational field of Solidarity Economy and to demand more recognition in society. It also empowers groups and organizations and trying to expand the field of knowledge by connecting academic knowledge with practical knowledge and to interconnect the movements to create an international network (RedPES, n.d.). Moreover, the study group of Solidarity Economy (ECOSOL-CES) of the Center of Social Studies at the University of Coimbra (CES-UC) is active since 2008. The group unites students, researchers, partners and interested people in the field of Solidarity Economy. The group aims to initiate new debates about the various subjects related to the field among other about production, service or consumption cooperatives, family farming entities, self-managed companies, exchange clubs and social currencies, among a multitude of possible enterprises (CES, n.d.). Furthermore, the study group began a preliminary survey of solidarity initiatives in the three regions of the north, Alentejo and center regions, which could facilitate and encourage a future national mapping (Hespanha et al., 2015, p. 470).

## CHAPTER 2 Empowerment

This chapter explains the term of empowerment, thus defining the term and giving an overview about the different understandings of power. Furthermore, the dimensions that include individual, groups and organizations as well as a structural empowerment of the society is explained. Moreover, the process that defines the different stages of empowerment is addressed in detail.

Generally, empowerment is a process in which people gain the power to create a *better life*, according to their own definition. The term of empowerment has therefore a very open and normative character, since the definition of what a better life depends highly on the individual convictions and standpoints on ethics, values and beliefs (Herriger, 2020, p. 13). To say it with the words of Adams (2003, p. 8), empowerment is

"the means by which individuals, groups and/or communities become able to take control of their circumstances and achieve their own goals, thereby being able to work towards helping them- selves and others to maximize the quality of their lives."

Therefore, it describes a self-initiated and self-directed process in which subjects regain sovereignty about their lives. It is a development in which individuals or groups break out of a situation of dependency, weakness and powerlessness and turn into self-determined, autonomous and active protagonists (Herriger, 2020, p. 16).

#### 3.1. **Power**

The term empowerment includes the word *power*, therefore, it is crucial to examine the different understandings and dimensions of power. Moreover, the meaning of the term empowerment depends highly on how the term *power* is interpreted (Rawlands, 1995, p. 102). Power is a multidimensional and dynamic concept that highly depends on the context it is analyzed. The dimensions of power can range from a negative understanding such as domination and oppression to more positive understandings such as transformation or collaboration (VeneKlasen and Miller, 2002, p. 39). Hence, the different understandings of power can be distinguished in the following way: One form of power is on the one hand, the negative designation of *power over* something or someone. This dimension of power forms a win-lose relationship, in which someone gains power and domination while someone else is inevitably losing power and is subject to subordination. This form of power includes repression, enforcement, discrimination, corruption and abusiveness (VeneKlasen and Miller, 2002, p. 39).

On the other hand, there are also positive understandings of power. One is the understanding of *power with*, which refers to the construction of collective power through finding consensus between different interests. Hence, social discrepancies can be overcome, and more stable and fair relationships can be established in society. Examples are solidarity, mutual support and cooperation between

individuals or groups. Another concept is *power to*, which can be understood as a unique potential of an individual to shape and transform his/her life. It is closely linked to power with, since it can lead to collective action and transformation when these people unite to support each other and to take action together. Another positive understanding of power is the *power within* concept. This term expresses how an individual explores himself/herself and can enhances their own self-worth. It has to do with the common human search of personal and spiritual fulfillment while respecting other people (VeneKlasen and Miller, 2002, p. 39). To conclude, empowerment aims to overcome *power over* through methods and strategies which increases *power with, power to* and *power within*.

#### 2.2. **Dimensions**

Empowerment has also different dimensions and can therefore have various impacts and outcomes. This section will outline the personal dimension and empowerment in relationships, the dimension of groups and organizations as well as the structural dimension of empowerment.

The first dimension that is addressed incorporates the individual dimension of empowerment and the empowerment in relationships between individuals. Generally, personal empowerment should free individuals from helpless and powerless situations in their everyday lives while encouraging them to regain control over their lives (Stark, 1993, pp. 43-4). Individual empowerment aims to encourage the strength, capacity, assertiveness and the ability to manage the tasks of everyday life with confidence and self-determination. Therefore, empowerment also describes the ability of individuals to create autonomous lives according to their own values and principles and to strengthen their capabilities to master the challenges and problems of their everyday lives (Herriger, 2020, p. 15). The personal dimension is also about developing confidence in abilities which can oppose internalized oppression. In the dimension of relationships, empowerment can improve the capacity in negotiation and influence what effects the relationship itself as well as the underlying power dynamics and decisions that are taken within it (Rawlands, 1995, p. 103).

There is also the empowerment within groups or organizations. To foster collective empowerment in groups, it is necessary that democratic decision-making structures are established within the groups or organizations. These structures should encourage the contribution of the strengths of each subject of the group as well as the evolvement of confidence within the group. Individuals should be encouraged to pass their competences to others and develop a common motivation and goal (Stark, 1993, pp. 43-4). Additionally, the involvement in a group can have a bigger impact than an individual itself (Rawlands, 1995, p. 103).

The structural level of empowerment aims to influence power structures in the society as a whole (Stark, 1993, pp. 43-4). It requires a collective dimension of empowerment with the emphasis on collective action, cooperation and involvement in political issues (Rawlands, 1995, p. 103). Structural empowerment aims to reallocate unequal political power structures. Through this process, disadvantaged subjects of society can regain political power of decision making and a higher ability to

engage in democratic participation (Herriger, 2020, p. 14). These strategies aim to engage and include people and groups that were excluded back into the decision-making process in society. This can be enabled through guaranteeing access in the political decision-making process as well as in the economic sphere through the access to markets and higher incomes (Rawlands, 1995, p. 102). This common process of taking action can take place on a macro level on a national or international sphere through big institutions such as the United Nations but also on a local level such as in the village or neighborhood (Rawlands, 1995, p. 103). On a village or neighborhood level empowerment processes are closely linked to community development<sup>14</sup>. The main focus lies on the encouragement of a certain group of people to take collective action. Therefore, community development is rather a collective approach that operates in pluralistic societies, embracing heterogeneity, while facilitating these communities' interactive processes. The goal is the encouragement to communicate their problems, to address their needs and to decide autonomously (Goel, 2014, p. 6). These empowerment processes emerge from projects that appear in form of civil rights movements or other movements of social emancipation. These can appear in various forms such as in literacy programs, political community work, feminist movements or citizens indicatives and campaigns to raise awareness for the interests of ethical and social minorities (Herriger, 2020, p. 14).

John Friedman, Professor Emeritus of urban and regional planning at the University of California at Los Angeles (1996, p. 161) recommends integrating an empowerment strategy on the structural that is based on the empowerment of associations and organizations. With the help of that strategy, structural poverty should be overcome and a new relationship between the population and the state should be established. Further, the household should be enabled to obtain improved access to basic resources to maintain their livelihoods. In order to provide these livelihoods a new *social contract* between the citizens and the state should be established that guarantees all citizens a basic right for their livelihood. To implement this, the civil society should be interconnected in a network of social associations. This network of civil associations could include housing cooperatives, political, merchant or neighborhood associations, trade unions or other clubs like a sports or women's clubs. These should obtain a non-profit character, inclusiveness and democratic governance and should, on the one hand, be supported through incentives and financial support of the state, but on the other hand, also by the citizens as active participants and other contributors such as labor or technical skills or money (Friedmann, 1996, pp. 169-70).

<sup>&</sup>lt;sup>14</sup> Community development can be described through different methods, characteristics and approaches that show and support the development of a certain community towards a determined goal. In social sciences, the term mostly refers to a social work method or approach to engage with groupings of people that are in some way disadvantaged or confronted with social issues resulting from unfair policies at a local, state, national or international level (Goel, 2014, p. 5).

#### 2.3. **Process**

Empowerment can be understood as a process that develops insight that can lead to action (Rawlands, 1995, p. 103). In this section, four different steps that determine the empowerment process will be outlined. In the first phase powerless individuals, groups or movements become *aware* of unfair power dynamics in their life (Rawlands, 1995, p.103). This phase is the phase of pre-mobilization, which Kieffer (1984, p.19) also calls the *era of entry*. This phase is normally driven by an initial reaction towards unfair and painful situations that people encounter in their lives. In this phase, individuals are exploratory in their political engagement and their participation is experimental. This phase also requires that individuals question the systems of authority and de-mystify the concept of power and authority figures (Kieffer, 1984, pp. 19-20).

The second phase is the *era of advancement*, in which engagement and critical reflection grows. In this phase a mentor or community organizer is essential to encourage critical reflection and to form more supportive relationships within the collective organizational structure (Kieffer, 1984, p.20). This mentor should have the following characteristics:

"Often described much like a benevolent parent, the enabler helps evoke latent strengths, nurtures independent action, and supports autonomous experimentation in unpracticed political skills [...], To these ends, the "organizer" acts as a role model, mentor, ally, instructor, and friend. While providing concrete aid in helping define appropriate actions, he/she also provides emotional support in the maintenance of effort amidst daily frustration and conflict." (Kieffer, 1984, p. 20)

Empowerment mentors should encourage independency and should be organize empowerment processes through a bottom-up approach. Therefore, the professionals should make a conscious effort to question and change their own behaviors, to make sure to avoid imposing views and behaviors on the people they aim to empower (Rawlands, 1995, p. 105).

People are engaged to mutually support each other in their efforts and collaborate in solving problems. In this phase, the grassroot organization exhibits characteristics of a self-help group with emphasis on the analysis of external and political dynamics that influence people's lives. It is not only focused on emotional and personal matters but aims to foster consciousness and capacities in both, the social and political sphere (Kieffer, 1984, p.21). Simultaneously, participants should reflect about the underlying dynamics and root problems that cause the situation they are trapped in (Rawlands, 1995, p. 106). This phase is marked by what Paulo Freire calls *conscientization*, in which individuals can only take action after developing a critical consciousness by understanding their owns life's circumstances (Rawlands, 1995, p. 103). This process begins when the oppressed start to critically question their reality and recognize these unfair structures and commit themselves to change (Freire, 2005[1970], pp. 52-54). Without this critical reflection the oppressed will accept their situation, thus their exploitation (Freire, 2005[1970], pp. 64-5). Furthermore, people are stimulated to learn and create strategies and skills and to become aware of how social, political and economic spheres and relations are interconnected. This engagement in critical analysis, creation of strategies and political action results in a spiral that

encourages further and continuous political engagement (Kieffer, 1984, pp. 21-2). This spiral of reflection and action is designated by Paulo Freire as *praxis* (cf. Freire, 2005[1970]: 64f). Praxis is described as a cycle of reflection and action, that is essential for social transformation (Freire, 2005[1970]).

In the following phase people develop certain skills in order to regain control and power over their lives (Rawlands, 1995, p. 103). This phase is also called the *era of incorporation*, in which self-awareness, strategic abilities and critical understanding are trained. The strategic abilities include new leadership, survival and technical skills. Political participation becomes an integrated routine of everyday life and participants need to find a balance between their ordinary, family lives and their new role as a political subject. They are encouraged to solve personal conflicts in their private and political life with new self-confidence. Therefore, it is necessary to improve self-awareness and reflect and redefine their own role and identity as a socio-political actor in the community (Kieffer, 1984, pp. 22-24). In the last phase participants execute the acquired control and skills can support and encourage the own community (Rawlands, 1995, p. 103). This phase is what Kieffer (1984, p.24) calls the *era of commitment*, in which the individuals integrate new gained personal and political knowledge and abilities. Participants discover and establish different ways to engage long term into community mobilization. Some people choose a new career dedicated to help others while some rather commit themselves to traditional political posts. In this phase individuals are looking for ways to apply their skills in ways that are meaningful to them and benefit the community (Kieffer 1984, p. 24f).

## CHAPTER 3 Citizenship

This chapter gives an overview on the topic of citizenship, thus a brief definition and understandings including various viewpoints of authors and sociologists as well as the different scopes of citizenship.

## 3.1. **Definitions**

There exist many possible definitions and understandings of citizenship. This section highlights the main understandings of citizenship as well as different viewpoints on citizenship from important philosophers and sociologists.

On the one hand, citizenship can be understood as a status that implies rights and duties and has a bigger emphasis on the individual and of the status of being a citizen (Lister, 1998, pp. 227-229). Traditionally, citizenship is tied to a certain nationality, affirming the full membership to the society of a nation-state. Citizenship is an established identity from a state which also coordinates and contains the subordinated identities of its citizens such as the identity of family, gender, religion, properties and the region of residency (Holston and Appadurai, 1999, p. 1). Formal citizenship proves the legal status of a citizen and officially recognizes the person as an official member of a nation state. Nevertheless, the term is also defined by the civil rights the person exhibits through this status. In that sense, citizenship claims certain duties such a military service or tax requirements and also provides the citizen with formal rights like the right to vote, to engage political and social participation (Holston and Appadurai, 1999, p. 4; Lister, 1998, pp. 227-229; Habermas, 1994, p. 25). These rights incorporate the civil rights of a citizen which include the right of liberty, property and equality before the law. Furthermore, it also implies having political rights such as the right to vote, to be voted and working for the will of society. Civil and political rights are complemented by the social rights that are compound of the right of education, work, fair salary, health, and tranquil old age (Pinsky, 2013). Nevertheless, formal citizenship is also not necessarily required for enjoying substantive citizenship and therefore, many legally resident noncitizens often enjoy the same socioeconomic and civil rights as citizens. Furthermore, some citizens who enjoy formal citizenship may still be excluded from if they lack the resources to participate effectively in its organization. Moreover, citizens who aspire a different lifestyle due to certain religious practices or sexual orientation might not feel adequately covered by the rights provided in their nation state. (Holston and Appadurai, 1999, p. 4). Hence, formal citizenship cannot be the only definition of citizenship. Therefore, citizenship can also be understood as a practice which involves active political participation. It is not only about having the rights for political and social participation but also to fulfill and take advantage of the potentials that this status provides. In this understanding citizenship implies to act as a citizen and highlights the importance of the community (Lister, 1998, pp. 227-229). It emphasizes a more pro-active citizenship, in which citizens overcome passivity and engage in participation. This is regarded as a form of citizen agency, where citizens have the right to act as such

agents through inclusion in decision making in social, economic, cultural, and political spheres. According to this view the right of participation and decision-making should be included in the set of basic rights of each citizen (Lister, 1998, p. 228). This broader view on citizenship is also reflected by the political dimension of solidarity economy, since it tries to expand political and social participation and co-responsibility within solidarity organizations as well as on a wider political level (Amaro, 2009, p. 24). When exploring the meaning of citizenship, the opinion of important sociologists and philosophers can also reveal different angles to understand citizenship. For Paulo Freire and John Dewey, for example, people act as active citizens through a process of exploration, critical reflection and action that aims to address social and community problems. The starting point for this process of becoming active citizens are individual and collective experiences that are used as the basis of critical reflection. For Dewey, these experiences should lead to an active engagement to seek for new information and ideas that addresses the problems and for Freire it should encourage a critical perspective that leads to action and praxis (Wood et al., 2018, p. 261). The sociologist Jürgen Habermas also developed a theory of the public sphere, which shaped the understanding of citizenship. He claims that citizenship evolves in the public sphere where people gather to enter in discussions about the government and their policies. Nevertheless, this understanding of citizenship got criticized by feminist thinkers such as Hannah Arendt or Nancy Fraser, who claim that Habermas description of citizenship is limited to subjects of the society that are male and bourgeois. Therefore, their claims are more rightsbased with a special emphasis on privilege (Ho and Yarwood, 2020, p. 231).

#### 3.2. Scope

Citizenship is not just limited to the nation-state level but can operate in different geographical scopes, which include the local, national and global level. It is necessary to consider all the three spheres, since people can enjoy a resident status in more than just one locality and can obtain more than one nationality. Consequently, these overlapping belongings encourage individuals to be concerned, influence and act in more than just one municipality and often more than a single country (Blank, 2007, p. 4). Furthermore, these three spheres of local, national and international citizenship constitute interdependent and overlapping identities. Even global citizenship is defined in local settings and through local groups or activists that direct their activism towards global or national intervention. (Blank, 2007, p. 30). As previously mentioned, on a national sphere, the nation-state is responsible to provide its citizens with formal citizenship and associated civil, social, and political rights and demand certain duties. Although the state is still an important actor concerning citizenship rights and duties it is no longer the only entity that can provide citizenship rights and entitlements (Blank, 2007, p. 25).

Local citizenship can exist on sub-national governmental level in form of a city or in any other regional, provincial sphere (Blank, 2007, p. 9). Besides the nation-state citizenship there is also the local political sphere with its own principles, ways of participation and rights. These entities provide on the one hand the services and protect the rights guaranteed by the nation state such as education, healthcare,

or welfare programs. On the other hand, the legal local political entities also function as mediator between the national level and the local communities (Blank, 2007, p.10). Furthermore, local citizenship highlights the membership and belonging to a certain territory which is strengthened through the proximity of people which favors direct political actions and allows the citizens to directly monitor the outcomes of local policies. Local citizenship also enables more opportunities of political engagement of the ordinary people through a bottom-up approach (Blank, 2007, p. 11). Therefore, local citizenship action can be understood as a form of community development (Lister, 1998, p. 226). Community development is the result of local, community action that aims to promote the defense, promotion, and extension of citizenship rights for example in favor of disadvantaged parts of the community. This process does not only focus on the outcomes but also on involving these individuals in the process of change-making and to strengthen their capacity to act as citizens (Lister, 1998, p. 229). This forms of citizenship of community development can have impacts on the community as a whole as well as on the individuals that are involved in the process (Lister, 1998, p. 231).

According to Nancy Fraser, there is a need to expand citizenship beyond the national borders, due to increasing globalization. In the globalized world, citizenship and justice have to be examined from multiple perspectives. Some individuals and groups are misrepresented or even excluded from participatory parity since the political sphere is often just limited to the nation state. This hinders marginalized groups form political participation and the chance to challenge their oppressors. Therefore, Fraser advocates to democratize the frame setting of political participation, that associate rights only to the nationality but instead to an *all-subjected principle*. This principle could coexist with the model of the nation state and include all individuals in the political participation that are subject to a certain government and its decisions (Fraser, 2010, cited in Gomes 2018, pp. 1021-1023).

Therefore, it is crucial that citizenship can also be transferred beyond the borders of a nation state and can be extended to a form of global citizenship. Global citizenship implies the political concept of *Pluriversity*<sup>15</sup>, which emphasizes that the entire planet must be regarded as political sphere of action composed of all its citizens political actions. It also embraces the right of existence to all individuals and political subjects and aims to solve conflicts between groups of people, social classes and states in a civilized way. Global citizenship also highlights underlying ethical and democratic principles, even though those are not always binding for national policy (Scherling and Mauric, 2019, p. 10).

<sup>&</sup>lt;sup>15</sup> The Columbian- American scholar Arturo Escobar uses that term in his work *Designs for the Pluriverse*, that opposes the eurocentric, capitalistic, western "universal values" but instead claims for a more diverse world, where many different forms of being and knowing exist and are respected simultaneously. The term emphasizes on the interdependence of all life on this planet and suggests participatory, integrative solutions to problems concerning sexism, racism, capitalism and eurocentralism that have their origins in the rigidities of the western university models (Escobar, 2018).

## CHAPTER 4 Education

This chapter gives an overview about the general definition of the term education including an explanation about the domains. Furthermore, it will elaborate on the concept of pedagogy with definitions and a brief historical overview. Moreover, the concepts of experimental, creative and playful learning will also be examined. The last part of this chapter will also explain the Portuguese school system especially emphasizing secondary education and the subjects of economy and development and citizenship.

The concept of education has a long tradition in the humanities and can be defined as the cultivation of the various facets of humanity in order to be able to participate in the forms of life common in a society. It is the acquisition of knowledge and skills in order to enable people to become self-determined while actively shaping a mental and intellectual capabilities (Raithel, Dollinger and Hörmann, 2009, p. 36). According to Oxford Lexicon (n.d.) education is "the process of giving or receiving systematic instruction, especially at a school or university". From this point of view, education can be understood as the knowledge that is obtained through education, but it can also be interpreted as theory and practice of teaching or knowledge or training that is acquired in a certain field or subject (Oxford Lexicon, n.d.). Biesta (2015, p. 76) highlights that education is not only about the content of learning but is also linked with a certain purpose and the personal relationships that derive from the learning environment. Education must be considered a multidimensional phenomenon since it appears in various domains. Biesta (2015, p. 76) highlights the following three domains of education: qualification, socialization, and subjectification.

The first domain, the *qualification*, implies the transmission and appropriation of knowledge and certain abilities. It can be understood as the education that is necessary for aspiring a professional career or in form of a more general education that prepares young people to be part of the complex society. *Socialization* describes the learning and acquisition of knowledge about traditions and norms in cultural, professional, political or religious terms. This form of education is rather implicit and hidden and has the power to reproduce certain social structures as well as existing inequalities and divisions in society. The third domain is the one of *Subjectivation*, in which education can either transform the students negatively or positively as a person. It means that education has the power to transform the student into an active subject of society with awareness on their responsibilities and enforcing initiative rather than a passive object that is subject to the behavior and decision of others (Biesta, 2015, p. 77). Biesta (2015, p. 78) also stresses that in modern society, a disproportional amount of emphasis is put on the domain of qualification, which can lead to excessive pressure on the acquisition of academic achievements of students. This can cause elevated stress levels on teachers and students, which can potentially weaken the impact on the domain of subjectification.

#### 4.1. **Pedagogy**

Originally, the word pedagogy comes from the ancient Greek word *paidogogos*, which can be understood as the learning of the child or slave (Leach and Moon, 2008, p. 4). Today, the term is defined as the "science of teaching" (Watkins and Mortimore, 1999, p. 2) or "the study of teaching methods" (Oxford Dictionary, n.d.). Nevertheless, Watkins and Mortimore (1999, pp. 2-3) also stress that the emphasis of pedagogy should not only lie on teaching but should also include the role of the learner. Therefore, they define pedagogy in more broader terms: "any conscious activity by one person, designed to enhance learning in another" (Watkins and Mortimore, 1999, p. 3). Beetham and Sharpe (2013, p. 2) define pedagogy as a creative and demanding human activity that is a guidance for learning. Hence, learning appears in a context of teaching, in which learning is the defined goal of teaching. Pedagogy is the constant dialog between learning and teaching, that involves different ways and methods of knowing and doing (Watkins and Mortimore, 1999, p. 15). In general, pedagogy is a term that is understood in many different ways and highly depends on the historic context and is therefore subject to constant reinterpretation (Watkins and Mortimore, 1999, p. 15). Pedagogy can be on one the hand, divided into practical pedagogy that instruct future teachers on how to precisely teach a certain subject in school. On the other hand, there is the general pedagogy, which is about the philosophical thought and theories (Best, 1988, p.158). Furthermore, two currents can be distinguished: the *traditional* and the *progressive* theories and practices of pedagogy. In many education systems it can be observed that there are clashes between those progressives and more traditionalists trends (Leach and Moon, 2008, p. 4).

The ancient Greek philosophers like Plato and Aristotle where one of the first people thinking about pedagogy and developing the first concepts around the term. Their basic thoughts around pedagogy were connected to the idea that education played a significant role in the cultural and social developments of a society (Hämäläinen, 2013, p. 1023). There are many other philosophers that shaped general pedagogy, besides the Greek philosophers, there were also Montainge, Rousseau, Montessori and Dewey, Ciari, Vives, Comenious and Pestalozzi ((Best, 1988, p.158; Hämäläinen, 2013, p. 1024). Some of them were more interested in general philosophy and some additionally developed practical pedagogical projects. In the following section a few of the practical and general theories and practices will be explained as well as the traditional and progressive view on pedagogy.

The traditional view on pedagogy was simply understood as the different methods and styles of teaching, that were applied by teachers. Therefore, pedagogy was rather seen as a categorization of different teachers and teaching styles (Watkins and Mortimore, 1999, pp. 3-4). In the end of the 20<sup>th</sup> century, more progressive studies were conducted that highlighted that pedagogy implied more than only the style of teachers but also on the context of teaching such as the interactions between students and teachers (Watkins and Mortimore, 1999, pp. 3-4). Students were considered active co-creators of knowledge. The perception of pedagogy shifted form the understanding of the mere transfer of knowledge towards individual students towards the importance of the students as a community that also build and evaluate knowledge. Furthermore, a more complex, reciprocal and multidimensional view

between teaching and learning is taken into account, instead of seeing it as a simple causal chain. This understanding integrates the complex relationships between the teacher, the physical space, the content, views about learning and other contexts such as purpose of the teaching, stage and age of the student (Watkins and Mortimore, 1999, pp.7-8) or even the background of the student.

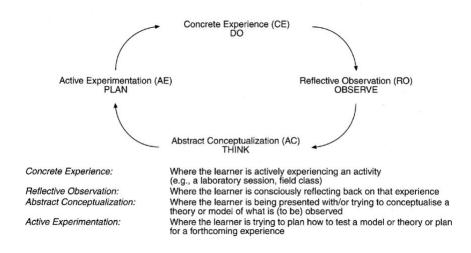
For example, the work and research of Ciari, Montessori and Dewey highlighted that pedagogy was not only about the specific skills of a teacher but also includes much more complex and holistic process (Leach and Moon, 2008, p. 3). Also, the Brazilian Paulo Freire can be considered as a progressive pedagogical philosopher. Paulo Freire distinguishes between the so-called *banking-education*, that hinders critical thinking and imposes creative power and the problem-posing education also encourages the students to question their reality and helps them to gain a state of critical consciousness about their situation to intervene and change their reality (Freire, 2005[1970], p. 81). Bruno Ciari did some alternative pedagogical experiments in a village school in the town o Certalo in Italy. His pedagogical approach was holistic and went beyond the conception that pedagogy was only about the individual teacher and her/his skills. Instead, his approach included teachers as well as students as central characters of an educational process. The student's diverse personalities were incorporated and seen as rich and naturally curious. Communication, cooperation, and the active process of observing, reflecting, discussing and interpreting were seen crucial for the learning process. (Leach and Moon, 2008, p. 2).

In Rome, during the early 20th century Maria Montessori developed a pedagogy that embraced and included classroom environment in the learning process of children. Her pedagogical model was also against the rating and classification system of the emerging basic education system. She was the director of a school for children with learning disabilities, where students that were considered having lower learning abilities could reach good results with an adequate pedagogical setting. (Leach and Moon, 2008, p. 2). In the United States, John Dewey developed alternative pedagogical models to the established traditional school and teaching system of the United States, that was merely based on memorization and reproduction of the studied material. He and his wife, Alice Chipman Dewey, established the University of Chicago Laboratory Schools, in which education was based on active, hands-on and explorative learning. Teachers should not impose the tasks on the students but adapt the tasks and the way of teaching to the students' interests. He also favored a cross-disciplinary approach, in which the different subjects like history, language, science are connected with each other (Leach and Moon, 2008, pp. 2-3). Furthermore, the educationists Juan Luis Vives from Spain, Johann Amos Comenius from Czech Republic and the Swiss, Johann Heinrich Pestalozzi were considered social pedagogists. Their view on education is based on the understanding that it should be considered a tool to prevent social disharmony and problems in society. Social pedagogy appears in general pedagogy as a theory of citizen education and in special education as a means for educational professions to adapt their teachings to the particular social needs of the students (Hämäläinen, 2013, p. 1024).

#### 4.2. **Experimental learning**

In this chapter the main features of experimental learning are outlined as well as the process of experimental learning in detail.

Experimental learning is a model that describes a learning process with a special emphasis on experience. It can therefore be distinguished from the more traditional, cognitive and rational teaching methods. These traditional methods often emphasize the acquisition, manipulation and recall of information and knowledge and often deny the importance of the subjective experience in learning (Kolb, 1984, p. 20). In contrast, in experimental learning, ideas are not fixed but are subject to constant modification through new understandings based on experience (Kolb, 1984, p. 27). Experimental learning is based on a model developed by Kolb (1984) and was highly influenced by the theories of Lewin and his action research and laboratory training such as the experimental learning model as well as the model of experimental learning from Dewey, which also integrates experience, action, conceptions and observations. Furthermore, Kolb's model is also based on the experimental learning cycle of Piaget, that emphasizes learning through interaction of the individual and its environment (Kolb, 1984, p. 21-24). Kolb's model combines aspects of experience, perception and imagination, cognition and comportment of people involved in the process (Kolb, 1984, p. 21). It is associated by concepts such as "independent learning, learning by doing, work-based learning, and problem-based learning" (Sharlanova, 2004, p. 36). Furthermore, it can be applied for various purposes such as to support the reflexive and general skills of teachers, that should encourage students to gain insights as well as to identify the learning style of each student (Sharlanova, 2004, p. 36). Furthermore, this model can be applied in multiple contexts and age groups as it is a holistic model that can be applied in adult development (Kolb, Boyatzis and Mainemelis, 1999, p. 2) as well as with pupils in schools. Kolb's model is based on a learning process that is depicted in form of a cycle consisting of four phases. It highlights how an individual can learn through a particular experience, which is observed and reflected upon and transformed into abstract concepts. These new concepts are incorporated in practice in form of a new experience, in which those can be actively tested (Kolb, Boyatzis and Mainemelis, 1999, pp. 2-3). The participants can enter the cycle at any stage, nevertheless, each phase must be executed in the designated order. The learning cycle aims to produce new feedback and ideas after each round, which is then applied in the following round. Students should go through the cycle several times (Sharlanova, 2004, p. 37).



(FIGURE 1.4. Kolbs Experimental Learning Cycle, after Healey and Jenkins, 2000, p. 187)

The first phase is the *concrete experience (CE)* which is about doing and experiencing a certain task. In this phase the individual or the team is only focused on conducting the task without reflecting on it yet. The second phase consists of reflexive observation (RO), which aims to engage students on reflecting about the task through active listening, paying attention and differentiating. Observations and ideas are shared and discussed in order to gain a better understanding and perception of the experience. The third phase is about *abstract conceptualization (AC)*, which includes the interpretation of observation and generalizations are formulated to describe the results from the experience. Thus, theories are formulated to explain and describe the results in form of conclusions and hypotheses. In the fourth phase, active experimenting (AE) takes place in which it is decided which actions need to be taken in order to the improve the previously conducted task. The new understandings from the previous phase can generate new, improved experiences which can be actively tested (Sharlanova, 2004, pp. 37-8; Kolb, Boyatzis and Mainemelis, 1999, pp. 2-3). The model considers and incorporates different learning styles into the process, in which each phase of the process corresponds to a different learning type. It highlights the individual tendencies of various learning types, in order that that each student is bale to yield and contribute in their own way. Acknowledging that each students has a different learning style creates a more flexible and inclusive learning atmosphere. Simultaneously the teachers must identify their learning style to develop more effective and adequate teaching strategies (Sharlanova, 2004, p. 36). The four basic learning styles are linked to different manners to confront and solve problems. The first learning type are the so-called *divergers*, the students that belong to that group can generate various ideas through methods such as brainstorming. The divergers can apply their skills best in the concrete experience (CE) and reflective observation (RO) phase, since they can observe different situations from various angles and perspectives. The assimilators have the ability to summarize and structure large blocks of information and are capable to condense it into a logical form. They are usually less concerned about people and show more interest in theoretical concepts and models. Those learning types can unfold

their potential in the abstract conceptualization (AC) and reflective observation (RO) phase (Kolb, Boyatzis and Mainemelis, 1999, p. 5). The *convergers* are logical thinkers that have the capability of transforming theoretical ideas into practical use. They prefer to work on solving technical problems rather than dealing with social or interpersonal concerns. These types can yield their abilities best in the phases of abstract conceptualization (AC) and active experimentation (AE). The last group are the *accommodators* who learn most effectively from a practical experiences and experiments. They usually act upon their feelings and are not interested in logical thinking. Those people are most productive in the active experimentation (AE) and concrete experience (CE) phase (Kolb, Boyatzis and Mainemelis, 1999, p. 6).

## 4.3. Creative learning

First of all, the term creativity should be defined. But there is nor a uniformed concept and theory about creativity neither a universally accepted definition of creativity. This is due to the fact that creativity is a phenomenon, which is one of the most complex functions that human beings exhibit (Treffinger, 1986, pp. 15-6). Nevertheless, in a simplified way it can be said that:

"Creativity is a state of mind in which all our intelligences are working together. It involves seeing, thinking and innovating. Although it is often found in the creative arts, creativity can be demonstrated in any subject of school or in any aspect of life." (Lucas, 2001, p. 38)

The ability of creativity and creative thinking is also associated to the capacity of human beings to solve problems. Creativity can help to solve problems for which an individual didn't obtain a routine solution. Therefore, it can also be defined as the ability of a person to move from a current state into a state that is associated with the aspired goal. It is learning how to find solutions to problems that someone didn't know how to solve previously and using the acquired knowledge in a proper and useful way (Mayer, 1989, pp. 203-210). Creative teaching occurs when the teacher provides information in a way that encourages the students to apply the received information so that they are able to solve problems creatively (Mayer, 1989, pp. 203-210). Some of the major characteristics of creative teaching and learning are relevance, control, ownership and innovation. Creative learning should be adapted and *relevant* for the needs and interests of the students as well as to the entire group. Furthermore, students should own their knowledge, which means that the students primarily learn for themselves. The acquired and internalized information should make a difference in the person's life. Moreover, students should be able to *control* the learning process, in a way that it stimulates an intrinsic and self-cultivated motivation. At last, the process should be *innovative*, that should stimulate the creation of an outcome that didn't exist before. This could appear in form of a new skill, insight understanding or some other form of knowledge, that is meaningful for the student (Jeffrey, 2006, p. 401). The teacher can encourage and stimulate this process additionally, through spatial or temporal changes in the habitual learning atmosphere. This can happen through the modification or reconceptualization of the physical space of the learning environment in order to enhance creative practices and experiences. Furthermore, the teachers can alter the temporal boundaries beyond the regular length of lessons, so that there is enough time for experimentation and creative learning. There should be enough time to share stories and narratives, exchange ideas and to discuss ideas and activities, in order to stimulate interest and commitment. Moreover, teachers can enhance the creative learning process by valuing all contributions and ideas from the students. They should also leave room for discussion, criticism, experimentation, and imagination as well as through acting spontaneously and taking part in the creative experience together with the students (Jeffrey, 2006, p. 405-6). Generally, creative learning is a way of learning, in which students engage in various forms of knowledge enquiry that is innovative, experimental, and inventive. This can happen through problem solving and possibility thinking, in which the students use their imagination to solve problems. This can be stimulated through solution- seeking tasks in order to find solutions and outcomes to an existing problem. Furthermore, creative learning can be stimulated through open adventures or open tasks, where students are exposed to new circumstances and are incentivized to experiment with different resources, techniques, mediums and ideas (Jeffrey, 2006, p. 407-8). Creative learning can also include *engaged productivity*, in which students consciously engage in the process of the development and production of certain products, that are the outcome of the creative process. This could appear in form of creative construction of literacy texts, models, narratives, photos, or any other form of aesthetic creation of any type which could appear in from of a physical artistic construction or even a mathematical pattern (Jeffrey, 2006, p. 408). Furthermore, the engagement in creative learning enables the students to obtain ownership in the learning process and encourages confidence in their abilities, since the learner's perspectives and opinions are respected and incorporated in the process. This active inclusion in the learning process can further stimulate the sense of belonging and the development of a social identity (Jeffrey, 2006, p. 410) since their new social role can be defined as an active innovator, creator and contributor. Through creative learning participants can participate in the decision-making process and are able to experience both roles, the role of a teacher and a student (Jeffrey, 2006, p. 407).

#### 4.4. Playful learning

Playful learning incorporates several learning activities that are associated with play, playfulness as well as physical game playing. It also encourages physical activities which imply learning through the whole body. The physical environment can therefore become the playground for learning and exploration. Playful learning can be integrated with any school subject (Kangas, 2010, pp. 38-9). Learning through games and play turns students from passive listeners to active participants that are able to act, engage, play in order to obtain knowledge (Kangas, 2010, pp. 48-9). Playful learning also helps to suggest the student that there is no universal truth or single answer but multiple different solutions to a problem or question. Therefore, it also helps the students to rethink preconceived ideas and concepts

and helps them to generate their own perspectives while acknowledging the multiplicity of different concepts and views. Nevertheless, experience and playing alone is often not sufficient to achieve a learning experience, therefore it must be completed through critical examination of the experience (Rice, 2009, pp. 96-7). Furthermore, playful learning can also encourage excitement, enjoyment, motivation and interest of the students in the examined subject (Rice, 2009, p. 103). A crucial element of playful learning is a collaboration between students (Kangas, 2010, p. 51). This type of learning enables the individuals or small groups to discover ideas more freely and spontaneously and make them able to play with the different disciplines and boundaries. Playing can enable the hybridization of theory and practice (Rice, 2009, p. 104). It changes the role of the student from a "passive consumer of knowledge towards active creators of knowledge" (Rice, 2009, p. 104).

#### 4.5. School system Portugal

In this chapter, the Portuguese education system will be briefly explained. Here, the emphasis will lie on the school system, most notably on the secondary education, with special emphasis on the subjects economics and development and citizenship.

The Portuguese education system is basically divided in different levels of education. It starts with the pre-school education (educação pré-escolar) which is voluntary for children from three until six years of age. Afterwards children start to enter the basic education (ensino básico), which is subdivided into three circles. The first circle has a duration of 4 years, which students usually finish with ten years when they enter the second cycle which lasts another 2 years. The basic education ends with the third cycles that takes another three years, which is usually concluded with age 15. In this cycle students learn the basics of Portuguese language, mathematics, environmental studies, artistic education, citizenship and development, physical education, English and later another foreign language, information and communication technology, history and geography, natural sciences, visual and musical education and catholic religion (República Portuguesa, n.d.a.). Thereafter, the secondary education (Ensino Secundário) starts, which endures three years and is concluded with 18 years of age. In this stage of education students can choose between five different types of curses: humanistic- scientific, professional, specialized arts, scientific- technological and education and formation of adolescents (European Commission, 2021). Afterwards, students are finished with their scholar education and can either enter post- secondary education with a shorter duration or the superior education which is structures with the European guidelines of the principles of Bologna. In the superior education students enter the cycle of professional education usually in universities and are able to obtain academic degrees of Bachelor, Master and Doctor (European Commission, 2021).

#### 4.5.1. Secondary Education

In this cycle, all students continue the general education, which consists of Portuguese, philosophy, English, physical education and the second foreign language of choice. Depending on the area of choice students learn about subjects like design, mathematics, history, Latin, literature, anthropology, development and citizenship, economics and so forth. Since this study is about Solidarity Economy, the content of economics as well and citizenship and development will be explored in greater detail (República Portuguesa, n.d.b.).

## 5.5.1.2. **Economy**

Economics is thought during three years in secondary education and consists of the level A until level C. The subject of economics begins in the 10<sup>th</sup> year and is part of the specific component of the scientific and humanistic course of socioeconomic sciences. (República Portuguesa Education, n.d.c.).

The main objective of the economic course is to identify the essential learnings in the field of Economics and provide students with tools that enable them to understand and reflect on the economic organization of contemporary societies with a special emphasis on globalization. Therefore, the discipline of economics of the 10th grade aims to structure concepts to define the object of study of economic science. This includes economic phenomena such as the acquisition of the concepts and instruments that allow understanding economic activity, most notably basic knowledge about economic activity and economic science, necessities and consumption, production of goods and services, markets, price formation including an understanding about money and inflation, income distribution and use of income (República Portuguesa Education, n.d.c.). In the 11<sup>th</sup> grade the focus is rather directed to the economy in the European Union, including subject like contents concerning the European Union and the Euro Area, as the economic crisis and challenges facing the European project. In the 11<sup>th</sup> grade students also analyze and learn about the basic economic agents and actors, state intervention in the economy and Portugal's economic situation, state accountability and it's economic relationships with the rest of the world (República Portuguesa, n.d.d.). In the 12<sup>th</sup> grade, students learn tools that enable them to understand and reflect on the complexity of contemporary societies in an increasingly globalized world. Therefore, the content of teaching is focused on the economy of global contemporary societies, the elaboration and definition of concepts like economic growth and development and their relationship. Furthermore, the globalization of the economy is discussed and analyzed in cultural and financial terms as well as the impact of the global economy. Moreover, development and resource utilization are examined in a critical way including effects on demographic developments, ecological costs, human rights and inequalities (República Portuguesa, n.d.e.).

## 4.5.1.2 **Development and Citizenship**

The subject development and citizenship is a curriculum component during in both, primary and secondary education. Each school of secondary education can choose how to adopt the subject in their schedule. Some options include development and citizenship as an autonomous subject or within the scope of another discipline. It can also be included in connection with another subject or within a certain project that the teachers coordinates.

Throughout the implementation of the contents the students should learn the conception of active citizenship, essential skills of citizen training and deepen their understanding of the different domains of citizenship and development (República Portuguesa, n.d.f).. The domains of citizenship and development are organized into three groups with differentiated implications. The first group contains subjects that are transversal mandatory for all levels and cycles of schooling. These subjects include human rights, gender equality, interculturality, sustainable development, environmental education, and health. The second group is taught in the first two cycles of basic education, that include subjects like sexuality, media, institutions and democratic participation, financial literacy and education for consumption, road safety and risk. The third group comprises the following subjects of entrepreneurship, world of work, security, defense and peace, animal welfare, volunteering or other citizenship education subjects. These can optionally be applied in the curriculum at any year of schooling, depending on which subjects are considered important by the school (República Portuguesa, n.d.f.).

## CHAPTER 5 Recapitulation and Intersection

This chapter recapitulates and describes the overlapping of the different subjects discussed in the theoretical framework. It is summarized what characteristics the subjects have in common and how they are interconnected.

Both progressive and experimental pedagogy, creative and playful learning methods address the solidarity economy values of community orientation and cooperation as well as self-government and democratization. Because these progressive and alternative forms of education and learning directly include the students actively in the learning process while encouraging them to construct and evaluate the knowledge. Moreover, collective empowerment is also encouraged since these learning methods make students cooperate to develop critical thinking, finding solutions that can improve the self-esteem and empowerment of the group. Values of democratization and community orientation also play a role in active citizenship, since the understanding of citizenship should be extended to expand rights for participation for communities and marginalized groups. Furthermore, cooperation is central for active citizenship since the different subjects of society should cooperate to increase political pressure to extend these rights. Moreover, the values of cooperation, democratization as well as self-government are essential values of empowerment. Especially the collective or group empowerment along with the structural empowerment, since the group must collaborate, and self-organize in a democratic way to take action.

The progressive, experimental, creative and playful learning methods address the knowledge together with the political dimension of solidarity economy, since they aim to educate the students in a way that fosters (political) engagement and active citizenship. Therefore, the knowledge dimension of solidarity economy is also incorporated in the process of empowerment within active citizenship since it requires knowledge, conceptualization and critical reflection before action can take place. Structural empowerment incorporates the social and political dimension of solidarity economy since collective action of empowerment aims to transform unfair power structures in the society and give power to marginalized groups of society. Citizenship aims to foster democratic participation in politics and society in general in order to make changes. Furthermore, the community and territorial dimension is incorporated in local citizenship and local empowerment that is also associated to community development.

# CHAPTER 6 Methodology

## 6.1. Analytical Framework

Specific objectives	Relatedconceptoftheoreticalframework	Relevant dimension for each concept	Relevance for the game	Identified indicators	Source	Data collection
1.Incentivize knowledge and critical reflection about current capitalistic economic system	Solidarity Economy Experimental learning	-Economic, social, cultural, environmental, territorial, management, knowledge and political dimension -Experimental cycle of	The first phase of the game is the "Capitalist Economy phase", after that phase students critically reflect about it and have the possibility to propose changes	Quantitative: Number of students that gave right response to questions about capitalist economy	Student`s responses	Questionnaire after game (multiple choice questions about the Capitalist economy)
	Creative learning	learning by Kolb -Problem solving, possibility thinking, open adventures, engaged productivity		Qualitative: Teachers estimation	Teachers' responses	Interview
	learning			Qualitative: Quality of reflection and answers (scale from 1-5)	Critical reflection about the first round of the game observed by teacher and researcher	Participant observation by privileged informants (teachers) and researcher
	Playful learning	-Game, collaboration with others		Quantitative: Number of contributions for critical reflection		

2. Increase knowledge and sensibility for Solidarity Economy among students in Portuguese High Schools	Solidarity Economy -Values and characteristics -Dimensions School System Portugal - Secondary education in Portugal	<ul> <li>Community orientation, cooperation, self- government, democratization, re-localization, communing, reproduction, ecological awareness, dependence, sufficiency</li> <li>Economic, social, cultural, environmental, territorial, management, knowledge and political dimension</li> <li>Subjects of Economy and Development and Citizenship</li> </ul>	The second phase of the game is the "Solidarity- Economy phase" in which the students learn about the different values, characteristics and dimensions. After the second phase the students reflect about that phase.	Quantitative: Number of students that gave right response to questions about Solidarity Economy Qualitative: Quality of answers to open questions Qualitative: Teachers estimation Qualitative: Number of contributions about Solidarity Economy reflection	Student's responses Teachers' responses Critical reflection about the second phase observed by teachers and researcher	Questionnaire after game (multiple choice questions and open questions about Solidarity Economy) Questionnaire (open questions) Interview Participant observation by privileged informants (teachers) and researcher
3. Facilitate learning through creative, experimental and playful methods	Pedagogy Experimental learning Creative learning	-Practical, progressive pedagogy -Experimental cycle of learning by Kolb -Problem solving, possibility	Game design is based on playful, experimental and creative methods	Quantitative: Students identify on a scale from 1-5 if the game contributed to motivation, interest and comprehension of the subject Qualitative:	Student's responses	Questionnaire after game (scale 1-5)
	Playful learning	thinking, open adventures, -Game, collaboration with others		Teachers estimation Qualitative: Observation of students during the game: facial expressions, interactions with other students, tone of voices	Teachers' responses Game observed by teachers and researcher	Interview Participant observation by privileged informants (teachers) and researcher

4.Incentivize empowerment, increase active citizenship of students	Empowerment Citizenship Education	<ul> <li>-Power to, power with</li> <li>-Individual, group, structural empowerment</li> <li>-Era of entry and advancement, conscientization</li> <li>-Act as a citizen</li> <li>-Subjectification</li> </ul>	Game showcases role of active citizenship in the Solidarity Economy phase and aims to incentivize and reflect upon empowerment and active citizenship in the students'	Quantitative: Students identify on a scale from 1-5 if the game contributed to motivation and confidence to contribute to society Qualitative: question what students would change in their	Student's responses	Questionnaire after game (scale 1-5) and open question
			lives	lives Qualitative: Teachers estimation Qualitative: Observation of students during the game: facial	Teachers' responses Game observed by teachers and	Interview Participant observation by privileged informants (teachers)
				expressions, interactions with other students, tone of voices	researcher	and researcher

(TABLE 1.6. Analytical framework, own graphic)

## 6.2. Methods

In this chapter, the methodological approach is outlined along with the methods of data collection and analysis.

The main research question is how Solidarity Economy can be thought in form of a game that was conducted in the 10th grade in the Portuguese High School *Passos Manuel* in Lisbon. Therefore, the research is a descriptive research that is subdivided in the following four specific objectives, which include:

- 1. Incentivize critical reflection about the current capitalistic economic system
- Increase knowledge and sensibility for Solidarity Economy among students in Portuguese High Schools
- 3. Facilitate learning through creative, experimental and playful methods
- 4. Incentivize empowerment, increase active citizenship of students

The game is composed in order to achieve those specific objectives. It is also constructed by using secondary data that is gathered from the literature research outlined in the theoretical part. The theoretical literature is used to compile the game structure in order to teach Solidarity Economy within the framework of the game for the High School students. Furthermore, the study is complemented with

the primary, empirical data that is collected during and after the workshop to evaluate and improve the game design. A qualitative approach of data collection is used due to the necessary to gain a broader, more comprehensive understanding beyond numbers and statistical data that includes how participants perceive and experience the program. Furthermore, qualitative data can help to gain insights on why and in which ways programs succeed or fail (Rogers and Goodrick, 2010, p. 429). Moreover, qualitative, and quantitative techniques of data collection are used in form of participant observation and a questionnaire. One of the main methodologies that is used in this research is the methodology of actionresearch. Action-research is a practical methodology usually applied in qualitative research. It is a synonym for practical research, in which the researcher engages actively in a situation or event and uses either qualitative or quantitative methods (Moura, 2003, pp. 13-4). The process of action-research is implemented step by step by using different instruments that enable the reflection about the action that was taken. It is usually conducted with a group of people, which can promote and facilitate the desired change since a group is more likely to achieve sustainable changes than just one individual alone. Other advantages are the flexibility and adaptability of the approach which can foster innovation and change in the long run. Disadvantages include the absence of scientific accuracy since the objectives of actionresearch highly depend on the specific situation and it is also criticized for the results being only focused on the practical objectives. This argument is based on the fact that this methodology is often used by unexperienced amateurs, which explains this lack. Nevertheless, it must be mentioned that this methodology can produce results with the same scientific accuracy and precision as any other research method, when the researcher is committed about precision (Moura, 2003, p.15). The present research can be considered an action-research since the research is conducted in the framework of a concrete action, namely the workshop about Solidarity Economy.

Another used methodology of investigation applied in this research is the case study. Case studies are usually performed with a focus on just one unity which can be an individual case or a multiple case where more studies are conducted at the same time with various individuals or organizations. Case studies are normally conducted through a qualitative research approach and allows individual researchers to study an aspect of a phenomena or problem profoundly and during a limited timeframe (Ventura, 2007, pp. 384-5). Some of the advantages of case studies are the flexibility of planning, the multiplicity of dimensions that can be discovered about the problem and the depth of analysis of the phenomena. Yet there are limitations, since the results of a case study can hardly be generalized as it is just a single case that could be atypical in comparison with other cases. Furthermore, the researcher needs to be involved with a lot of attention and caution, since she/he can run the risk of drawing wrong conclusions. Therefore, it is essential to test the reliability of the data, the categorization and the analysis. Moreover, it is also false to assume that the case study research is easy since it analyses only one or few cases. Case studies can be very complex and there is a need of a high level of severity for the planning, analysis and interpretation (Ventura, 2007, p.385).

Another method used is participant observation, in which the researcher participates in the community of the group being researched. The researcher becomes part of the group and participates with them in the planned activities. He/She needs to maintain her/his naturality despite sympathies or apathies towards certain people in the group that the researcher might experience while gaining the confidence of the group making the participants understand the objective of the research. Generally, there are two types of participant observation, i.e. natural and artificial. In the natural participant observation, the researcher belongs to the same group as the participants and in the artificial observation the researcher integrates in the group to obtain information (Marconi and Lakatos, 2002, pp. 90-1). In the present study, artificial participant observation is conducted, since the researcher is integrated in the class during the entire time of the game. The used tools are a research diary to take field notes during and after the workshop, and the contributions to the game. On the one hand, the aim of the participant observation is to obtain qualitative, hidden, non-verbal information in the form of specific behaviors, tone of voices, interactions between students, facial expressions. These observations are written down by the researcher and the teachers in order to record the quality of the student's contributions and their behavior during the game. On the other hand, participant observation can also include quantitative techniques of data collection. The participant observation is conducted by the researcher and three teachers that are not actively participating in the game but have a role of observers. The teachers and the researcher receive a guideline sheet with different questions that were asked to the students after each phase of the workshop (see Annex A). The sheet contains different questions about the observations and a scale to rate the contributions of the students, which ranges from one to five. In this quantitative data collection, one represents a low-quality contribution of the student that expresses a low level of understanding of the subject, while the five equals an excellent contribution that indicates a comprehensive understanding. Teachers and researcher evaluate each contribution with a cross next to the referring numbers on the scale. The cross indicates the quantity (number of crosses) as well as the quality (positions of the crosses) of the contributions of the students. Furthermore, the sheet also contains a section with general observations which can be filled in freely.

Another common research method are interviews. There are many forms of interviews, one of them are the semi-direct interviews, in which the researcher asks a sequence of open and guided questions. Another form is the focus interview, in which the researcher asks the participants questions about a certain event, in order to gain information about the impact of the event (Quivy and Campenhoudt, 1998, pp. 192-194). Interviews can be conducted with experts, researchers or lecturers from the field, the potential public or clients of the case study or privileged informants. The privileged informants already have relevant knowledge about the problem studied, due to their position, actions or responsibilities (Quivy and Campenhoudt ,1998, pp. 69-72). In the present research, focus interviews used along with one of the teachers, which is the privileged informant who can reveal additional information on the workshop and the perception of the students. Choosing the teacher as a privileged informant has the advantage that he/she already knows the students and can therefore evaluate the behavior of the students

more adequately. The teacher is not directly involved in the workshop and just takes the role of a passive observer.

Another method used is the questionnaire, which is an instrument involving a series of structured questions that are answered in a written from without the presence of the researcher. The researcher distributes the questionnaire to the participants and each participant fills out the required questions individually (Quivy and Campenhoudt, 1998, p. 98). Some of the advantages of this instrument include that a large number fast and precise answers can be obtained in relatively short time without the need for an assistant in the field. There is also more security for the participants since the questionnaire remains anonymous and less risk for the researcher to manipulate the received data. The disadvantages include the risk of any questions remaining unsewered, the participants can't be analphabets and the order of the questions can have an influence on the answers (Quivy and Campenhoudt, 1998, pp. 98-9). The questionnaire of this research provides qualitive and quantitative techniques of data collection. The questions asked in the questionnaire are both open and multiple-choice questions as well as questions where students can indicate feelings, perceptions, and motivation on a scale from one to ten. Furthermore, the questionnaire contains questions about personal conceptions and feelings about the workshop but also rational questions about the comprehension of the subjects and the abilities of critical reflection of the students. The questionnaire with all the questions about the different subjects is distributed to each student and the teachers after the workshop (see Annex B).

The case study will be conducted in the school of *Passos Manuel* in Lisbon, Portugal. The school is chosen because of the broad cultural and social background of the students. The workshop will be conducted with a class of the secondary education in a 10<sup>th</sup> grade. Since the game requires a certain degree of maturity and capacity to reflect critically about current societal issues, students with a higher age will participate in the game, ranging from 15-18 years. The sample size will be limited to 18 students and three teachers. The sample size is chosen as the game is designed in a way that everyone has the chance to contribute and participate, which would be difficult with an increasing number of participants. The timeframe for the workshop extends to 160 minutes. The workshop will take place at the 17 of July from 13:45 until 16:25 pm.

To reach the first objective, a participant observation of the students is conducted during the second round of the game. The participant observation includes the observance of the student's interactions and contributions during the game. When the second round is completed, the students are encouraged to reflect about the experience through several questions asked by the researcher. A quantitative technique is used to count the number and quality of the contributions which the teachers and the researcher rank through a cross on the sheet from one (excellent quality contribution) to five (very low-quality contribution). The cross indicates the quantity (number of crosses) as well as the quality (positions of the crosses) of the contributions. The interview with one of the teachers provides qualitative data of her observations and estimation on how well the students understood this economic model. A quantitative

method is used in the questionnaire with three multiple choice questions to verify how well the students managed to answer the questions about capitalist economy.

For the second specific goal, the same quantitative method of participant observation is applied. This method includes questions, that are posed after the first round of the game to make the students think and reflect about Solidarity Economy and its contributions to society. Furthermore, qualitative data is obtained through an interview with one of the teachers about his/ her observations and estimation on how well the students understood and reflected about Solidarity Economy. The questions on Solidarity Economy in the questionnaire include a quantitative method with three multiple choice and one qualitative method with an open question.

To reach the third specific objective, qualitative and quantitative techniques of data collection are used as well as the questionnaire and participant observation. In the questionnaire, there are three quantitative questions, where students can state their level of motivation, interest, and comprehension of the subject on a scale that extends from one to five. In the interview, a qualitative method is applied that askes the teacher about the effect of the experimental, creative and playful methods on the students. The participant observation is another method used to observe the student's engagement during the workshop. A qualitative method is utilized in the participant observation that includes the researchers and privileged informant observations, including facial expressions, tone of voices and the interactions between students. The fourth specific objective is also verified through various techniques. In the questionnaire exerts quantitative methods indicated by two multiple choice questions whether students felt motivated and empowered to contribute to the society or not. A qualitative method is applied with an open question on what they would contribute to society. This is accomplished with the qualitative method in form of an interview with the teacher, in which he/she estimates if the workshop contributed to the student's self-confidence and ability for change. Another qualitative method is adopted during the participant observation, in which the researcher and the teachers write down their general observations of the students.

The qualitative data analysis undergoes a cyclical process of reading, comparing and analyzing. The collected data from the field notes of the participant observation is read through several times with emphasis on content analysis of what was said by the participants. The researchers and the teacher's impressions field notes are analyzed. These fieldnotes can contain the researcher's and teacher's feelings, perception about the atmosphere and the mood during the workshop, participants' facial expressions and other subtle impressions. To facilitate the participant observation a guideline sheet is used by the teachers and the researcher to write down general observations and to evaluate the reflection questions that were asked to the students after each phase of the game. The results of the participant observations are laid down next to each other and the answers are compared. The results are written down on a concept sheet and interesting results that could be useful for the data analysis are then highlighted with a marker. The sheet

with all field notes, comparisons of the results and highlighted sections is used to interpret the results together with the results of the questionnaire and the interview.

To interpret the data empathic, the approach of *empathic interpretation* is used. Emphatic interpretation aims to deepen and expound the meaning of the data. Through empathic interpretation, the interpreter draws conclusions by paying attention to certain attributes and explaining the connections, links and patterns. By looking at the data from different perspectives and by focusing on the different aspects, a deeper understanding can be generated (Willing, 2014, p.138).

The interview is conducted with one teacher, the questions aim to explore specific angles, observations and interpretations of the teacher about the game. The interview is semi-structured and is recorded. After the recording the interview is transliterated as a text (see Annex C). This text is then printed, and the sections are highlighted that could be interesting for the interpretation. To interpret the questionnaire, quantitative interpretation methods is used. The different questions are written down on a new word document and the answers are counted. The multiple-choice questions contain each one question with five possible answers from which either three or two are correct. Each student has therefore two or three votes for each question. The emphasis lies on how many times students voted for certain answers of the multiple-choice questions about Solidarity Economy and the Capitalist Economy. Then, the number of right and wrong answers as well as the unanswered questions are summated to calculate the percentage. Furthermore, it is calculated how many and which percentage of the students voted for which answer. These results will be summarized in a table. The answers about the creative, playful, and experimental methods of learning as well as the answers about active citizenship and empowerment are structured differently. Each question is answered on a scale from one to five and each student had one vote to make her/his cross on a spot on the scale. The answers are counted as well as the percentages of how many students voted for which answer as well as percentages of the not answers are calculated. The answers of the open questions are summarized and divided to different subjects. The number of answers is counted and the percentage of students that voted for each answer is calculated (see Annex D).

The results of the questionnaire are structured according in that way and the most interesting and extraordinary results are highlighted and used together with the other results of the interview and the participant observation for the interpretation.

In the following section, the ethical considerations are outlined. First of all, all gathered data is anonymous, personal data such as names are not mentioned. Neither the field notes, the interview nor the questionnaire require personal data about the participants. A guideline with the conditions about the obtained information from the interview is written down in a document and is signed by the interviewee (see Annex E). Furthermore, the researcher always takes the risk of being influenced by biases. Not necessarily by biased interpretations but also by the inclusion and exclusion of certain data and by evaluating relevance of the data. Therefore, the data analysis section will contain a paragraph in which the researcher reflects about biases that might have influenced the result.

#### 6.3. Game development

The game is developed in conformity with the associated concepts of the theoretical framework. In this section, the process of the game development will be explained as well as how the different concepts are incorporated.

In order to start the process of game development, a list with the important concepts was comprised for keeping an overview on the topics that should be integrated in the game. Furthermore, the analytical framework with the four objectives was printed and acknowledged as a guideline. After that, all the ideas about the game were written on a paper. In order to organize these ideas, a mind-map was created, in which the different ideas were connected with lines. Various mind-maps were created, and the best ideas of all mind maps were then selected and written down on paper as bullet points. On one paper, bullet points that outlined all the main features of the game including the general rules, event cards, the points, the establishments, currencies, and the playing field were written down. These features were then written down on separate papers and divided by the different main features. Therefore, each paper was related to a certain feature of the game, so for example, there was one paper about general rules of the game, one about the event cards, the points, and the playing field. In this process, new ideas that came up were also integrated. These notes were adapted several times, revising the ideas, integrating new ideas and deleting others. Afterwards all the handwritten sheets with the features of the game were digitally transmitted with the program Word. After all sheets with the handwritten notes were transferred and the game was considered coherent, the designs for the game were made. All designs were self-drawn by using a digital drawing app called *Procreate*. First, the playing field was designed, then the establishments, the players, the points, and lastly the cards. For the establishments and the cards, the program InDesign was used to compile the designs with the text written down in word. Afterwards, all components were printed on paper in size A4 and cut by hand if necessary and the playing field was printed in A0. The players, the playing field and the cards were printed once, and each point was printed 30 times. When the game was composed and finished, the reflective questions and the questionnaire for the students and teachers were developed in greater detail. As already described in the previous chapter, the questionnaire orients according to the four specific objectives and aims to evaluate the level of comprehension of the subjects, the evaluation of the teaching methods, the opinions of the students and ideas for improvements.

#### 6.3.1. **Rules**

The game is designed for a total of six players. Since the game is conducted with 18 students, they need to be divided into six teams with each three students. Each team gets a card which represents a certain player with different characteristics (see Annex F). Each character represents a different person with certain privileges, conditions and social and cultural backgrounds which determines the possibilities and limitations during the game. Besides the card with information about the character, they also get a separate illustration with the physical appearance of each player (see Annex G), which is then

located on the playing field. Each physical character wears clothes with a certain color representing the color of the team. The character advances in the playing field according to the number that is indicated by the dice.

The game is divided in two phases, in which the first represents the current conditions of the neoliberalistic, capitalistic economy and the second one represents the conditions and possibilities of a solidarity economy. The game aims to showcase the differences between the capitalistic and solidarity economy as well as the effects on the planet and society. The first phase represents the capitalistic economic system, in which the goal of the game is to gain as much money as possible and the gain most *exclusive points* (the different points will be explained in the next paragraph). The first phase finishes when the first player finishes the second round on the field or when 30-40 minutes are over. Afterwards, all teams count their money and their exclusive points, and the team with the highest number of exclusive points and money wins the first round. In the second phase the teams keep the characters, the establishments and the points gained in the first round. Furthermore, in the beginning of the second round, the students are asked if they would change something about the game to make it more sustainable, fair and solidarity based. The students' opinions are acknowledged and integrated if possible. In general, the second round aims to construct a society that is in concordance with solidarity economy. In this phase, the goal is to gain as many *solidarity points* as possible and to plant as many natural resources as possible. The second phase finishes when the first player finishes the second round on the field or after 30-40 minutes. The team with the highest amount of solidarity points wins the second round. The goals and the rules are explained in greater detail in Annex H (in Portuguese).

#### 6.3.2. Main features

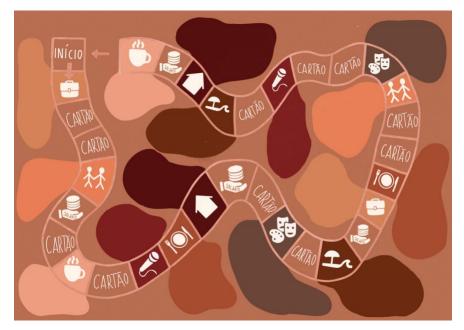
During the game the players gain different points through the decisions they make. All the points are physically distributed to the team gaining the points during the game (see Annex I). One team member saves and manages the points.

In the first phase it is especially important to gain so-called *exclusive points* (*pt. exclusivo*), that can be gained if players conduct activities that are exclusive and expensive. These points represent the excess of consumption and luxury that the capitalist economy incentivizes. Nevertheless, many of these exclusive activities cause some kind of environmental harm that is represented through *waste points* (*pt. lixo*) that are represented by waste illustrations that the players don't keep for themselves but distribute on the field. This aims to showcase that the exclusive points benefit only certain individuals but the environmental harm, which is caused by their behavior, and influences the whole society. Furthermore, the waste does not only represent the physical waste which the economic activity causes but also of economic activity that is not sustainable and is causing ecological problems such as any form of pollution and destruction of the environment. Furthermore, there are the different *solidarity points* that can be earned through several economic activities that are based on the values of solidarity. The solidarity points represent the values of Solidarity Economy described in chapter 1.3. The solidarity

points consist of the following seven points: The first type of solidarity points are the *community points* (*pt. comunidade*). These can be obtained if the team improves the general life for the community and contributes to better solidarity and respect for different cultures and sexual orientations. Moreover, *cooperation points* (*pt. cooperação*) can be gained if the team contributes to mutual help, networks between people in society but also within and between organizations. *Self-governmental points* (*pt. auto-governação*) can be obtained by players contributing to less hierarchies, equal participation, self-determination, and democratization of institutions. Furthermore, players can collect *local points* (*pt. local*) if the production is done with local resources and decisions are taken as locally as possible. *Commons points* (*pt. uso comum*) are won if goods (the commons) are produced, used, or managed by the community and are not subject to private ownership. *Care points* (*pt. cuidados*) are obtained for activities that are essential to conserve and maintain life such as care work for the elderly or sick, childcare, or domestic activities that are equally valued as production activities.

Moreover, *ecological points (pt. ecológicos)* can be earned through the prudence in the use of materials, energy, water and land, and their integration into regional cycles in order to maintain a harmonious ecosystem. Ecological points also represent awareness of the dependence of humans on nature. The special feature of the ecological points is that in the second phase (Solidarity Economy phase) the players can exchange one waste point from the field for one ecological point. Only after all the waste points are removed from the field, the players can use their ecological points to plant trees, flower beets, grasslands, bushes and even create lakes and rivers on the field, visible for all players. One ecological point, they can build a lake or a river on the field. When exchanging the ecological points for new natural resources (placed on the field) the group obtains double the amount of initially handed in ecological points for this specific move. Thus, with gaining additional ecological points the students are encouraged to plant natural resources. Nevertheless, planting resources is only possible after players removed all waste points on the playing field beforehand. In order to remove one waste point, the teams have to give up one ecological point without any reward.

Therefore, this part of the game should incentivize the players to work together as a community to remove the waste, even though they have to give up their ecological points. Only if the community works together to remove the waste it is possible to plant the natural resources (see Annex J). That means that the players have to first make a sacrifice when they exchange their ecological points to remove waste, but after they succeeded to remove all the waste points, they receive double the amount of ecological points when they plant new natural resources.



(FIGURE 1.6. illustration of playing field, own graphic)

The playing field that is illustrated in *figure 2*, that consists of the path players follow. Players roll the dice in order to advance the number of fields indicated by the dice. The playing field generally consists of three different features. Those are: the *salary symbol (pt. salário)*, the *symbols to create establishments* like the microphone and the house symbol and *event cards (pt.cartão)*. These three features will be explained in the following paragraph.

On the playing field are eight different symbols that bear the opportunity to create certain establishments, that can provide the players with money and points. The symbols that represent the different categories of establishments are the *suitcase* (=work), two people holding hands (=social), coffee (=cafés and shops), microphone (=entertainment), house (=housing), masks and paint (=culture), beach (=tourism), plate (=food). Each time a team stops at on one of those fields, they have the possibility to create an establishment which is related to each field. In the beginning of the game each team receives a table providing them with an overview on the establishments they can create in each category (see Annex K). Each team can discuss which establishment they want to build within their financial possibilities and based on points and money they can earn through it. The table which explains the establishments and showcases all construction possibilities with the respective construction costs and the points or money players can earn with the establishment. If a team chooses to build an establishment on the field there are at, they have to pay a certain amount of money and can get the associated points in return. Furthermore, they have to place an establishment card on the field they are at with a point of the teams' color to indicate to which team the establishment belongs to (see Annex L). If a team does not want to establish anything due to lack of financial means or other reasons, they have the choice to refuse and not to build anything. Every time someone passes on a field where another team has already built an establishment, the teams must look up the implications indicated by the table of establishments (see Annex K). Players either might have to pay money to the owner or even gain extra points, recued utilization fee or some kind of other community benefit if the establishment is related to the Solidarity Economy.

The establishments are divided into solidarity-based and capitalistic establishments. For example, if someone passes on the field with the *symbol food*, one can decide between establishing a *five-star restaurant*, a local vegan/vegetarian restaurant, a community garden or a food crop. On the one hand, the *five-star restaurant* is the most expensive to establish and bears most exclusive points and generates most money when another player passes on the field. On the other hand, it causes waste and has no benefit for the community and therefore does not generate solidarity points. Whereas the other three options bear more solidarity points and are cheaper to establish. The local vegan/vegetarian restaurant bears local and ecological points because it operates with local and sustainable sources and the *community garden* or the *food corps* provide community, ecological or cooperation points. These establishments bear solidarity-points since they are beneficial for the whole community as all players can take advantage of these kinds of community establishments. In this case, players can substitute supermarket shopping (can appear in the event cards) through the cheaper alternatives of the community garden or the food crops.

When a player stops at the *salary symbol*, the team receives their salary minus taxes. Salary and taxes are defined depending on the business or association that a team owns.

In the first round, each player has to stop at the field with the symbol work (pt. trabalho) and can choose from five different options for work. Each of these possibilities cost a certain amount of money and bear different amounts of points, a certain salary and tax. Each team can establish a certain association or company based on their initial capital and preferences. There is the possibility to establish an environmental or social association or a multinational, or a small or medium sized company. In the game, it is only possible to create an own association, or a company while it is not possible to be employed. This is due to the fact that a certain degree of simplicity has to be maintained to make the game easy to understand and to apply for students of the targeted age. Furthermore, some of the event cards include personal decisions others business decisions. The business decisions can have an effect on the whole community since they can imply resource allocation, investments, waste disposal, publicity and decision making within the association or business. Some fields indicate *card (pt. cartão)* meaning that a player needs to draw a card. These cards indicate different events, either be positive or negative, that can affect only one player, or all the players involved in the game (see Annex M). Some of those cards showcase regular life events such as "you have to pay the electricity bill" or "you have to go to work". If a player draws one of those cards, the team must decide about the various options. The team usually has different possibilities from which some options are solidarity-based and others are capitalistic. For the electricity bill for example, the teams can choose to obtain their electricity from fossil fuels, ecological energy or they can buy a solar panel. Each choice is related to a certain price and points the team can earn. Some cards have no options to choose from and have the same effect on each player. Examples are the holiday pay card or the card that indicates that the player lost an important client and will not receive the next salary. Some of these cards can be related to choices concerning their association or business, such as choices related to marketing or social projects, decision-making within the association or business, waste disposal and the way resources are obtained and applied. Further, there are cards, that make the teams receive or lose money depending on their association or business type. The multinational company for example earns a lot with the promotion (event card) but also runs the risk to lose the most money if business is not going well (event card), whereas the ecological association earns much less than the multinational company when they receive a promotion but also runs a lower risk of losing money if the association is not going well.

There are two cards that effect all players in the game. An example is the economic crisis card, which makes all players lose money. Nevertheless, the consequences of the economic crisis have different effects on society. The richest player only loses 5 %, the two of the middle class lose 70 % and the poorest lose 50 % of the money they are having at that moment. This dynamic aim to showcase the effect of an economic crisis on the different social classes.

Furthermore, the cards are designed in a way that certain solidarity establishments, for example, the community garden, the community- medical center, day nursery and nursery home can lower the negative impact some event cards can have on the players. Through these establishments, players are able to use those services for much less money than the conventional supermarkets, medical and care giving services from the capitalist market. With the solidarity establishments such as the community medical center, the players have the opportunity to take advantage of this cheaper, community-based establishment when they draw a card such as "you are having an accident and you need an operation". This is especially important for players that have few financial resources and are not able to purchase the general insurance or to pay the bill of a conventional medical treatment.

Throughout the game, one member of each team must track the money earned and used. In the beginning of the game, each team is handed out a sheet with three columns for the accountability of each team. One with the establishments, in which the team can keep track of their establishments, one with the salary and one with the total sum of money, so that the students can keep track of their money and establishments (see Annex N).

In the second round, the game bears two different currencies. One is the international currency (*pt. moeda international, MI*) and the other is the community currency (*pt. moeda comunitária, MC*). In the first phase, the capitalistic round, there is only the international currency. In the second solidarity-based round both types of currencies are integrated. Therefore, the sheet with the columns gets complement by another column that counts the community currency in the second round (see Annex M). As in the first phase, the international currency can be used in international and in the local establishments. In the second phase, if players opt for the local currency, they can only use this currency in local establishments but not in international establishments. In that phase, players have the possibility to change all or part of their money into local currency at the beginning of each round. During the round no player can

exchange their money to another currency. The salary can either be paid in local or international currency. The benefits for the players that change their entire monetary resources into local currency is that they don't have to pay international establishments, even when they need to stop on a field with an international establishment. Furthermore, an economic crisis will only effect wealth in international currency and not local currency.

#### 6.3.3. Integration of the theoretical framework

The game was developed under the consideration of the theoretical framework with the emphasis on Solidarity Economy, empowerment, citizenship as well as education and pedagogy. This section outlines how the theoretical framework was integrated in the game.

Solidarity Economy is the central aspect of the game. All the values of Solidarity Economy outlined in chapter 1.3 are practically integrated in the game in form on the solidarity points that the players can earn. The solidarity points were explained in greater detail in the previous chapter. Furthermore, the points are explained in the sheet that addresses the general rules and is handed in to the students in the beginning of the game (see Annex H).

The following dimensions of Solidarity Economy are also included:

The economic dimension is integrated in the game through the various ways for solidarity-based consumption. Through the event cards, the teams have the opportunity to opt for various capitalistic as well as solidarity-based consumption, production, investment and currency choices. In terms of consumption, the teams have the choice to take the car or the bicycle as a means of transport or to repair broken items instead of purchasing new items for replacing old items.

The solidarity-based production of goods and services is, on one hand, represented through the various options provided by the event cards which includes for example the decision about obtaining resources for the production from the same continent or country. On the other hand, the production can also be based on profit-maximization and cost minimization and externalization of costs, through cheap purchase of resources from other continents and waste shipping to other countries.

Capitalist investment options are also offered as investments in the stock market or in marketing projects. Moreover, solidarity investment options are also available as the investment in an awareness project of a social or environmental issue or to donate to a social or environmental organization. Furthermore, the game offers the opportunity to establish capitalist consumption establishments that are focused on gaining money and solidarity points. These are for example the haute-couture or the fast fashion shop, the 5-star hotel, the Airbnb, the fashion week, or the opera. But there are also solidarity-based establishments for sustainable consumption, such as the free shop, repair café, the community garden or the secondhand shop. These aim to reverse the capitalist logic as already mentioned in chapter one, so that "the practice of buying can be replaced with borrowing and giving away what is no longer needed while the practice of consumption can be replaced with "pro-sumption", where the end users are involved in the process of creation and production. Through this practice, capitalist economy can

gradually be deconstructed and transformed into more solidarity forms of economy" (Ronge, 2016, pp.18-21). Moreover, the purchasing of a solidarity-based establishment can be seen as a solidarity investment for oneself, the community and the environment.

Besides the international currency, that can be used in the international market, there is also the community currency, that can be used in the second round. A facet of the economic dimension of solidarity economy in the game, are the community currencies that can be applied in the second round of the game. The teams are informed about the main features and benefits of the community currency (moeda comunitária MC) used in the game and they can find a brief description about community currencies in the sheet with the general rules about the game. With the integration of the community currency, players can learn about the mechanisms and general idea of community currencies explained in chapter 1.4. Through the integration of the community currency in the game, players can experience that an increasing amount of circulating community currency can foster the local economy represented by the local establishments. This mechanism aims to show that the community currency can stimulate and improve the local economy and can therefore increase the positive impact on the community and the environment. Furthermore, the solidarity-based establishments also increase social benefits and help the most vulnerable and poor players of the game. The environmental aspect becomes visible through the increasing use of local and solidarity-based establishments that encourage the plantation of natural resources and decreases the amount of waste. Furthermore, the social dimension is included in the first round, as inequalities are deliberately created with the initial cards that determine the possibilities and limitations of the players. These inequalities reflect the disparities that people with different backgrounds face in a capitalist society. Those include for example the initial capital that the individual has saved or that was inherited from the family. Furthermore, players with an immigrant background gain 20 percent less, woman earn 20 percent less as men and some players gain 20 percent less for taking care of their children. Since 70 percent of unpaid care work is done by woman, most of the care work in the game was also distributed to the women. In order to avoid stereotypes, the names of the players are chosen as universal as possible, such that none of the names could be associated to a certain country (see Annex F). Furthermore, the teams have to draw a separate card that represents a physical appearance of the player (see Annex G) that is independent form the card that determines the predispositions.

The capitalist establishments that can be established within the social field are characterized by the privatization and exclusiveness of social services, such as the exclusive care facilities or the purchase of a general insurance. These capitalistic establishments exhibit a high price and don't contribute to inclusion and social equality.

The social dimension of solidarity economy concerning inclusion, equality and alleviation of poverty is integrated through the several establishments such as the social association, the community nursery of young and old people and the medical center, the multicultural cinema, the community center, multicultural festival, the community garden, the food corps, the community kitchen, the co-living house, the eco-village as well as the solidarity shops such as the free shop, lending shop, secondhand

shop and the repair café. All these establishments aim to fight poverty through the inclusion of socially disadvantaged players, since many of these establishments can be used for free or for a very low fee. Moreover, the problem concerning unpaid care work gets alleviated through the establishment of the community nursery home for elderly and kids. The community nurseries are organized through independent nurses or educators as well as voluntaries of the community including parent volunteers that take turns with the childcare work. With the establishment of a community nursery the players are able to get help form the community nursery if they can't afford an exclusive nursery or if they don't want to earn 20 percent less for having to do care work. Furthermore, the community medical center is organized by independent doctors and nurses, medicine students and voluntaries to bear an alternative for players who can't afford to pay the doctors bill or to pay a costly insurance. Alternative projects concerning housing for less privileged players are the co-living and the ecovillage housing options. Those are cheaper and less resource intensive options in comparison to the private house or villa.

The cultural dimension is included in various aspects, for example, in form of capitalist cultural establishments, which include the international and expensive establishments such as the museum, the opera, the fashion week or the rooftop bar. Whereas the cultural dimension of Solidarity Economy includes the establishments that foster the inclusion, integration, and appreciation of different cultures. These establishments are, for example, the multicultural cinema, the community center, the multicultural festival and the community cooking classes. These establishments aim to improve cohesion and integration in the community, where different cultures are integrated, and marginalized cultures can gain visibility. Through events such as the multicultural festival or cinema, the community can get in touch with different cultures and in the cooking classes or in the community center they can come together to interact with each other and build friendships.

The environmental dimension of Solidarity Economy is also integrated in the game. In order to contrast the Solidarity Economy establishments, capitalist options can also be established. Those include the multinational company, the fast fashion, the haute-couture, the 5-star restaurant or hotel such as the private villa or house need vast amounts of resources, in terms of energy, food and space. The event cards also exhibit capitalist options, players can, for example, opt for cheaper energy gained from fossil fuels or more convenient travelling options such as the car or long-distance travels with the plane. This excessive need for resources could have been reduced by sharing them with the community through the solidarity-economy establishments. The environmental dimension of a Solidarity Economy is represented through the event cards, in which the players have the possibility to opt for renewable energies. For transportation, the players always have the possibility to opt for ecological options of transport, such as public transport or the bicycle. When taking holidays, the players can choose to take the train or the bicycle to a nearby destination. For the associations or businesses that produce waste, the teams have the possibility to recycle locally, instead of transporting waste to another country.

There are also several options for ecological establishments such as the ecological association, the community garden, the food corps, the eco-tourism, or the ecological village. Also, the establishments such as the repair café, the free and the lending shop as well as the secondhand shop belong to the ecological dimension since resources are shared and reused instead of newly produced. Moreover, all establishments that are considered local contribute to the ecological dimension, since long distance travels are avoided. Further, the territorial dimension is incorporated in the game. The capitalistic establishments of the game are mainly focused on the international market and are classified as international establishments and often not associated with the territorial development. Whereas in the Solidarity Economy, the territorial dimension is a central aspect and is highlighted through the importance of the local community and the local development of the region in the second part of the game. All local establishments are part of the territorial dimension of Solidarity Economy. Furthermore, the community currency is also contributing to improve local development through the favorability of local establishments. The event cards also bear the possibility to enhance local development, through locally favorable decisions, such as whether resources should be obtained from the same city, continent or from another continent.

The management dimension is integrated within the associations or businesses of the players, the teams have to make management decisions when drawing certain event cards. For example, some event cards request players to take decisions concerning investments of projects such as marketing or awareness projects, resource input, profit investment and decision taking within the association or business. Furthermore, management decisions are also taken within each team, that include the management of money and the gained points. The teams always have the opportunity to take management decisions towards more solidarity-friendly or more capitalistic options.

The knowledge dimension is included, since the game itself can be considered the knowledge dimension, as it requires a constant process of learning and reconstruction. On the one hand, the participants learn about the different aspects of Solidarity Economy and the Capitalist Economy through the game. On the other hand, their input, feedback and reaction towards the game determine the adjustments and changes that the game will undergo.

The political dimension is reflected by the different internal and external structures of the associations and the businesses. The internal political dimension is integrated through the degree of participation and democratization of the decision-making process within the institutions. Certain event bear the possibility to determine the degree of participation and democratization. One example is the event card that leaves the option for the players to make the decision about their association or business in plenum or alone. Another event card is about how donations or profits should be used, that include the possibility to keep everything or to discuss in plenum how to use or invest the donations or profits.

The external political dimension is addressed through the responsibility of the business or association to tackle social, environmental or other societal problems of the local communities. The associations of the game are aiming to tackle social and environmental problems of the community. The small and medium businesses may solve economic problems of the community, since they bear job opportunities for the local population. Furthermore, the associations and businesses can always make decisions within the scope of the event cards that can tackle the problems of the local society. Some examples are decisions about waste disposal, the use of material and human resources, and social and environmental projects.

Empowerment is also an important aspect of the game. As defined in the specific research goal number four, the game also aims to empower the players to become active citizens and to make them feel like they can make a difference in the world. Regarding the power concept, the conceptions *power with* and *power to* are integrated. *Power with* is integrated through the decision-making process within each group, since many decisions need to be taken within each team during the game. Solidarity and mutual support, that are also part of *power with* are fostered in the second round of the game and through the solidarity points and the common efforts to remove waste to plant trees. *Power to* is integrated since players have the power to transform the lives of their characters and the community within the game. For example, players are able to build and participate in the solidarity-based establishments, even with few monetary resources.

Concerning the dimensions of empowerment, the dimension of *individual empowerment* and the *empowerment of groups* are addressed throughout the game. The game aims to develop the self-confidence of the players so that they are able to understand the power structures of society and to act against oppression and inequalities. Furthermore, the empowerment of groups should be fostered through the teamwork within the groups. The discussions and the decision-making in the teams aim to encourage negotiation skills and the confidence of the students in taking democratic decisions, without the need for a teacher or mediator. Moreover, the game showcases the process of *structural empowerment* and *community development* which is imitated through the game. Through the transition towards a more solidarity-based society within the game, unfair power structures are reduced, and collective action is taken and the participation of more marginalized subjects of the society is improved. The game encourages a reflection on how structural changes can be achieved within a society and aims to inspire the players to work towards such a structural empowerment in their real lives.

Concerning the process of empowerment, the students aim to undergo the *era of entry*, in which they are encouraged to understand the unfair power structures in the capitalist society and experiment with their participation and political engagement. Furthermore, the game also fosters the students in the *era of advancement*, in which critical reflection and participation expands and *conscientization* grows. In addition, praxis including the spiral of critical reflection is encouraged in the game through the regular reflections after each round and the questionnaire at the end of the game.

Citizenship is a crucial element of the game, since the game is constructed in order to encourage *power with* and *power to* to incentivize individual and collective resources to makes changes. It also encourages the students to *act as citizens* within the scope of the game and to become active advocates for common good of the community. The game further aims to include the students in important

decision-making processes and to encourage participation throughout the game. The players can create opportunities for engagement and participation in the community through the establishment of solidarity-based establishments. These establishments foster the integration or the marginalized people in society and therefore also contribute to community development in the scope of local citizenship. Through the solidarity-based establishments, such as the social association or the community center, disadvantaged people can be integrated, and their citizenship rights can be extended through mutual help and participation in the community. These dynamics of the game aim to sensitize and encourage the students to engage in their own communities, thus encourage local citizenship and act as active citizens.

Education is another important aspect of the game, since it should encourage and foster education especially in the areas of Solidarity Economy, empowerment and active citizenship. Furthermore, the game is conducted in a school, therefore in an educational environment. Nevertheless, are the methods and subjects of the game are not connected to the *formal education*. It is rather operating in the realm of *socialization* and *subjectification*. The game aims to question the student's socialization and subjectification in the area of economic and social norms, that are transmitted by western, capitalistic society and its values. The solidarity-based establishments of the game create new forms of interacting and organizing economic activities, for example by repair cafes or free shops, that aim to question those norms and values. The second phase of the game shows the shift from the monetary-based value system represented by the possession of money and exclusive points towards solidarity-based values represented by the solidarity points. This shift of values aims to show the students what kind of society could be possible if this kind of shift in values takes place.

The kind of pedagogy integrated in the game can be seen as a *progressive* form of pedagogy. The game aims to integrate a holistic approach in which students are involved in the process of knowledge creation. They are included in the game not only to test and play but also to construct and to evaluate the game. The students have the possibility to reflect after each phase and articulate what they would change. Furthermore, the students have the possibility to evaluate the whole game after the second phase through a questionnaire. The answers of the questionnaire are fundamental for the changes and adjustments the game undergoes.

Furthermore, the cycle of experimental learning by Kolb is a fundamental facet of the game. The cycle starts with the *concrete experience*, which is the experience of playing the first round of the game. Afterwards follows the *reflective observation* phase, which starts after the first round and includes questions for the students. These questions aim to encourage the students to put their experiences and observations of the game into words. The students should reflect about whether the first round contributed to a solidarity behavior among the players or to a more egoistic behavior. After the students are guided towards interpretation and theorization of the observations. In this phase students are asked questions that aim to relate the experience with the real world and encourage a reflection about capitalistic economy. Subsequently, the students are asked what they would change in order to make the

round more solidarity-based, just and sustainable. In this phase, the whole class enters the phase of *active experimentation* which includes the possibility to think about which suggestions for change should be integrated in the next round.

Thereafter the suggestions are integrated, and the second round begins. The cycle of experimental learning starts again with a new *concrete experience* of the second, solidarity-based phase. After the experience students enter the *reflective observation* and are asked to describe the experience and to compare the level of solidarity, sustainability and equality to the previous experience of the first round. Accordingly, they are encouraged to conceptualize their experience and to reflect about Solidarity Economy in the phase of *abstract conceptualization*. Furthermore, they are once again asked if they would change something to make the game more sustainable, fair and solidarity-based. These questions that are conducted during the game and that are evaluated by the researcher and the teacher can be found in Annex A.

Creative learning is integrated in the game through *possibility thinking* and *problem solving*. Especially the last question of the critical reflection phase encouraged the students to think what could change about the first and second phase of the game in order to make it more sustainable, fair and solidarity based. Furthermore, they may apply problem solving in different situations within the game, for example, when thinking about how to take advantage of the solidarity options when facing difficult financial situations. The researcher also encourages the creative learning experience since spatial or temporal changes take place throughout the game. The usual learning atmosphere is modified, since the tables are located in a different way, the students are sitting on top of the tables in order to see the playing field and the temporal frame of a usual class is also extended.

Playful learning is essential for the game since the game encourages the learning process in a playful manner. In order to combine the playful experience with the learning aspect, the game involves an observation and critical reflection, as described in the previous chapter. Furthermore, the collaboration aspect of playful learning was integrated through the teamwork within the groups during the game.

The school system in Portugal is taken into consideration since the central topics of the curriculum subject development and citizenship were integrated in the game. These topics include gender equality, interculturality, sustainable development, environmental education and health, democratic participation, and education for consumption. The topic of gender equality is addressed through the initial cards of the characters, in which woman generally earn less than men in our capitalistic society. These cards including the initial inequalities and should encourage the students to think about gender equality and what can be done to combat those and how solidarity-based establishments and decisions can make a contribution. Interculturality is addressed through the inclusive cultural establishments such as the multicultural cinema, festival, cooking class or the community center. Sustainable development and environmental education are fostered through environmentally friendly establishments such as the ecological association, the community garden, the food corps, eco-tourism, or the ecological village.

options for sustainable and solidarity consumption, such as the free-, second-hand- and landing-shops as well as the repair café. Moreover, democratic participation is fostered through the decision-making within the teams.

## CHAPTER 7 Data Analysis

#### 7.1. **Interpretation of the results**

This chapter highlights the results obtained from the gathered data of the workshop. Furthermore, it aims to describe and analyze the collected data. Therefore, the data analysis is divided by subjects that are related to the specific research goals. The foundation for this analysis is the data gathered through participant observation conducted by the researcher and the privileged informants, the interview with a teacher as well as the results of the questionnaire. The obtained data is used to verify the student's level of comprehension and reflection about the subjects the gamed aims to teach.

The first subject that will be explored is the capitalist economic system, that is represented in the game through the first phase and is related to the first specific research goal. In order to evaluate how well the first specific objective was reached, the data obtained from the questionnaire, the participant observation as well as the interview will be described and analyzed. The questionnaire includes three different questions on critical reflection and comprehension of the capitalist economy. The three questions about the capitalist economy is comprised of three multiple choice questions, in which the students should identify: 1. Main characteristics; 2. Main establishments; and 3. Problems associated with the capitalist economy that are represented in the first phase of the game.

The participant observation data consists of the teacher's and researcher's field notes as well as the information obtained from the sheet in which they counted and ranked the answers of the students. Four reflective questions were asked to the students that implies: 1. If the first round of the game contributed to mutual help and solidarity or egoistic behavior between the students; 2. Whether the phase of the game is similar to our society and economy; 3. Whether they know how that form of economy is called; and 4. What they would change about this phase in order to make the game more just, solidarity-based and sustainable. The teacher was asked whether she thinks that the students understood the game and if it encouraged critical reflection. Generally, the students had no or only a little previous knowledge about different forms of economy, including the capitalist economy. This was revealed in the critical reflection phase about the capitalistic economy, where the students were asked what type of economy our society is embedded in at the moment. The students hesitated with the answers and only a few and low-quality contributions were made. The facial expressions of the students were not familiar with the term capitalist economy and also didn't associate it with the first phase of the game.

Between 60-70 % of the answers about the problems and the establishments of the capitalist economy were correct, whereas only 52,63 % of the answers concerning the characteristics of the capitalist economy were correct. Furthermore, the quote of unanswered questions about the characteristics was also the highest with 31,58 %. Therefore, it can be said that it was easier for the students to identify the problems and the establishments, while the characteristics were not clear to the students. Most of the students understood that the main characteristics of the capitalist economy,

especially competition and the accumulation of private wealth. Nevertheless, more students voted for the accumulation of private wealth than competition. In the critical reflection phase, some students also highlighted that this economic system contributes to egoistic behavior. This was revealed through the participant observation in which two or three students highlighted that the capitalist round of the game contributed to a more egoistic, rather than to a solidarity-based behavior between the teams. That shows that there is a basic awareness about the egoistic and therefore competitive nature of the capitalist economy represented by the first round.

Another particularity about the characteristics is that only 36,84 % of students identified "maintaining hierarchies" as part of the capitalist economy. This difficulty to identify the hierarchies probably exists because the hierarchies within the establishments of the capitalist economy were not clearly expressed by the game.

Moreover, the same number of students also erroneously identified cultural assts as capitalistic. This confusion could be attributed to some of the cultural assets, that can be considered capitalistic such as the expensive international opera or the international museum.

Furthermore, it became clear to most students that the capitalist economy did not aim to take care of the environment, since only 10,52 % identified taking care of the environment as capitalistic. Therefore, most students, 84,21 %, pointed out pollution as a problem of the capitalist economy. This awareness about the capitalist economy and the problem of pollution was also confirmed by the critical reflection phase. In that reflection, three or four students made contributions regarding the question whether the game is similar to our today's society. The students mostly referred to similarities concerning environmental issues and pollution, which indicates that students are especially aware that pollution is a problem caused by the capitalist economy. Consequently, it can be said that it was very clear to the students that the capitalist economy contributes to pollution and ecological problems.

Almost the majority of the students was able to distinguish the capitalist economy establishments. Especially the multinational company was clearly identified by 89,47 % of the students, whereas less than half of the students managed to identify the fast fashion as capitalistic. Therefore, it was much clearer to the students that the multinational company was a part of the capitalist economy than the fast fashion establishment

The students identified most problems specified in the questionnaire, especially about pollution and of social injustice. Nevertheless, when looking at the questionnaire it was less clear for the students that individualization and weak communities is considered a problem, since only 42,11 % pointed out that specific problem. It can be concluded that this problem was not depicted clearly enough by the game.

Nonetheless, students had ideas on how to tackle these problems. This got clear by the critical reflection questions after the first phase, in which the students were asked what they would change in order to make the first phase of the game more sustainable, fair and solidarity based. The teachers and the researcher ranked the contributions that were made as good and very good. Nevertheless, all those three contributions came from the same student, which also shows that few students were able to

understand these problems and to contribute with improvements and suggestions. The suggestions from the student included that: the initial capital should be equal with 10 000 Euros for each player; that players should pay 100 MC/MI extra if they produce waste; and that players should be able to "buy" waste in order to take it away from the playing field and recycle it. After a discussion with the fellow students, they agreed to integrate these three new, more-solidarity based rules in the next round. This shows that the student who made the contributions was able to address the problem of initial inequalities and pollution as well as finding solutions how to tackle it.

The interview revealed that the teacher thinks that the game contributed to a critical reflection and increased understanding about the economy and society (Teacher A, 2021, p.101). The participant observation also showed that the students became more confident with the game and the economic terms as the game advanced. This can be confirmed by the questionnaire that was conducted at the very end of the workshop. In general, it can be said that the students improved their knowledge about the capitalist economy. After the first round most students didn't know what the capitalist economy was but after the game in the questionnaire the majority of students could identify the characteristics, establishments and main problems of the capitalist economy, that were answered by the students through the identification of the problems and the suggestions for improvement of the first phase. Therefore, the first specific research goal, which aims to increase knowledge and critical reflection about the capitalist economy can be considered fulfilled. Nevertheless, the game needs to undergo adjustments in order to improve the results and enhance the learning experience and critical reflection.

The second topic that was elaborated is the main topic of thesis, Solidarity Economy. The topic of Solidarity Economy is represented by the second phase of the game which aims to fulfill the second specific research goal. To make sure how well Solidarity Economy is understood, the questionnaire, a participant observation and an interview were conducted. The questionnaire included four questions about solidarity economy, three of them being multiple choice questions, in which students should identify: 1. The values; 2. Purpose; and the 3. Establishments of Solidarity Economy. Another open question was added to the questionnaire which encouraged to reflect about if and what solidarity economy could change in society. Moreover, the participant observation included questions that should encourage critical reflection about 1. If the second round of the game solved problems concerning sustainability, equality and solidarity from the first round 2. If the changes in society could be more easily achieved alone or in community; 3. If they know how other forms of economy and which economy this round of the game represents; and 4. What they would change about this phase in order to make the game more just, solidarity-based and sustainable.

Furthermore, there was an interview conducted with the teacher asking whether the game contributed to an understanding and reflection about Solidarity Economy.

In the beginning of the game, the students had no previous knowledge about Solidarity Economy. The participant observation confirmed this as the students were asked if they can mention other forms of economy and if they know what kind of economy the second phase of the game represents. The students hesitated to give answers and just made few contributions that showed that they were unsure about what answers to give and what different forms of economy exist. The students whispered to each other to discuss ideas, but no one answered the question correctly.

To verify how well Solidarity Economy was understood this paragraph will analyze the understanding and reflection of the students towards the values of Solidarity Economy.

More than half, more precisely, 63,16 % of the answers about the values of Solidarity Economy in the questionnaire were correct. The value of cooperation was most clearly selected by the students as well as the value of ecological awareness, which got identified by more than half of the students, m that these two values were the clearest transmitted by the game.

Furthermore, the students understood the importance of community when considering the results of the participant observation about the question whether changes could be more easily implemented by the community or alone. The students that made contributions agreed that that profound and long-term changes are rather achieved through community action than alone. Although the community was considered important in making changes, the value of communing was only identified by 42,11 % of the students. That means that this value was not sufficiently addressed or explained throughout the game.

There was also ambiguity about Solidarity Economy and the generation of profits. 31,58 % of the students were suggesting that gaining profits is a part of Solidarity Economy. Moreover, 26,32 % of the pupils identified the maximization of profits as a purpose of Solidarity Economy. This indicates that the students got confused with the Solidarity and Capitalist Economy concerning the role of making profits. Therefore, it can be summarized that this distinction was not communicated clearly by the game.

The interview depicts, that the students understood the difference between the Solidarity and Capitalist Economy and their main features, according to the teacher's observations. The teacher states that this understanding and distinction was developed throughout the process of the game including the explications of the rules and the practical engagement in the game (Teacher A, 2021, p. 101). Therefore, it can be concluded that the game contributed to a better understanding and distinction between the capitalist and the solidarity economy, yet the game could still be improved by making this distinction more obvious.

Regarding the purpose of Solidarity Economy, 68,42 % of the students were able to identify the maximization of social utility and community as a purpose. That clarifies that most students understood the importance of social utility and community and implies that these criteria were adequately communicated by the game. When it comes to the solidarity-based establishments, over 80 % of the students identified the community nursery and almost 70 % identified the ecological village as solidarity establishments. Whereas only slightly above 50 % pointed out the lending shop as part of a solidarity economy. Therefore, it can be outlined that it was more obvious to the students that community nursery

and the ecological village are a part of solidarity economy, than a lending shop. Through the participant observation it was observed that only few or none lending shops were established on the playing field compared to the other two establishments. Therefore, the students remembered the community nursery and the ecological village better than the lending shop.

In the critical reflection phase, the participant observation further proofed that the students that made contributions agreed that the second phase of the game contributed to a higher level of equality, sustainability and social justice. Even though not all students made contributions, many of them confirmed with nodding their hands or just saying yes without raising their hands. Some students also mentioned that the level of pollution was significantly reduced. The researcher and the teachers ranked the contributions as good and very good, which reveals a good understanding of the students.

Hence, the students identified that the second phase of the game, the Solidarity Economy phase, can solve some of the problems of the first phase, the Capitalist Economy phase. Nevertheless, when transferring the logic of the game to the real world, solely less than half of the students think that Solidarity Economy could enable social changes in society. In total, only 52,63 % of the students responded to this question of the questionnaire. Just one student responded with "No" and the rest responded with "Yes". Six students highlighted that a Solidarity Economy can make changes in the fields of social justice and environmental issues. Therefore, it can be pointed out that almost half of the students believe in the ability of Solidarity Economy to make changes in society. Nevertheless, it must be mentioned that nine students didn't reply to the question. The reasons for not responding to that question are unclear. Nonetheless, it can be speculated that they didn't reply the questionnaire, since it was distributed at the end of the game just before the students could leave.

Nevertheless, in the end of the game the replies on the questionnaire indicate that more than half of the students (over 60 %) were able to identify the values, purpose, and establishments of Solidarity Economy correctly. It can be reasoned that the game improved the knowledge of the students about Solidarity Economy.

Interpreting the results, it can be said that the majority of students answered the questions of the questionnaire correctly and gained a general understanding about solidarity economy. Most students managed to identify the right answers regarding Solidarity Economy, which therefore satisfies the second specific research goal. Nevertheless, there is still confusion and there are flaws in the game that could be improved to enhance the understanding.

The third topic highlights the learning methods the game is based on. These methods include creative, experimental and playful methods that are included in the game. This section evaluates the questionnaire, participant observation and the interview, to verify whether these methods contributed to a facilitated learning experience or not. The questionnaire includes three multiple-choice questions, that aimed to verify if the game contributed to: 1. A facilitated learning; 2. Enhanced interest in the subject; and 3. to a higher motivation to learn.

Through the participant observation the researcher and the teachers observed the behavior and the reactions of the students when in contact with these learning methods. Furthermore, the interview posed some questions of the questionnaire to the teacher as well as about other observations and impressions.

Over the majority, 57,89 % of students reviewed these learning methods as making the learning process easier. The rest of the students found it either as easy as the more traditional methods or even much easier to learn with the game. None of the students find it difficult/or much more difficult to learn new subjects with a game. That means that in general the game contributed to a facilitated learning process, through experimental, creative and playful methods.

Almost all students, except for one, found it more or much more interesting to learn through the game. The interview also showed that the teacher estimates that the learning process is facilitated through the game. The teacher also stressed that the game has another advantage as the students are encouraged to cooperate in the groups and the competitive character of a game also contributes to an increased interest. Furthermore, it shows students that learning does not always has to be in the traditional way of listening and taking notes (Teacher A, 2021, pp.101-2). The other teachers additionally emphasized on the sheet of the participant observation that they observed a good participation of the class. This confirms that the students find it more interesting to learn through a game.

Concerning the motivation for learning through the game, the results were not that univocal. The answers were spread out, since 21,05 % of the students found that the game is either less or as motivating as other traditional learning methods. Nevertheless, over the majority of the students agreed that the game is more motivating than traditional methods of learning. 21,05 % shared the opinion that it is much more motivating than traditional teaching methods. Teacher A also thinks that the game contributes to their motivation to learn and that the students were happy to have an alternative to a normal class (Teacher A, 2021, p. 102). Nevertheless, the researcher observed that some students, around two or three, didn't engage at all. Some were not focused on the game but rather engaged in discussions about other topics with their classmates. Still, only few students showed no interest and motivation in the game. Thus, in general, it can be concluded that the game contributed to a higher motivation, although not for all the students.

All in all, the students generally appraised the game as easier more interesting and motivating than traditional teaching methods. In that sense the third research goal is reached, nevertheless there is still a scope for further improvements in the game to enhance the outcome towards the third research goal.

The fourth topic that is elaborated is on empowerment and active citizenship. This topic is related to the fourth specific research goal that aims to verify the game contributed to empowerment and increased active citizenship of the students.

Several questions were posed to the students, containing the following two multiple-choice questions: 1. If the game contributed to the motivation to engage and contribute to our society as an active citizen; as well as 2. If the game contributed to the understanding that the students can make a

difference in society. Furthermore, an open question was posed in the questionnaire if there is something that the students would contribute to society.

In the interview, the teacher was asked whether she thinks if the game contributed to motivate the students to be active citizens. Furthermore, other observations of the researcher and the teachers were considered regarding the subjects of empowerment and active citizenship.

Regarding the motivation of the students, most students, more precisely 52,63 % felt very motivated to engage in the society as an active citizen after playing the game. Only 10,53 % felt solely a little motivation to contribute, the rest of the students feel either motivated, very motived or extremely motivated to contribute. The teacher also thinks that the game contributed to their motivation to act as active citizens. Nevertheless, the teacher also mentions that one single action is not enough to incentivize sensibility about active citizenship, therefore there should be a continuity. She further thinks that the educational system as it is at the moment in Portugal, is not fulfilling this goal. There is a lack of continuity and a lack of taking responsibility for making these type of actions (Teacher A, 2021, p. 102).

Therefore, it can be said that the game contributed to a higher motivation of the students to act as active citizens but there must be a continuity of these type of actions to guarantee long-lasting effects.

The empowerment of students was measured by their estimation if their contribution could make a difference in society. It can show whether the students believe in their own abilities and self-confidence to act as active citizens and to indicate change. All students agreed that their contribution could make a difference, but only 10,53 % thought that it could make an enormous difference. Most students solely think that their contribution could make a bit of a difference. In general, it can be said that all students feel that they can make a difference after playing the game, but the degree of the perceived effect of their contribution varies.

Furthermore, some students exhibited concrete ideas on how they would like to contribute to society. Most of them mentioned that they could contribute to help the environment and reduce pollution and reducing their prejudices. Moreover, voluntary work was mentioned as well as making donations. One student mentioned that making changes in the society is a long process and would require a shift in mentality and way of life. Only one student said that he or she would contribute nothing to society and 73,68 % of the students didn't respond to the question. These answers show that the students mainly thought about their individual contribution that they can have in society rather than about the joint power of community in making changes. Furthermore, many students didn't reply, which raises the question if the estimated time for the questionnaire was too short and whether students wanted to finish it quickly to go home or if they didn't know what to answer.

Since most students feel motivated to contribute and acknowledge that their behavior can make a difference, the game contributed to the empowerment and the active citizenship of the students, which fulfills partly the fourth specific research goal. Nevertheless, in order to make the results more long-lasting, the game should be integrated in the curriculum of the students more profoundly by repeating

the game several times and to extend the reflection about the game and integrate that reflection in the regular curriculum of the students.

The last section will explore general observations of the researcher and the teachers as well as an examination of how the students liked the game. The basis of the evaluation are the questionnaire and the participant observation.

The questionnaire included two final questions containing one multiple choice question asking students how well they liked the game and one open question asking if there is something that the students would improve or change about the game. Although these questions seem superficial, it can help to get a general overview whether the students liked it and had fun doing the game or not. The questionnaire indicated that 94,74 % of the students liked or liked the game a lot. Only one student indicated that he or she liked it only more or less. This clear result shows that almost all students liked the game. Furthermore, the general observations the teachers noted during the game are included. The observations of the teachers confirm this, one teacher articulated that during the activity the students were very involved especially when they interiorized the dynamic of the game in the second phase. Another teacher wrote that the participation of the class was considered good, while the teacher observed that the majority of the students showed interest and participated, yet sometimes in an uncoordinated way. That shows that the teachers consider the participation and the level of comprehension of the students as good.

On the one hand, one teacher wrote in the participant observation that many understood the objective of the game since the beginning showing that the rules were explained well and in a simple way. On the other hand, the teacher stated in the interview that the explication of the rules could be facilitated through a more visual aspect, such as a Power Point or a short video (Teacher A, 2021, p. 102). This was confirmed by one student that wrote that the game could be improved by explaining the rules in a clearer way. Therefore, it can be said that there are many rules that are complex and varied in the two phases, what could have caused confusion.

Regarding improvements of the game, most of the students had nothing to add. 73,68 % didn't respond and the rest of the students except one agreed that there was nothing to improve about the game. These answers indicate that most students didn't have many things to contribute to improve the game. It could either be that they were very content with the game or they lacked in time or ideas to improve the game. In general, it can be said that the students were content with the game.

### 7.2 Improvements

This chapter aims to propose improvements of the game based on the obtained and analyzed data described in the previous chapter. Those alterations include improvements about the game in general as well as improvements related to the main topics of Solidarity Economy, the Capitalist Economy, active citizenship and empowerment as well as towards the creative, playful and experimental methods of the game that are related to the specific research goals.

Something that needs to be improved is the timing in which the game is implemented in and integrated in the curriculum, because the game was only conducted in the end of the school year with only one class and two teachers. For example, the teacher highlights in the interview that the critical reflection as well as the obtained knowledge could have been improved if the game would have been integrated more profoundly in the curriculum with the collaboration of more teachers in the beginning of the school year. In that way more time could have been used to deepen the reflection in class in the prearrangement and postprocessing of the game (Teacher A, 2021, p. 101). Therefore, the critical reflection could be amplified through integrating the game in the beginning of the school year and integrating a posterior reflection about the game in the regular classes.

There should also be improvements concerning the duration of the game. After the second round of the game, lots of students made the impression that they were tired. The game had a total duration of 2:40 minutes from 13h45 until 16h25. Therefore, the attention and concentration of teachers, students and the researcher decreased, especially in the reflection period after the second phase of the game. Hence, the results obtained from that phase were not as rich as the results obtained after the first phase. First of all, the two hours and forty minutes without break probably made it difficult to concentrate during the game. The game would need a break of at least fifteen minutes between the two phases in order to improve concentration and motivation. With the break the students could have time to relax and maybe to already exchange opinions and reflections about the game with each other.

Furthermore, there should be more time calculated for the questionnaire, so that the students have more time to think about the answers. In addition, the students were told whenever they finished the questionnaire, they can go home. That was possible a reason why the students didn't take extra time to answer the open question since open questions are more time-consuming. Further, due to a lack of time the reflection was done in 15 to 20 minutes, which didn't a allow discussions or further conversations around the topic. Probably the answers could have been richer with a longer discussion and reflection time. Therefore, the reflection time should be extended to 30 minutes.

Furthermore, the answers obtained from the reflective questions and the participant observation were limited because the teachers and the researcher only had time to count the contributions and to evaluate them. There was not sufficient time for the teachers or the researcher to write down the content of the answers. Therefore, it would be helpful to have another privileged informant who only writes down the answers of the students without evaluation.

It was also pointed out that the explanation of the rules could have been clearer. In order to improve that, there should have been more time to explain the rules and to clarify doubts and questions that appeared while explaining the rules. Furthermore, a video or a power point should have been integrated in order to clarify the rules and make them visually more appealing, as the teacher suggests (Teacher A, 2021, p. 102).

Regarding the data analysis of the topic of the capitalist economy, it can be said that the students weren't always able to distinguish the capitalist establishments and values from solidarity ones. This is

also not surprising, since in reality, it is also not always possible to distinguish the solidarity from the capitalistic establishments because there are also establishments that can be identified in between. Therefore, students got confused in the questionnaire identifying if cultural or international establishments are a main feature of the capitalist economy. As the cultural and international establishments can be a part of a solidarity economy, but do not necessarily have to be. In order to improve the game and widen the understanding, there could also be international Solidarity Economy establishments to be integrated in the game, such as an international committee for solidarity-based organizations to support and promote solidarity-based organizations internationally.

The questionnaire also revealed that the pupils had difficulties to identify that hierarchies are a part of the capitalist economy. Therefore, on the one hand, another feature that emphasizes on hierarchies could be integrated in the game. On the other hand, the game is limited in the way that players can only be entrepreneurs but cannot be employed. Therefore, a new feature could improve these deficits by allowing the players to be employed as well. For example, every time an association or a business is established, the founders should also be able to employ one or multiple players. Every time a new business or association is established, the founders can ask their fellow players if someone wants to get employed. In the solidarity establishments, hence in the two associations, the players have the same salary as the founders and the opportunity to take equal parts in decision making. These decisions involve questions about waste disposal or about new projects that can appear in the event cards. In capitalist establishments such as the businesses, the employees have much lower salaries as the founders and will not be able to participate in the decision making. This new feature enables some players to refuse self-employment and will provide the opportunity to be employed without taking personal risks and at the same time it will enable the players to also experience hierarchical or non-hierarchical structures within the establishments.

Furthermore, it should be clarified that the capitalist economy leads to individualization and weak communities, since this problem did not get clearly identified by the students in the questionnaire. Therefore, the characteristics and values of the capitalist economy should be expressed more clearly in the game. This could happen by a diversification of the points. While there is a big diversity concerning the solidarity-based points that represent the values of Solidarity Economy, the points that can be gained through capitalistic behavior are only limited to exclusive points and waste. Hence, it could be useful to extend and complement the capitalistic points in order to improve the understanding of the effects and values of the capitalist economy. The exclusive points can therefore be extended in order to contrast the solidarity points. For example, the communing points (uso commun) can be contrasted by private use points, the auto governance (auto-governação) points can be complemented by hierarchy points, the community care (cuidados) points can be complemented by personal or private benefit points, the community (communidade) and the cooperation (cooperação) points can be opposed by individualization points.

Considering the results of the data analysis of the Solidarity Economy, there was still confusion distinguishing solidarity economy form the capitalist economy, since many students identified characteristics, establishments, and values of the capitalist economy as solidarity based. It is not clear whether this confusion is due to insufficient explanation in the game or due to deficient attention of the students. The participant observation indicates that some students didn't listen to the game and were not interested in participating. This absence of participation in the game enhances difficulties to understand the game, thus the difference between the Capitalist and Solidarity Economy. In order to make the game more participative and interesting, the tasks of the team could rotate, so that everyone has the opportunity to roll the dice. Because when one person of the team is only involved in counting the money and the other person is only rolling the dice it might be less interesting for the person counting the money. Therefore, in each round, another person should be responsible for rolling the dice.

The value of common use in the Solidarity Economy phase was also not clearly identified, whereas more students managed to identify cooperation and ecological awareness. The solidarity points of cooperation and ecological awareness were more frequently distributed than the communing points. Therefore, more communing points should be distributed. The construction of a community center should therefore give the founders 2 community points and 1 communing point, instead of one cooperation point. The community garden could also offer an extra communing point, as well as multicultural festival and the community cooking. Furthermore, the solidarity points of locality, self-governance and care should also be integrated more frequently so that the different solidarity points appear equally.

Moreover, less students identified the lending shop as solidarity based, probably because there were no lending shops established during the game. In general, it was not possible to establish all the establishments options in the two rounds of the game, due to a lack of time. For an improved learning effect, the total time span should be extended, or the game conducted multiple times so that there will be more possibilities to establish more of the options.

Regarding the experimental, creative, and playful methods, there are also some things that could be improved. For example, the experimental learning cycle of Kolb was integrated but could still be improved. The phases of the concrete experience (the game itself) and the abstract conceptualization (interpretation of the experience, which is encouraged through the reflective questions) were done intensively, while the reflective observation and the active experimentation were comparatively disregarded.

The reflective observation could be enhanced through more descriptive questions in the reflection phase after the game. The questions posed were increasingly directed towards the interpretation and less towards objective descriptions of the observations during the game. Therefore, more descriptive questions could be included such as "What were your general observations during the game?", "Describe what you have just experienced". These descriptions could also help to direct the students easier towards the interpretation of the observations.

The active experimentation phase reflects what can be done in order to improve the experience. After the first and second phase the last question was "What can be changed to make the game more sustainable, fair and solidarity-based?". In the first round, the students contributed some ideas that were implemented in the second phase, but after the second phase almost no contributions were made and were also not implemented. That could be improved if the researcher would take more time for this question and even ask more questions that could lead to an improved reflection and better contributions. The researcher could first ask "What was the thing you didn't like about the game?" and then "What did you think was unfair about the game?" "What part of the game still contributes to pollution?" "What part is fostering egoistic behavior?". With encouraging the students to identify the problems in detail, it might also be easier to make them find solutions and improvements for the detected challenges.

Nevertheless, the last question demonstrates that most students still lack in concrete ideas how to contribute to society. The answers of the last question were mostly directed to personal choices and behavior, only one student mentioned that the impact must also include more people, thus the whole world. None of the students mentioned the importance of organizing within the communities, as Solidarity Economy tries to transmit, in order to contribute to long-term changes within their local communities. Therefore, it can be said that the game contributed to personal motivation to make changes in society and to act as an active citizen, but it is not clear whether it also encourages the students to organize themselves in their communities. Probably the question was also asked in a way that the students primarily think about their personal contribution and not so much about organizing in the community. Therefore, the last question could be posed in a different manner such as "If there is something you want to contribute to society alone or with your community, what would it be?"

Furthermore, the game could be improved if there could be a feature that includes the aspect of community organization for common action. The players could for example get the possibility to work together to build and organize beneficial actions for the community through certain event cards. An event card could for example be "You have the opportunity to fundraise for a clean-up that can remove four bags full of trash, find three more players that want to contribute with each 200 MC/MI or with one solidarity point in order to make it happen." There could be different cards that encourage community action and the collaboration between the teams could be created such as a barker market, a campaign or a fundraise for a social cause. Through this possibility, people with solidarity points as well as rich people can contribute to the well-being of the community.

#### 7.3. Self-reflection and ethical considerations

When conducting a case study in social sciences, it is important to reflect on oneself and one's own biases and contradictions that can influence and modify the results obtained by the research. This chapter will showcase and critically reflect on potential biases of this research.

When analyzing potential biases, the questions posed in the reflective observation phase and in the questionnaire should be investigated. Some questions in the questionnaire are objective such as "What are the characteristics of Solidarity/ Capitalist Economy?" However, it must be mentioned that some other questions can induce biases and thus might influence the opinions and replies of the students. For example, the students were asked what potential problems of the capitalist economy are and what solidarity economy can improve in society. These questions are posed in a way that already implies a judgement and possibly influences the opinion of the students, by unconsciously making certain suggestions about the Capitalist and Solidarity Economy.

Questions should have been posed more neutrally so that students can form their own opinion and judge and reflect for themselves. In order to avoid judgments, the same question could be asked about the solidarity as well as about the round of the capitalist economy like "What were the things you considered good and what were the potential problems about that round?".

The questions of the reflective observation were more balanced since the questions were asked in a more natural way without directing the answer in a certain direction. For example, the question whether the capitalist economy contributed to a more egoistic behavior was posed in the following way "Do you think that that this round of the game contributed to more solidarity or to more egoistic behavior between the people?". Furthermore, the same question was posed after the solidarity and the capitalist round which was "What would you change in order to make the game more solidarity-based, sustainable and fair?" Furthermore, the questionnaire contained other biased questions such as "Do you think it is easier to learn with the game?" Instead the question could be posed in the following manner "Do you think it is easier or more difficult to learn through the game?". The same should be changed about the questions considering interest and motivation. Furthermore, the question that discovers whether the students liked the game should be posed in the following way "How did you like the game?" instead of "Did you like the game?".

Reflecting upon the researcher's behavior during the game, the bias is less evident since the researcher encouraged the students to establish capitalist establishments and during the second phase, she encouraged the students for more solidarity-based establishments and behavior.

The research was conducted following research ethics, that include the confidentiality of personal data and utilization of the collected data.

All the data that was obtained within the framework of the present research, is exclusively used for the thesis to obtain the master's degree of the University ISCTE-IUL. The questionnaire for the students as well as the sheet for the participant observation for the teachers was conducted anonymously, no names or other confidential data that could give indications about the identities were mentioned. Furthermore, the obtained data underlies confidentiality and cannot be transferred to a third party. As already mentioned in a previous chapter, a consent form was handed in for the personal interview with one of the teachers, that guaranteed the conditions explained in the previous paragraph. The interviewee has also the chance to choose whether he or she wants the transcript of the interview. This consent form was signed by the designated teacher to confirm a consensus regarding the data obtained from him/her.

#### Conclusion

To conclude the thesis, the research question will be answered, the main features of the game, helpful theories and concepts of the theorical framework, as well as the improvements for the game will be summarized. In addition, political recommendations for the educational systems will be given and the new problems and questions that emerged throughout the research will be discussed.

The research question is how Solidarity Economy could be thought to High School Students in Portugal through experimental and playful methods. The research developed a game especially for High Schools Students in Portugal that meet the four specific research goals that include: 1. Incentivizes knowledge and a critical reflection of the capitalist economy; 2. teaching the basic features and increase sensibility for Solidarity Economy; 3. Facilitates learning through playful and experimental methods and; 4. Increases empowerment and active citizenship of the students.

This paragraph will conclude the basic features of the game, evaluates in which ways the specific research goals were reached and emphasizes on the possible improvements that were examined through the data analysis. To give a general overview, the main features of the game will be summarized. The game includes two phases, the first one represents a Capitalistic and the second one emphasizes on a Solidarity- based Economy. These two phases, in which the students actively play and experience the game are accompanied by a critical reflection phase that is conducted with the students after each phase.

The students form teams of two to three people and each team gets a character with certain features that represent their possibilities during the game. These characters are all located on the start of the playing field, on which they advance during the game by the number indicated by the dice. During the game, the teams have the possibility to establish either capitalistic or solidarity-based establishments that can either be local or international in different life categories such as work, social, housing, food, cafés and shops, entertainment, culture and tourism. Through these establishments that are located on the playing fields the teams can either gain personal benefits or benefits of the whole community including other teams.

The playing field further involves event cards that are drawn by the teams when they stop at a certain field. The cards represent certain events in the character's lives that can either be positive, negative, or neutral. The cards can either influence only the characters live or the life of all characters, more precisely all teams that are participating. In most of the event cards the teams have the opportunity to choose how to react to those events. They can choose from various options indicted by each card that can either provide personal or community benefits. On the one hand, there are some options that represent personal benefit and logic of a Capitalistic Economy and on the other hand, there are option that bear community benefit, which incorporates the idea of Solidarity Economy. The decisions that the teams are taking throughout the game in the framework of possibilities offered by the cards or the through the establishments determine how many points and/or money they earn. There are two different types of points, the exclusive points that are gained through a more personal-focused, capitalistic

behavior and the solidarity points that are gained by choices that benefit the whole community and represent solidarity.

The money and the points determine the scope of possibilities the teams have throughout the game in order to take decisions and to build establishments. Furthermore, the points and the money also determine whether the team has the possibility to win the first or the second phase. In order to win the first, capitalistic phase, the team with most exclusive points and the highest amount of money wins. The second phase, which represents the solidarity economy phase, can be won by the team with the highest quantity of solidarity points. The game offers two different currencies, one is the international currency (moeda international/MI) that is used in both phases and in all establishments. The other currency is the community currency (moeda comunitária/MC) that is integrated in the second phase and can only be used in local establishments in order to improve the local economy and to reduce the ecological footprint.

All the visual features that are included in the game such as the playing field, the characters, the points, the establishments, and the cards were created by the researcher.

The first specific research goal aims to incentivize knowledge and a critical reflection of the capitalist economy. The reflective questions revealed that the students think that the first, capitalist round contributed to a more egoistic behavior, than to a solidarity behavior, the students also understood that the first round has similarities to our today's society. Nevertheless, they were not able to name that type of economy our society is embedded in. The students were encouraged to give suggestions of what they would change about the game to make it more sustainable, fair and solidarity based. The students gave three suggestions that were integrated in the second round of the game. The questionnaire reveals that most students identified the main characteristics of the capitalist economy such as accumulation of private wealth and competition. Nevertheless, some students got confused about cultural assets and hierarchies. Furthermore, most students also managed to distinguish the capitalist establishments such as fast fashion and the multinational company from the solidarity-based ones. The majority of students also detected two of the main problems of the capitalist society which are social injustice and pollution. Less students identified individualization and weak communities as a problem, whereas many students also indicated international establishments as a problem.

Therefore, it can be said the students enhanced their knowledge about the capitalist economy, since the majority was able to correctly identify the main characteristics, establishments and problems of the capitalist economy in the questionnaire. A critical reflection also got initiated through the critical questions that the students responded to, that include the identification of the main problems of the capitalist economy as well as the suggestions proposed by the students to improve the first phase.

Therefore, the first specific research goal can be considered complied. Nevertheless, the data analysis reveals that the results concerning the first specific research goal could be improved. First of all, the critical reflection about the economic system could be improved through a better integration in the curriculum of the class. As the teacher mentioned in the interview, the game should have been conducted in the beginning of the year and the teachers should have collaborated to integrate the subjects

of solidarity and capitalist economy in their classes in order to improve the critical reflection. Another improvement could be the integration of an international committee for solidarity-based organizations in the game, in order to facilitate the understanding that international establishments do not necessarily have to be capitalistic. Furthermore, the players should have the choice whether to be employed or self-employed. Hence, the would be able to establish solidarity or capitalist workplaces and offer jobs to other players or get employed by their fellow players. In the solidarity-based job offers, the employees earn less than the employer and they do not have the opportunity to participate in the decision-making. Consequently, the hierarchical structures of capitalist establishments are emphasized in a clearer way.

Moreover, the points could be diversified, since the solidarity points are very divers while the capitalist points only consist of exclusive points and waste that is caused. Therefore, the solidarity-points (community, self-government, care, community and cooperation) should be contrasted with capitalist points of private use, hierarchy, personal benefit and individualization points. Hence, the values of the capitalist society are being conciliated as well.

The second specific research goal is about enhancing knowledge and sensibility for Solidarity Economy among students in Portuguese High Schools. In the reflection phase, the students that gave a contribution agreed that the second phase was able to solve problems concerning solidarity, social justice and pollution appearing in the first phase. Furthermore, they also noticed that long-term changes in society are more easily accomplished when those are tackled with a group or community, rather than alone. The students didn't have previous knowledge about Solidarity Economy but were able to specify some types of economy but did not know that the second phase in the game represented Solidarity Economy. The students didn't give contributions to the question what should be improved about the second phase. Considering the questionnaire, most students managed to identify the values of a Solidarity Economy correctly, especially the values of cooperation and ecological awareness. Less students were able to identify communing. Furthermore, most students gave correct answers about the purpose of Solidarity Economy including the maximization of social utility and community. On one hand, there was confusion about the maximization of profits, since some students identified this as a purpose and value of Solidarity Economy. On the other hand, solidarity establishments were also mostly correctly identified. Some solidarity establishments, such as the lending shop were less evident for the students than the community nursery or the ecological village. Eight students responded to the question whether solidarity economy can improve something in the society and seven students agreed mostly referring to social justice and environmental aspects.

The teacher confirms in the interview that through the explication of the rules and the practical part of the game, the students managed to distinguish the Capitalist from the Solidarity Economy. To conclude, most of the students answered the questions in the questionnaire regarding the values, purpose, and characteristics correctly. These results combined with the contributions of the phase of the critical reflection, makes a basic level of understanding and sensibility for Solidarity Economy evident. Hence, the second research goal can be considered fulfilled, whereas various areas of the game need to be improved. Considering the data analysis, it becomes evident that a break of at least 30 minutes should be integrated between the two phases of the game. Furthermore, the game phase should be extended or conducted more frequently so that the students deepen their understanding and get in contact with all the establishments and values that the game transmits. Also, the reflection phase could be extended to 30 minutes. Further, it would be helpful to include another privileged informant for the participant observation who writes down the behavior, reactions and answers from the students during the game and the critical reflection. Furthermore, two other helpers could be included to assist the researcher with leading the game. Also, the tasks in each team should rotate, hence the game gets more interesting for all team members.

The solidarity points should also be distributed equally, so all solidary points are circulating with the same frequency in order for students to become familiar with all values of Solidarity Economy.

The third research goal is about enhancing learning through creative, experimental and playful methods. Analyzing the questionnaire, the majority of the students find it easy to learn about new subjects through the game. Four students also find it much easier and the other four find it as easy/ difficult as with traditional learning methods. Furthermore, most students find it more or much more interesting to learn through a game. Only one person found it as interesting as with traditional methods. With the exception of one student all other students found the game as motivating as traditional methods or even more and much more motivating as traditional learning methods. The teacher also confirms in the interview that the students found the game more stimulating as usual classes.

To conclude, it can be said that the students perceived the game as easier, more interesting and more motivating than traditional teaching methods. Therefore, the third specific research goal is reached since the game including the experimental and playful methods facilitated the learning process.

Nevertheless, there are parts that need to be improved. For example, the Experimental Learning Cycle of Kolb consists of four phases from which two could be integrated more profoundly. The phase of reflective observation could be enhanced through more descriptive questions in the reflection phase after the game that lead from the descriptions of the observations and to a facilitated interpretation. To improve the active experimentation phase, the researcher could ask questions that help the students to identify problems of the game which can help them finding improvements.

In order to make sure that the fourth specific research goal is reached, it has to be verified whether the game contributed to empowerment and increased active citizenship of the students. Most students feel motivated or very motivated to contribute and to act as active citizens. Only a few students feel extremely motivated or only a little bit motivated. So, in general, the students are rather motivated than demotivated.

Furthermore, the majority of students feel that they can make a difference in society and some think they can only contribute to a make only a little difference. Only two people think that they can make an enormous difference in society. Five students responded to the open question what they would like to contribute to society. The answers were mostly connected to individual behavior, environmental aspects, less prejudice, voluntary work and referring that this process is difficult and takes a long time. Therefore, it can be said that game contributed slightly to the empowerment of the students, since it had a positive effect on the personal motivation to contribute to change and the perception that their contribution can make a difference. Therefore, the fourth specific research goal can be partly considered accomplished.

To accomplish the fourth research goal completely, a continuity would be needed in order to achieve long-term results. The game in form of a single action can contribute, but the game and the reflection should be conducted several times to make the results long-lasting.

Furthermore, the contributions that are associated to the last questions reveal that students still lack in concrete ideas on how to contribute to society. Moreover, the students rather thought about individual contributions than on community actions. Therefore, the last question should have been posed in a different way that also encourages the students to think about contributions that can be initiated together with their communities. In order to encourage that, another feature should be included in the game that emphasizes on the importance of organizing in as a group. The event cards could therefore also include cards that encourage the players to organize themselves to conduct common actions that are beneficial for the community.

In general, it can be said that the students liked the game, all students with the exception of one indicated that they liked or even liked the game a lot. The teachers confirmed that the comprehension and participation of the students were relatively good, especially in the second phase of the game. Most students had nothing to add when they were asked what they would change about the game. One student and one the teachers agreed, that the rules could be explained in a clearer way. Therefore, a more visual aspect, such as a video or a PowerPoint could be integrated to improve the game.

Analyzing the biases induced by the researcher, it can be concluded that the questions should be posed in a more open and objective way, without unconsciously imposing opinions on the students.

The theoretical framework was used as a guideline and some of the theoretical concepts were very useful to create the game, as already explained in chapter 6.3.3.

Especially the values and characteristics were important to create the game, since those were used to create the different points that could be gained during the game. The different dimensions were all considered important, since they represented the basis for creating the establishments of the game. The concepts of the history of Solidarity Economy and the Solidarity Economy were less important in respect to the creation of the game, but nonetheless they were important to gain knowledge about the backgrounds of Solidarity Economy and the situation in Portugal.

From the concept of empowerment, the definitions *power to*, *power with* were helpful considering the creation of the game. Furthermore, the dimensions of *individual empowerment* and the *empowerment* of groups is addressed in the game. Indirectly the dimensions of *structural empowerment* and *community development* were also important since they were imitated by the game.

Regarding the process of empowerment, the game aims to incorporate the *era of entry* and the *era of advancement* as well as *conscientization* since it encourages students to understand unfair power dynamics in society and encourages critical reflection. The *era of incorporation* and the *era of commitment* were not directly useful for the game but could eventually become relevant if the game and the reflection is conducted repeatedly and might lead to action and commitment to change.

From the concept of citizenship various parts of the game were important. However, the historical context was not considered essential for the construction and implementation of the game. The concept of *acting as a citizen* was especially considered essential, since the game was directed to encourage students to become active citizens. The scope of local citizenship was especially significant in the game, since the game encouraged the students to become active in their local communities that is represented through the game and also aims to transfer this behavior to their own lives. Another concept that was highly important was the concept of *act as citizens*, which the game also tried to encourage.

In the scope of education, the concepts of *socialization* and *subjectification* were important since the game aimed to shape the values and encourage action of the students, which was not directly linked to *formal education*. Regarding the pedagogy, the game was build trying to integrate the concept of *progressive* pedagogy.

From alternative ways of education, the experimental learning was fundamental for the construction and reflection about the game. The *experimental learning cycle* by Kolb was entirely included in the game, with a special emphasis on the *concrete experience* and the *reflective observation* phase. The concept of *playful learning* could be considered as the most important concept of the game, since the main objective of the game is to teach students in a playful way and to encourage them to collaborate and to work together. *Creative learning* was also integrated in the game, nevertheless, it can be considered less crucial than *experimental* and *playful learning*.

Furthermore, it was also fundamental to examine the School System in Portugal while creating the game to measure whether the included subjects of the game are appropriate and fit into the curriculum of the students. Nevertheless, it was still not clear with which class the game would be conducted, therefore the researcher aimed to find a class which is in the 11<sup>th</sup> or 12<sup>th</sup> grade with the subjects of economy and citizenship. Hence, the subjects of economy and development and citizenship were integrated in the theoretical framework. The workshop was however conducted with a class of the 10<sup>th</sup> grade without the focus on economy and development and citizenship, due to difficulties finding a teacher that was interested in a collaboration. Therefore, it was less important to include the exact subjects that were pointed out in the theoretical framework. Nevertheless, the main subjects of development and citizenship were integrated in the game, which included gender equality, interculturality, sustainable development, environmental education and health, democratic participation, and education for consumption.

Considering political recommendations in public education in Portugal, the game and the data analysis revealed that there are areas that could be improved. Considering the statements of the teacher in the interview, it becomes obvious that there is a lack of continuity in activities that encourage active citizenship. Therefore, it would be recommendable to integrate activities that foster this kind of empowerment and active citizenship as a fixed component in the curriculum. This enables continuity and long-term effects on the students.

Furthermore, there is a lack in creative, playful, and experimental teaching methods in public schools. The data analysis revealed that students prefer these methods instead of the traditional teaching methods and get excited about activities that are different from "normal classes". Therefore, it would be recommendable to also integrate these methods into the curriculum. The ministry of education could elaborate ideas how to integrate these methods to teach the usual subjects as well as extra subjects that are focused on fostering active citizenship. University students could also be included preferably form the area of education with a collaboration of students from the creative area, such as fine arts or design in order to create those activities. For example, practical subject could be introduced in the curriculum of these university courses that could have this as an objective. Moreover, these students could be encouraged to make their final thesis about creating these methods and to collaborate with the students from another universities of education and art. In that way, the students could learn multidisciplinary skills, collaboration and would create an output of value for society instead of theoretical theses that only a few people read.

In addition, there is a general lack in subjects in public schools that teach and motivate the students on how they can build a fairer, more solidarity-based and sustainable future. This could happen within the subjects that are already established such as economy or development and citizenship. In economy classes it should be thought that there are multiple ways to conduct economic activity and not only the current paradigm of the capitalist market economy, but in addition it should be thought about Circular, Green or Solidarity Economy for example. These different forms of economy could be taught through games and a reflection about those game, starting with the game Monopoly to demonstrate the capitalist economy. Later on, the game about Solidarity Economy, that is the central aspect of the present research, could be integrated. Furthermore, these different economic systems should be central aspects in the formation of high school teachers that aim to teach the subjects of economy and citizenship and development.

Moreover, other subjects should be urgently integrated such as sustainability or mental health. All subjects should integrate the following elements: the introduction in the subject, an experimentation phase, a critical reflection phase and a phase in which the students can suggest practical solutions considering the society as a whole, the community and the individuum.

Considering further research on Solidarity Economy, a question that came up during the research that considers how knowledge and activities of solidarity economy could be integrated into the mainstream of society. During the research it became obvious that the subject is still a niche theme, that most young people are not aware of. Thus, the question would be how the knowledge about Solidarity Economy and similar ways of conducting economic activities in a fair and sustainable way could spread

in society. Hence, a following extensive research could be conducted to analyze the state of knowledge about Solidarity Economy in different population and age groups and through which ways this knowledge could be improved and spread in the various groups.

Another problem or question that occurred is; if Solidarity Economy became the mainstream, would it change a whole economical system that has multidimensional effects on the whole world? These effects are difficult to anticipate since it can generate effects that are not evident on the first sight or that only appear after years or decades. Therefore, a multidimensional study is needed that analyses how the world could undergo a sustainable transition to a different economical paradigm that measures the effect on different geographical, social and societal areas.

Moreover, there is also a need to analyze the effects on the global South, if Solidarity Economy would be comprehensively adopted in the global north. This is especially important, since decades of exploitation, colonization and domination created tremendous dependencies. Hence, it is indispensable to integrate the global south in the transition to a more solidarity-based worldwide model of economy. Therefore, a further study is needed which explores options on how to create an equal collaboration between the global south and the global north. It is urgent to create a strategy that respects and integrates the knowledge and ideas of the global south in order to create a worldwide, fair and long-term transition to a more solidarity-based economy.

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# Appendices

## Annex A - Formulário: Observação do jogo da economia solidária

Obrigada pela vossa disponibilidade de ajudar com a observação e avaliação.

Vocês podem observar os seus alunos durante o jogo inteiro. Aqui vocês podem notar todos os tipos de observações como por exemplo as expressões faciais, as vozes ou interações com outros alunos. Pode também apontar que observou comportamentos estranhos, extraordinários dos seus alunos.

Observações gerais:

## Primeira fase do jogo: Economia Capitalista.

Vamos jogar a primeira fase que vai ser sobre a economia capitalista. Depois da primeira fase vou fazer uma reflexão com os alunos sobre esta fase do jogo através das seguintes perguntas. Vamos jogar a primeira fase que vai ser sobre a economia capitalista. Depois da primeira fase vou fazer uma reflexão com os alunos sobre esta fase do jogo através das seguintes perguntas.

Peço-vos para me ajudarem a contar o número das contribuições dos alunos para cada pergunta. Além disso, vai ser preciso avaliar a qualidade a resposta de uma escala de 1-5. Vou escrever as perguntas na ordem certa:

1. Acha que o jogo contribui para a solidariedade e ajuda mútua entre as pessoas ou contribui para um comportamento mais egoísta? Quais foram as vossas observações?

Qualidade e número de contribuições:

l Contribuição de muito baixa qualidade que mostra que não percebeu nada do conteúdo	2	3	4	5
	Contribuição de	Contribuição	Contribuição de	Contribuição de
	baixa qualidade	média qualidade	boa qualidade que	excelente
	que mostra que	que mostra	mostra uma	qualidade que
	não percebeu	alguma	compreensão	mostra uma
	bem o conteúdo	compreensão	geral	compreensão
				holística

2. Acham que o jogo é semelhante à nossa sociedade e economia? E porquê?

Qualidade e número de contribuições:

l	2	3	4	5	
Contribuição de muito	Contribuição de	Contribuição	Contribuição de	Contribuição de	
baixa qualidade que	baixa qualidade	média qualidade	boa qualidade que	excelente	
mostra que não	que mostra que	que mostra	mostra uma	qualidade que	
percebeu nada do	não percebeu	alguma	compreensão	mostra uma	
conteúdo	bem o conteúdo	compreensão	geral	compreensão	
			0	holística	

3. Alguém sabe como se chama esta forma da economia que nós temos neste momento? E o que isto significa?

Qualidade e número de contribuições:

1	2	3	4	5
Contribuição de muito	Contribuição de	Contribuição	Contribuição de	Contribuição de
baixa qualidade que	baixa qualidade	média qualidade	boa qualidade que	excelente
mostra que não percebeu nada do	que mostra que	que mostra	mostra uma	qualidade que
conteúdo	não percebeu	alguma	compreensão	mostra uma
conteudo	bem o conteúdo	compreensão	geral	compreensão
94				holística

4. Vocês têm ideias sobre o que se deveria mudar para tornar o jogo mais sustentável, justo e solidário?

Qualidade e número de contribuições:

l Contribuição de muito baixa qualidade que mostra que não percebeu nada do conteúdo	2 Contribuição de baixa qualidade que mostra que não percebeu bem o conteúdo	3 Contribuição média qualidade que mostra alguma compreensão	4 Contribuição de boa qualidade que mostra uma compreensão geral	5 Contribuição de excelente qualidade que mostra uma compreensão holística
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#### Segunda fase do jogo: Economia solidária.

Depois da segunda fase vamos fazer outra reflecção sobre a experiência e vou perguntar a seguintes perguntas. Peço-vos para avaliar na mesma forma:

1. Acham que esta fase consegui resolver uns dos problemas que surgem na ronda anterior? Referente a igualdade/ sustentabilidade/ justiça social?

Qualidade e número de contribuições:

1	2	3	4	5	
Contribuição de muito	Contribuição de	Contribuição	Contribuição de	Contribuição de	
baixa qualidade que	baixa qualidade	média qualidade	boa qualidade que	excelente	
mostra que não	que mostra que	que mostra	mostra uma	qualidade que	
percebeu nada do	não percebeu	alguma	compreensão	mostra uma	
conteúdo	bem o conteúdo	compreensão	geral	compreensão	
	bem o conteudo	compreensao	geral	compreensao holística	

2. Vocês acham que se pode fazer uma diferença na sociedade como individual ou melhor em comunidade e porquê?

Qualidade e número de contribuições:

3. Vocês conhecem outras formas de economia? Têm uma ideia como se chama está forma de economia que representa a segunda fase?

Qualidade e número de contribuições:

1	2	3	4	5
Contribuição de muito	Contribuição de	Contribuição	Contribuição de	Contribuição de
baixa qualidade que	baixa qualidade	média qualidade	boa qualidade que	excelente
mostra que não percebeu nada do	que mostra que	que mostra	mostra uma	qualidade que
conteúdo	não percebeu	alguma	compreensão	mostra uma
contendo	bem o conteúdo	compreensão	geral	compreensão
				holística

4. Depois desta fase do jogo, há alguma coisa que vocês mudavam para fazer o jogo mais sustentável, justo e solidário?

Qualidade e número de contribuições:

1 Contribuição de muito baixa qualidade que mostra que não percebeu nada do conteúdo	2 Contribuição de baixa qualidade que mostra que não percebeu	3 Contribuição média qualidade que mostra alguma	4 Contribuição de boa qualidade que mostra uma compreensão	5 Contribuição de excelente qualidade que mostra uma
contendo	bem o conteúdo	compreensão	geral	compreensão holística

## Annex B - Questionário sobre o jogo

Obrigada por teres participado no jogo da economia solidária. Agora vou precisar da tua ajuda para a avaliação e o impacto do jogo que eu preciso para a minha pesquisa da minha tese de mestrado.

## Perguntas sobre a economia capitalista (primeira fase do jogo):

- 1. Escolha múltipla. Por favor faz uma cruz à frente da resposta que achas correta. Quais são as características principais da economia capitalista? (Valores corretos: 3)
- □ Competição
- □ Estabelecimento de bens culturais
- □ Cuidar do ambiente
- □ Acumulação de riqueza privada
- □ Manter hierarquias

2. Escolha múltipla. Por favor faça uma cruz à frente da resposta que achas correta. Estabelecimentos que tradicionalmente fazem parte da economia capitalista são: (Valores corretos: 2)

- □ Loja de pronto-a-vestir (fast fashion)
- □ Empresa multinacional
- □ Loja gratuita
- □ Centro comunitário
- □ Lar comunitário

3. Escolha múltipla. Por favor faz uma cruz à frente da resposta que achas correta. Quais são alguns dos problemas que a economia capitalista pode causar? (Valores corretos: 3)

- □ Injustiça social
- □ Estabelecimentos internacionais
- Poluição do planeta
- □ Individualização e comunidades fracas
- □ Salários elevados

#### Perguntas sobre a economia solidária (segunda fase do jogo):

4. Escolha múltipla. Por favor faz uma cruz em frente da resposta que achas correta. Marca os valores que fazem parte da economia solidária. (Valores corretos: 3)

- □ Consciência ecológica
- □ Ganhar lucros
- □ Cooperação
- $\Box$  Uso comum
- □ Minimizar lucros

5. Escolha múltipla. Por favor faz uma cruz em frente da resposta que achas correta. Na economia solidária atividades económicas são feitas com o fim de: (Valores corretos: 2)

- □ Maximizar o bem-estar individual
- □ Maximizar lucros
- □ Maximizar a utilidade social
- □ Maximizar o bem-estar da comunidade

6. Escolha múltipla. Por favor faça uma cruz à frente da resposta que achas correta. Estabelecimentos que podem fazer parte da economia solidária são: (Valores corretos: 3)

- □ Loja de empréstimos
- □ Vivenda privada
- □ Creche comunitária
- □ Aldeia ecológica
- □ Restaurante 5 estrelas

7. Questão aberta. Por favor responde em duas ou três frases.

Achas que a Economia Solidária pode melhorar alguma coisa na nossa sociedade? Se sim, que seria?

#### Perguntas sobre método de aprendizagem através do jogo

 Escala. Por favor marca com uma cruz na escala de 1 a 5.
 O que tu achaste sobre temas novos através de um jogo? Achas que é mais fácil aprender sobre temas novos através de um jogo?

1 Foi muito difícil aprender através do jogo	2 Foi difícil aprender através do jogo	3 É tão fácil como outros métodos mais tradicionais do ensino	4 Foi fácil aprender através do jogo	5 Foi muito fácil aprender através do jogo
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2. Escala. Por favor marca com uma cruz na escala de 1 a 5. Achas que é mais interessante aprender sobre temas novas através de um jogo?

1 Foi muito menos interessante de aprender através do jogo	2 Foi menos interessante de aprender através do jogo	3 É tão interessante como outros métodos mais tradicionais de ensino	4 Foi mais interessante de aprender através do jogo	5 Foi muito mais interessante de aprender através do jogo
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3. Escala. Por favor marca com uma cruz na escala de 1 a 5 o nível da tua motivação. Achas que aprender sobre temas novas através de um jogo aumentou a tua motivação em aprender?

1 Foi muito menos motivador aprender através do jogo	2 Foi menos motivador aprender através do jogo	3 É tão motivados como outros métodos mais tradicionais de ensino	4 Foi mais motivador aprender através do jogo	5 Foi muito mais motivador aprender através do jogo
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### Perguntas sobre o grau de empoderamento

1. Escala. Depois de fazer o jogo sentes-te mais motivado em contribuir a construir a nossa sociedade e ser um cidadão ativo? Por favor marca com uma cruz na escala de 1 a 5.

1 Não sinto motivação nenhuma	2 Sinto-me um pouco motivado	3 Sinto-me motivado em contribuir	4 Sinto-me muito motivado em contribuir	5 Sinto-me extremamente motivado em contribuir
--	---------------------------------------	--	--	--

2. Escala. Depois de fazer o jogo achas que a tua contribuição pode fazer uma diferença na sociedade? Por favor marca com uma cruz na escala de 1 á 5.

1 Sinto que a minha contribuição não faz diferença absolutamente nenhuma	2 Sinto que a minha contribuição não faz muita diferença	3 Sinto que a minha contribuição pode fazer alguma diferença	4 Sim, sinto que a minha contribuição pode fazer uma diferença	5 Sim, sinto que a minha contribuição pode fazer uma diferença enorme
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3. Questão aberta. Por favor responde em duas ou três frases. Há alguma coisa em que queres contribuir para a sociedade, o que é?

#### Perguntas gerais sobre o jogo:

- 1. Escala. Gostaste do jogo sobre a economia solidária? Por favor marca com uma cruz na escala de 1 á 5.
- 2.

1 Não gostei nada	2 Gostei mais ou menos	3 Foi neutro	4 Gostei	5 Gostei muito
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3. Se quiseres dizer qualquer coisa ou se tens uns conselhos para melhorar ou mudar o jogo, podes responder aqui em duas ou três frases.

#### Annex C - Entrevista com uma professora da turma (Teacher A)

Entrevistador: Hanna Flachs/ Investigador (I) Interviewee: Professor anonym (P) Data e tempo: 24. Agosto 2021, 12:00 am Medium: Whatsapp Call

I: A primeira pergunta é se você acha que os estudantes perceberam o que é a Economia Solidária e a Economia Capitalista e quais são as diferenças entre as duas?

P: Sim, eu acho que eles perceberam bem a diferença. Primeiramente através das regras e depois ao jogar há uma tomada da consciência. A verdade que eles já não partiram do zero porque há pouco eles já estudaram isso na cadeira da filosofia. Já sabiam alguma coisa sobre sistemas económicos portanto ideias desorganizadas... mas mesmo assim já é uma base onde se pode ancorar o jogo.

I: Perfeito, Obrigada.

E também acha que o jogo contribui para uma reflecção crítica da nossa economia e sociedade?

P: Sim penso que sim, mas penso que em outra etapa se fosse integrado no sistema normal de ensino eles poderiam ter mais tempo para refletir com mais sistematização...

I: É profundidade?

P: Sim, e com profundidade. Mas sim, acho que resultou.

I: Mas você refere se estivesse integrado numa matéria da escola, ou...?

P: Se nos não tivéssemos aplicado o jogo mesmo no final do ano, mas se tivéssemos feito o jogo mais cedo ...

I: Ah ok.

P: Poderia ser... se mais professores colaborassem poderíamos ter explorado isso nas nossas matérias, nas nossas disciplinas, deveríamos ter explorado o jogo e a reflecção do jogo posteriormente. Mas como foi no final do ano e tínhamos que acabar os nossos programas e tudo isso e ainda por cima era o ano com COVID e tudo estava diferente, as coisas foram um pouco apertadas, digamos.

I: Sim, percebo perfeitamente. Faz sentido.

Ok, e você acha que o jogo foi mais ou menos fácil e interessante para os estudantes aprenderem através do jogo?

P: Eu acho que é sempre mais fácil aprender através de jogos. E tem outra vantagem, trabalham em equipa e há uma certa competição entre as equipas e não se poem individualmente cada aluno. De facto, ser uma equipa aumenta a colaboração entre eles.

I: Pois é.

P: É uma vantagem, é normal.

#### I: Hmm

P: Não tem ... de aprender. Eu acho que o importante destes jogos é que eles aprenderem que a aprendizagem não tem que ser uma coisa aborrecida, quando eles têm que tomar notas mas que se pode fazer de outra maneira e obter o mesmo resultado.

I: Ok, ótimo obrigada. E acha que o jogo aumentou ou reduziu a motivação deles para aprender?

P: Acho que aumenta.

I: E teve algumas observações?

P: As observações deles são que gostaram muito, que foi divertido, que gostaram. Mas nada muito sistemático.

I: Ok, e por não ser tão sistemático foi mais motivador?

P: Eu digo que a reação que eles tiveram não foi sistemático. Eles disseram sim gostamos muito, foi melhor do que ter aula. Qualquer alternativa às aulas é melhor.

(as duas a rir)

I: Ok, ótimo. E você acha que aumentou ou reduziu a motivação dos estudantes para ser cidadãos ativos? Acha que teve uma influência ou não?

P: Eu penso que todas estas que nos temos contribuem com gotas de água que podem criar um rio que nos esperamos que no final, quando chegaram aos 18 anos sejam cidadãos ativos. No entanto, eu acho que uma ação isolada não chega a isso. Eu acho que uma ação isolada como o jogo contribui mas não chega.

Eu acho que este são muito pouco participativos institucionalmente para criar cidadãos ativos. Eles têm representantes no ... mas não querem assumir compromissos para ... ou por exemplo na associação de estudantes... e depois perdem o entusiasmo e fazem mais nada. Portanto o problema da continuidade de ações, é um problema serio. Porque... não sei se viu o documento de alunos de ensino secundário, é um documento orientador no sistema educativo. ... para tornar cidadãos ativos, críticos, participativos etc. não sei se o sistema educativo está completamente a cobrir esta função. Cumpre algum, mas não cumpre para a maioria ou para todos, e isso era importante. E o jogo aí dá uma contribuição.

I: Ok, ótimo. E acha que há algumas coisas que se pode melhorar do jogo? Para fazer o jogo mais interessante e compreensível? Pode ser qualquer coisa.

P: Eu acho se houvesse um pequeno vídeo, em que eles dizem, pode ser um minuto ou dois. A única coisa para perceber as regras, com um powerpoint ou um vídeo antes de começar o jogo.

I: Ok, acho ótimo. Uma coisa mais visual para explicar as regras

P: Exatamente. Para não ser só explicação. Uma coisa mais visual, uma powerpoint ou um vídeo ou uma coisa qualquer.

I: Exato. Perfeito, pela minha parte é isso. Quere acrescentar mais uma coisa?

P: Não obrigada.

I: Então, muito obrigada pelo seu tempo e disponibilidade.

P: De nada.

## Annex D - Análise do questionário

Sample Size: 19 estudantes

## Perguntas sobre a economia capitalista (primeira fase do jogo):

1. Escolha múltipla. Por favor faz uma cruz à frente da resposta que achas correta. Quais são as características principais da economia capitalista? (Valores corretos: 3)

Quadro 1 – Percentagem res	postas corretas em total
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Resposta	Número respostas
Competiçao (correto)	10
Estabelecimentos de bens	7
culturais	
Cuidar do ambiente	2
Acumulação de riqueza	13
privada (correto)	
Manter hierarquias	7
(correto)	
N/R	18
T. ( 1	57 (2 10)
Total	57 (3 x 19)

Número respostas corretas: **30** / **52,63** % Número respostas erradas: 9 / 15,78 % Não respostas (N/R): 18 / 31,58 % Número total de respostas: 57 / 100 %

Quadro 2 – Percentagem respostas corretas divido por respostas
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Resposta	Número respostas	Numero	Pertcentagem
		estudantes	
Competiçao	10	19	52,63
(correto)		17	
Estabelecimentos de	7		36,84
bens culturais			
Cuidar do ambiente	2		10,52
Acumulação de	13		68,42
riqueza privada			
(correto)			
Manter hierarquias	7		36,84
(correto)			

 Escolha múltipla. Por favor faça uma cruz à frente da resposta que achas correta. Estabelecimentos que tradicionalmente fazem parte da economia capitalista são: (Valores corretos: 2)

Resposta	Número respostas
Loja de pronto-a-	9
vestir(correto)	
Empresa multinacional	17
(correto)	
Loja gratuita	3
Centro comunitário	3
Lar comunitário	0
N/R	6
Total	38 (2 x 19)

Quadro 3 – Percentagem respostas corretas em total

Número respostas corretas: **26 / 68,42 %** Número respostas erradas: 6 / 15,78 % Não respostas (N/R): 6 / 15,78 % Número total de respostas: 38 / 100 %

Quadro 4 - Percentagem respostas divido por estudantes

Resposta	Número respostas	Numero estudantes	Pertcentagem
Loja de pronto-a- vestir(correto)	9	19	47,36
Empresa multinacional (correto)	17		89,47
Loja gratuita	3		15,78
Centro comunitário	3	]	15,78
Lar comunitário	0		0

Escolha múltipla. Por favor faz uma cruz à frente da resposta que achas correta.
 Quais são alguns dos problemas que a economia capitalista pode causar? (Valores corretos: 3)

Resposta	Número respostas
Injustiça social (correto)	12
Estabelecimentos culturais	5
Poluiçaõ do planeta	16
(correto)	
Individualização e	8
comunidades fracas	
(correto)	
Salários elevados	3
N/R	13
Total	57 (3 x 19)

Quadro 5 - Percentagem respostas corretas em total

Número respostas corretas: **36** / **63,16 %** Número respostas erradas: 8 / 14,04 % Não respostas (N/R): 13 / 22,8 % Número total de respostas: 57 / 100 %

Quadro 6 - Percentagem respostas divido por estudantes

Resposta	Número respostas	Numero estudantes	Pertcentagem
Injustiça social	12	19	63,16
(correto)			
Estabelecimentos culturais	5		26,32
Poluição do planeta (correto)	16		84,21
Individualização e comunidades fracas	8		42,11
(correto)			
Salários elevados	3		15,78

### Perguntas sobre a economia solidária (segunda fase do jogo):

4. Escolha múltipla. Por favor faz uma cruz em frente da resposta que achas correta. Marca os valores que fazem parte da economia solidária. (Valores corretos: 3)

Resposta	Número respostas
Consciência ecológica	12
(correto)	
Ganhar lucros	6
Cooperação (correto)	16
Uso comum (correto)	8
Minimizar lucros	4
N/R	11
Total	57 (3 x 19)

Quadro 7 – Percentagem respostas corretas em total

Número respostas corretas: **36** / **63,16 %** Número respostas erradas: 10 / 17,54 % Não respostas (N/R): 11 / 19,3 % Número total de respostas: 57 / 100 %

Quadro 8 - Percentagem respostas divido por estudantes

Resposta	Número respostas	Numero	Pertcentagem
		estudantes	-
Consciência	12	19	63,16
ecológica (correto)			
Ganhar lucros	6		31,58
Cooperação	16		84,21
(correto)			
Uso comum	8		42,11
(correto)			
Minimizar lucros	4		21,05

5. Escolha múltipla. Por favor faz uma cruz em frente da resposta que achas correta. Na economia solidária atividades económicas são feitas com o fim de: (Valores corretos: 2)

Resposta	Número respostas
Maximizar o bem-estar	2
individual	
Maximizar lucros	5
Maximizar a utilidade	13
social (correto)	
Maximizar o bem-estar da	13
comunidade (correto)	
N/R	5
	20 (2 10)
Total	38 (2 x 19)

Quadro 9 – Percentagem respostas corretas em total

Número respostas corretas: 26 / 68,42 % Número respostas erradas: 7 / 18,42 % Não respostas (N/R): 5 / 13,16 % Número total de respostas: 38 / 100 %

Quadro 10 - Percentagem respostas divido por estudantes

Resposta	Número respostas	Numero estudantes	Pertcentagem
Maximizar o bem- estar individual	2	19	10,53
Maximizar lucros	5		26,32
Maximizar a utilidade social (correto)	13		68,42
Maximizar o bem- estar da comunidade (correto)	13		68,42

6. Escolha múltipla. Por favor faça uma cruz à frente da resposta que achas correta. Estabelecimentos que podem fazer parte da economia solidária são: (Valores corretos: 3)

Resposta	Número respostas
Loja de empréstimos	10
(correto)	
Vivenda privada	3
Creche comunitária	16
(correto)	
Aldeia ecológica (correto)	13
Restaurante 5 estrelas	3
N/R	15
Total	57 (3 x 19)

Quadro 11 – Percentagem respostas corretas em total

Número respostas corretas: **39** / **68,42 %** Número respostas erradas: 6 / 10,52 % Não respostas (N/R): 15 / 26,32 % Número total de respostas: 57 / 100 %

Quadro 12 – Percentagem respostas divido por estudantes

Resposta	Número respostas	Numero estudantes	Pertcentagem
Loja de empréstimos (correto)	10	19	52,63
Vivenda privada	3		15,79
Creche comunitária (correto)	16		84,21
Aldeia ecológica (correto)	13		68,42
Restaurante 5 estrelas	3		15,79

7. Questão aberta. Por favor responde em duas ou três frases.

Achas que a Economia Solidária pode melhorar alguma coisa na nossa sociedade? Se sim, que seria?

Quadro 12-	Respostas	questão	aberta
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Categoria de respostas	Número respostas
Just "yes"	3
Just "No"	1
Yes, social justice	3
Yes, environmental issues	2
Yes, social justice and environmental	1
issues	
N/R	9
Total	19

Número respostas: **10** / **52,63** % "No": 1 / 5,2 % "Yes": 9 / 47,37 % Não respostas (N/R): 9 / 47,37 % Número total de respostas: 19 / 100 %

## Perguntas sobre o método de aprendizagem através do jogo

Escala. Por favor marca com uma cruz na escala de 1 a 5. O que tu achaste sobre temas novos através de um jogo? Achas que é mais fácil aprender sobre temas novos através de um jogo?

Quadro 13 - Percentagem respostas divido por estudantes

Resposta	Número respostas	Pertcentagem
1.Foi muito difícil	0	0 %
aprender através do		
jogo		
2.foi difícil aprender	0	0 %
através do jogo		
3.É tão fácil como	4	21,05 %
outro métodos mais		
tradicionais do ensino		
4.Foi fácil aprender	11	57,89 %
através do jogo		
5.Foi muito fácil	4	21,05 %
aprender através do		
jogo		
N/R	0	0 %

Total 19 100%
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2. Escala. Por favor marca com uma cruz na escala de 1 a 5. Achas que é mais interessante aprender sobre temas novas através de um jogo?

Quadro 14 - Percentagem respostas divido por estudantes

Resposta	Número respostas	Pertcentagem
1.Foi muito menos	0	0 %
interessante de		
aprender através do		
jogo		
2.Foi menos	0	0 %
interessante de		
aprender através do		
jogo		
3.É tão interessante	1	5,26 %
como outro métodos		
mais tradicionais do		
ensino		
4.Foi mais	8	42,12 %
interessante de		
aprender através do		
jogo		
5.Foi muito mais	10	52,63 %
interessante de		
aprender através do		
jogo		
N/R	0	0 %
Total	19	100%

3. Escala. Por favor marca com uma cruz na escala de 1 a 5 o nível da tua motivação. Achas que aprender sobre temas novas através de um jogo aumentou a tua motivação em aprender?

Resposta	Número respostas	Pertcentagem
1.Foi muito menos	0	0 %
motivador de		
aprender através do		
jogo		
2.Foi menos	1	5,26 %
motivador de		
aprender através do		
jogo		
3.É tão motivador	3	15,79 %
como outro métodos		
mais tradicionais do		
ensino		
4.Foi mais motivador	11	57,89 %
de aprender através		
do jogo		
5.Foi muito mais	4	21,05 %
motivador de		
aprender através do		
jogo		
N/R	0	0 %
Total	19	100%

Quadro 15 - Percentagem respostas divido por estudantes

#### Perguntas sobre o grau de empoderamento

1. Escala. Depois de fazer o jogo sentes-te mais motivado em contribuir a construir a nossa sociedade e ser um cidadão ativo? Por favor marca com uma cruz na escala de 1 a 5.

Quadro 16 - Percentagem respostas divido por estudantes

Resposta	Número respostas	Pertcentagem
1.Não sinto	0	0 %
motivação nenhuma		
2.Sinto-me pouco	2	10,53 %
motivado		
3.Sinto-me motivado	4	21,05%
em contribuir		
4.Sinto-me muito	10	52,63 %
motivado em		
contribuir		
5.Sinto-me	3	15,78 %
extremamente		
motivado em		
contribuir		
N/R	0	0 %

Total 19	100%
----------	------

2. Escala. Depois de fazer o jogo achas que a tua contribuição pode fazer uma diferença na sociedade? Por favor marca com uma cruz na escala de 1 á 5.

Quadro 17 - Percentagem respostas divido por estudantes

Resposta	Número respostas	Pertcentagem
1.Sinto que a minha	0	0 %
contribuição não faz		
diferença		
absolutamente		
nenhuma		
2.Sinto que a minha	0	0 %
contribuição não faz		
muita diferença		
3.Sinto que a minha	9	47,36 %
contribuição pode		
fazer alguma		
diferença		
4.Sim, sinto que a	8	42,11 %
minha contribuição		
pode fazer uma		
diferença		
5.Sim, sinto que a	2	10,53 %
minha contribuição		
pode fazer uma		
diferença enorme		
N/R	0	0 %
Total	19	100%

Questão aberta. Por favor responde em duas ou três frases. Há alguma coisa em que queres contribuir para a sociedade, o que é?

Quadro 18 - Respostas questão aberta

Categoria de respostas	Número respostas	Pertcentagem
Sim, menos preconceito e poluição	1	5,26 %
Sim, fazer volutariado, doações, menos preconceito	1	5,26 %
Sim, menos poluição e ajudar o ambiente	1	5,26 %
Claro, gostaria muito que a sociedade melhora-se, mas tenho consciência que é uma coisa que vai demorar muito tempo. Não se faz "só assim". É algo que apesar muito bonito, é preferível, é algo que tem de ter impacto na funcionalidade e mentalidade do mundo todo. Sou sonhadora, mas realista	1	5,26 %

Não	1	5,26 %
N/R	14	73,68 %
Total	19	100%

## Perguntas gerais sobre o jogo:

1. Escala. Gostaste do jogo sobre a economia solidária? Por favor marca com uma cruz na escala de 1 á 5.

Quadro 19- Percentagem respostas divido por estudantes

Resposta	Número respostas	Pertcentagem
1.Não gostei nada	0	0 %
2.Gostei mais ou	1	5,26 %
menos		
3.Foi neutro	0	0 %
4.Gostei	10	52,63 %
5.Gostei muito	8	42,11 %
N/R	0	0 %
Total	19	100%

3. Se quiseres dizer qualquer coisa ou se tens uns conselhos para melhorar ou mudar o jogo, podes responder aqui em duas ou três frases.

Quadro 20 – Respostas questão aberta

Categoria de respostas	Número respostas	Pertcentagem
Nada, está tudo bem	3	15,79 %
Sim, as regras poderiam estar explicado	1	5,26 %
com um foco mais claro		
Através do jogo podemos perceber melhor	1	5,26 %
a economia sustentável		
N/R	14	73,68 %
Total	19	100 %

## Annex E – Regulamento Entrevista

No âmbito da pesquisa de para a tese de mestrado no ISCTE-IUL com o tema *Teaching Solidarity Economy in Portuguese High Schools through a game based on experimental, creative and playful methods*, eu gostaria de executar uma breve entrevista online, por chamada whatsapp, que visa aprofundar as suas observações e avaliações do jogo.

Os dados recolhidos através da entrevista serão estritamente confidenciais e é garantido o anonimato do entrevistado. Além disso, os dados obtidos serão usados exclusivamente para esta pesquisa.

Estas são as implicações da sua participação:

- A entrevista não deverá ter uma duração superior a meia hora e, será transcrevida e caso você autoriza também será gravada;
- A informação da entrevista será usada de forma anónima e será exclusivamente usada pela análise de dados desta pesquisa;
- Os dados recolhidos em forma das anotações, gravações e transcrições serão mantidos por um período de 48 meses e depois deste período, a informação será eliminada.

Também posso enviar-lhe a transcrição e a gravação da entrevista. Caso precisar mais informações pode sempre contactar-me pelo e-mail hanna.flachs94@gmail.com. Agradeço a sua colaboração e a sua disponibilidade.

## Nome da organização

Escola Básica e Secundária Passos Manuel Agrupamento de Escolas Passos Manuel

## Assinatura do entrevistado

Japped ef Jure

Professora de Filosofia e Diretora de Turma

## Annex F – Characteristics Players



Annex G – Physical Appearance Players





## Annex H - Regras do Jogo

Fase 1: Acumulação de riqueza

OBJETIVO: Ganhar a máxima quantidade de dinheiro e a máxima quantidade de pontos exclusivos

FIM:

A fase 1 acaba quando a primeira pessoa acaba a segunda volta ou quando o tempo acaba (30-40 min)

### **Regras gerais:**

As pessoas têm que formar equipas de 3-5 pessoas. Uma pessoa da equipa tem a responsabilidade pelos dados, outra é o "tesoureiro" que guarda e conta o dinheiro que aequipa tem, outra tem os cartões dos estabelecimentos e outra pessoa tira os cartões e guarda os pontos ganhos.

Cada equipa tira uma carta inicial que é associada com uma personagem. Cada personagem representa uma pessoa diferente com determinados privilégios, condições e contextos sociais e culturais que determinam as possibilidades e limitações durante o jogo. Cada equipa fica com um cartão com as informações sobre a sua personagem.

Todas as equipas põem as suas personagens no campo marcado "início". Uma equipacomeça a lançar os dados e pode avançar o número de campos que o dado indica.



Cada vez que um jogador passar nas casas de comida, casa, loja/ cafés, social, entretenimento, cultura ou turismo pode implantar os estabelecimentos relacionados comcada casa. Uma pessoa da equipa fica com a tabela dos estabelecimentos e a equipa pode discutir que estabelecimento querem construir dentro das suas possibilidades financeiras. Na tabela podem encontrar as diferentes possibilidades de construção no campo com os respectivos custos da construção e os pontos ou dinheiro que podem ganhar. Se não querem estabelecer nada por falta de meios financeiros ou outras razões também têm a possibilidade de desistir e não construir nada.

Cada vez que alguém passar na casa onde um jogador tem um estabelecimento tem que pagar para usar o estabelecimento. Mas em alguns casos a pessoa que passar na casa também pode ganhar pontos ou dinheiro, dependendo do estabelecimento. Todas as condições para construir e o que acontece se alguém fica na casa do estabelecimento estáescrito na tabela dos estabelecimentos.

Se alguém fica no campo da "comida" por exemplo e quer estabelecer um restaurante local,não tem

que estabelecer neste campo específico, mas em qualquer campo que diz"comida". O Jogador que tem um estabelecimento tem que pedir o pagamento de entrada/renda etc. do seu estabelecimento/evento a outro jogador que ficar nesta casa. Seo jogador 1 se esquecer de pedir, a outra pessoa não tem que pagar.

Também há possibilidade de perder um estabelecimento quando a sua equipa chegue aovalor de - 1000 MI/MC de dívida.

Na primeira ronda da fase 1, todos os jogadores têm que parar na casa de "trabalho" paraestabelecer o seu negócio ou associação.

Quando alguém fica na casa salário/ imposto tem que pagar os seus impostos ou recebe oseu salário.

Se alguém fica na casa "cartão" tem que tirar um cartão e seguir as instruções.



Durante o jogo a equipa pode ganhar os seguintes pontos:



**EXCLUSIVO:** Ganhas pontos exclusivos se estabeleces e usas estabelecimentos caros e exclusivos



**LIXO:** Causas lixo se a tua atividade económica não é sustentável e está a causar problemas ecológicos como qualquer forma de poluição e destruição do ambiente

Cada equipa guarda os seus pontos exclusivos. O lixo é distribuído pelo tabuleiro.

## Fase 2: Construção de comunidade e solidariedade

Os estabelecimentos e pontos da fase 1 mantêm-se na fase 2

## **OBJETIVO**:

Ganhar a máxima quantidade de **pontos solidários** e **transformar o lixo em** recursos naturais

FIM:

A fase dois acaba quando a primeira pessoa acaba a segunda volta ou quando o tempo acaba (30-40 min)

### **Regras gerais:**

Além de dinheiro, lixo e pontos exclusivos também é possível ganhar os seguintes pontos:



GANHAR PONTOS:

Nesta fase é importante os seguintes **pontos solidários:** 



**COMUNIDADE:** Ganhas pontos comunitários se melhoras a vida geral para a comunidade e contribuis para melhor solidariedade e respeito pelas diferentes culturas e orientações sexuais



AUTOGOVERNA das hierarquias,







**COOPERAÇÃO:** Ganhas pontos de cooperação se estás envolvido em ajuda mútua entre pessoas na sociedade, dentro e entre as organizações

AUTOGOVERNAÇÃO: Se contribuis para a diminuição das hierarquias, participação igualitária, autodeterminação e democratização da tua instituição.

**LOCAL:** A produção é feita com recursos o mais locais possíveis e decisões deveriam ser conduzidas tão localmente quanto possível

**USO COMUM:** Se bens são produzidos, utilizados ou geridos em comum pela comunidade e não são sujeitos a propriedade privada

**CUIDADOS:** Para atividades que são essenciais para conservar e manter a vida como o trabalho de cuidado a pessoas idosas ou doentes, cuidados infantis, ou atividades domésticas que são igualmente valorizadas como atividades de produção

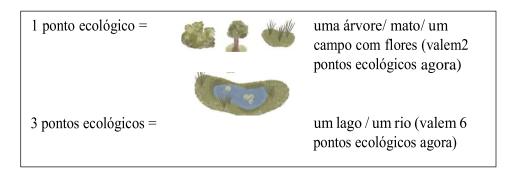


**ECOLÓGICO:** Prudência na utilização de materiais, energia, água e terra, bem como a sua integração em ciclos regionais para manter um ecossistema harmônico. Também inclui a consciência da dependência dos seres humanos da natureza.

É possível trocar os pontos ecológicos para tirar lixo do tabuleiro.



Só quando todo o lixo for tirado, é possível plantar árvores, campos com flores ou rios elagos com os seus pontos ecológicos.



Vocês têm que anotar a quantidade de recursos naturais que plantaram, porque vai aumentar a quantidade dos vossos pontos ecológicos. Cada árvore/ cada mato/ cada campode flores vai duplicar os pontos ecológicos.

Nesta fase, é possível ganhar um ponto comunitário doando dinheiro para perdoar asdívidas de outros jogadores.



Nesta fase podem ganhar dinheiro na mesma maneira como na fase anterior.

Há só uma diferença, porque agora há duas moedas. Uma é a moeda internacional (MI) e a outra é a moeda comunitária (MC). Na primeira fase só existe a moeda internacional e na segunda fase existem os dois tipos de moedas. Nos estabelecimentos internacionais só se pode pagar em moeda internacional e em estabelecimentos locais pode-se pagar em moedalocal ou internacional.

Na segunda fase os jogadores têm a possibilidade de trocar todo o seu dinheiro ou parte do seu dinheiro em moeda local no início de cada ronda. Durante a ronda não pode trocar o seudinheiro para uma outra moeda. O salário também pode ser pago em moeda local.

Se optar pela moeda local **só pode pagar em estabelecimentos locais**, portanto vai ajudar a economia local, uma vez que o dinheiro não pode ser gasto em estabelecimentos internacionais. Também pode diminuir a sua pegada ecológica porque evita transportes de materiais de distância cumprida como tudo é comprado localmente. Além disso, numa crise económica (que pode acontecer nos cartões) a sua fortuna não vai ser afetada com a moeda local. Se uma pessoa fica numa casa onde há um estabelecimento internacional não pode pagar em moeda comunitária, mas se só tem moeda comunitária não vai ter que pagar.

## O que é uma moeda comunitária?

As moedas comunitárias (MC), que também podem ser chamadas moedas alternativas ou complementares, são moedas que são criadas por atores não estatais e funcionam como alternativas ao dinheiro que é criado pelos bancos centrais (cf. Norte 2019: 92).

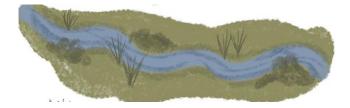
Essas moedas visam estabelecer uma economia mais local, convivial e sustentável. Uma economia que se concentre nas necessidades das comunidades e não no crescimento do PIB (cf. Norte 2019: 94). Moedas comunitárias permitem uma forma de financiamento mais comunitária, auto-organizada e descentralizada.

## Annex I – Pontos do jogo

exclusivo comunidade κοορεπαção Le ecológico 5 3 autogovernação local USO comum ruidados

## Annex J – Natural resources and waste









## Annex K – Establishments and explications



TRABALHO

CUSTO: 1 000 000 MI PONTOS: 3 lixo. 1 exclusivo

empresa)

NEGÓCIO MULTINACIONAL (internacional):



## NEGÓCIO MÉDIO (local):



CUSTO: 10 000 MI/MC PONTOS: 1 local, 1 comunidade SALÁRIO: 4 000 IC e 100 IC de cada pessoa que passa nesta casa(compra alguma coisa da tua empresa) IMPOSTOS: 50 % RISCOS: há a possibilidade de perder parte do salário do negócio e ficarcom uma dívida de 5 000 IC se tirar o cartão "*negócio não tem êxito*"

SALÁRIO: 7000 MI e 200 MI de cada pessoa que passa nesta casa(compra alguma coisa da tua

paga poucos impostos porque investe todos os lucros novamente na emp-resa e tem a sede no estrangeiro, num país onde se paga pouco impostospelos lucros. Também têm suficiente dinheiro para pagar lobbyistas RISCOS: há a possibilidade de perder parte do salário do negócio e ficar com uma dívida de 500 000 IC se tirar o cartão "*negócio não tem êxito*" Só é possível

IMPOSTOS: 10 % impostos sobre os 7000 MI

receber dinheiro em moeda internacional

## NEGÓCIO PEQUENO (local):



CUSTO: 2 000 MI/MC PONTOS: 1 local, 1 comunidade SALÁRIO: 1 000 MI/MC e 50 IC de cada pessoa que passa nesta casa(compra alguma coisa da tua empresa) IMPOSTOS: 50 % RISCOS: há a possibilidade de perder parte do salário do negócio e ficarcom uma dívida de 1 000 IC se tirar o cartão "*negócio não tem êxito*"

# ASSOCIAÇÃO SOCIAL (local):



CUSTO: 200 MI/MC

PONTOS: 1 autogovernação, 1 comunidade SALÁRIO: 800 MI/MC e a pessoa mais pobre recebe 100 MI/MC se alguémpassa nesta casa (alguém está a fazer uma doação) IMPOSTOS: 30 % RISCOS: há a possibilidade de perder parte do salário da associação setira o cartão que diz *"a associação não tem êxito*"

# ASSOCIAÇÃO AMBIENTAL (local):



CUSTO: 300 MI/MC PONTOS: 1 autogovernação, 1 comunidade SALÁRIO: 800 MI/MC e recebes um pontos ecológico se alguém passanesta casa (alguém está a fazer uma doação) IMPOSTOS: 30 % RISCOS: há a possibilidade de perder parte do salário da

RISCOS: há a possibilidade de perder parte do salário da associação setira o cartão que diz *,, a associação não tem êxito* "



# CRECHE EXCLUSIVA (internacional):



Creche internacionalmente reconhecida e que proporciona a possibilidade decuidar de crianças o dia inteiro com os melhores educadores professionais

CUSTO: 4000 MI

PONTOS: 1 exclusivo BENEFÍCIO: 200 MI se alguém passa nesta casa e 200 MI de pessoas quetiram um cartão relacionado com assistência a crianças

## LAR EXCLUSIVO (internacional):



Lar que é internacionalmente reconhecido e que proporciona a possibilidadede uma reforma descansada e luxuosa

CUSTO: 4000 MI PONTOS: 1 exclusivo BENEFÍCIO: 200 MI se alguém passa nesta casa e 200 MI de pessoas quetiram um cartão relacionado com serviços da casa de repousos

# CRECHE COMUNITÁRIA (local):



Creche em que trabalham educadores profissionais independents e os pais se revezam para dar a oportunidade a outros pais de trabalhar durante o dia

## CUSTO: 800 MI/MC

PONTOS: 1 cuidados , 1 comunidade BENEFÍCIO: 100 MI/MC se alguém passa nesta casa , e 100 MI/MC de pes-soas que tiram um cartão relacionado com assistência a crianças

# LAR COMUNITÁRIO (local):



Lar em que trabalham enfermeiros/as independentes e voluntários da comu-nidade

CUSTO: 800 MI/MC PONTOS: 1 cuidados , 1 comunidade BENEFÍCIO: 100 MI/MC se alguém passa nesta casa, e 100 MI/MC de pes-soas que tiram um cartão relacionado com serviços da casa de repousos

# CENTRO MÉDICO COMUNITÁRIO (local):

Centro médico em que trabalham médicos independentes, estudantes demedicina, e voluntários



CUSTO: 800 MI/MC PONTOS: 1 cuidados, 1 comunidade BENEFÍCIO: 100 MI/MC se alguém passa nesta casa e 100 MI/MC pessoasque tiram um cartão relacionado com serviços médicos



## BENS CULTURAIS



ÓPERA (internacional):

CUSTO: 8000 MI PONTOS: 1 lixo, 2 exclusivos BENEFÍCIO: 100 MI entrada das pessoas que passam nesta casa



MUSEU(internacional):

CUSTO: 4000 MI PONTOS: 1 lixo, 1 exclusivo Benefício: 80 MI entrada das pessoas que passam nesta casa



CINEMA MULTICULTURAL NO AR LIVRE (local): Cinema no ar livre onde se pode ver filmes de diferentes culturas

CUSTO: 300 MI/MC PONTOS: 2 comunidade BENEFÍCIO: entrada livre de pessoas que ficam neste campo, extra pontode comunidade para o dono das pessoas que passam nesta casa



CENTRO DA COMUNIDADE (local): Espaço onde a comunidade pode conviver e fazer eventos gratuitamente

CUSTO: 300 MI/MC PONTOS: 1 cooperação, 2 comunidade BENEFÍCIO: entrada livre, extra ponto comunidade para ti se alguém passanesta casa



COMIDA



## RESTAURANTE 5 ESTRELAS (internacional):

CUSTO: 1000 MI PONTOS: 1 lixo, 1 exclusivo BENEFÍCIO: 100 MI da pessoa que come aqui (que passa nesta casa)



# RESTAURANTE VEGANO E VEGETARIANO LOCAL (local):

CUSTO: 500 MI/MC PONTOS: 1 local, 1 ecológico BENEFÍCIO: 30 MI/MC de cada pessoa que come aqui (que passa nesta casa) e um extra ponto local para ti se alguém passa nesta casa



## HORTA COMUNITÁRIA (local):

Horta onde toda a comunidade pode ajudar e tirar frutas e legumes a vontadee não tem que fazer compras no supermarcado (pode aparecer nos cartôes)

## CUSTO: 100 MI/MC

PONTOS: 1 ecológico, 1 comunidade BENEFÍCIO: extra ponto comunitário e ecológico para ti se alguém passanesta casa



# ACORDO COM O AGRICULTOR (local):

É um acordo que há com o agricultur que te permite comprar a comida direta-mente com ela/ ele sem intermediário do supermercado

## CUSTO: 30 MI/MC

PONTOS: 1 cooperação, 1 comunidade BENEFÍCIO: extra ponto comunitário para ti se alguém passa nesta casa, pessoas podem comprar a comida diretamente do agricultor por metade dopreço do supermercado



## ENTRETENIMENTO



FASHION WEEK (internacional): Semana em que se mostra as colecções de alta costura mais recentes a pú-blico de todo o mundo

CUSTO: 2000 MI PONTOS: 1 lixo, 2 exclusivos BENEFíCIO: 400 IC entrada (de pessoas que passam nesta casa)



BAR-TERRAÇO (internacional): Bar exclusivo com vista pela cidade e preços elevados para um público inter-nacional

CUSTO: 1000 MI PONTOS: 1 lixo, 1 exclusivos BENEFÍCIO: 200 MI entrada (de pessoas que passam nesta casa)



FESTIVAL MULTICULTURAL (local): Festival comunitário que festeja diferentes culturas com música, comida econvívio

CUSTO: 400 MI/MC PONTOS: 1 cooperação, 1 comunidade BENEFÍCIO: 20 MI/MC entrada, mais um ponto comunitário para ti se alguémpassa nesta casa



AULA DE COZINHA COMUNITÁRIA (local): Iniciativa comunitária em que pessoas diferentes da comunidade dão aulas decozinha, comem juntos e distribuem uma parte pelas pessoas desfavorecidas da comunidade

CUSTO: 100 MI/MC PONTOS: 1 cooperação, 1 comunidade BENEFÍCIO: 10 MI/MC entrada, extra ponto cooperativo para ti se alguémpassa nesta casa



COMIDA

HOTEL ** * * *			
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# HOTEL 5 ESTRELAS (internacional):

CUSTO: 10000 MI PONTOS: 1 lixo, 2 exclusivos BENEFÍCIO: 300 MI por noite das pessoas que passam nesta casa



AIRBNB (internacional): Plataforma que permite alugar a sua casa ou apartamento para turistas nomundo inteiro

CUSTO: 2000 MI PONTOS: 1 lixo, 1 exclusivos BENEFÍCIO: 150 MI por noite para das pessoas que passam nesta casa



HOTEL RECURSOS LOCAIS (local): Hotel que só usa recursos locais tanto empregados como comida e outrosmateriais

Custo: 1000 MI/MC Pontos: 1 comunidade, 1 local Benefício: 100 MI/MC por noite das pessoas que passam nesta casa



ECOTURISMO (local): Establecimento turistico que é sustentável e usa apenas recursos locais enaturais

CUSTO: 600 IMI/MC PONTOS: 1 ecológico, 1 local BENEFÍCIO: 80 MI/MC por noite das pessoas que passam nesta casa e umponto ecológico para ti



CASAS



# VIVENDA PRIVADA (local)

CUSTO: 10.000 MI/MC PONTOS: 2 lixos, 2 exclusivos BENEFÍCIO: 300 MI/MC de renda das pessoas que passam nesta casa



## CASA PRIVADA (local)

CUSTO: 8.000 IMI/MC PONTOS: 1 lixo, 1 exclusivo BENEFÍCIO: 150 MI/MC de renda das pessoas que passam nesta casa



CASA COMPARTILHADA (local) Custo: 400 MI/MC Pontos: 1 uso comum, 1 cooperação Benefício: 80 MI/MC de renda das pessoas que passam nesta casa



# CASA NA ALDEIA/ COMUNIDADE ECOLÓGIC (local)

Conjuto de casas numa pequena aldeia que é totalmente sustentável e viveem harmonia com a natureza

CUSTO: 300 MI/MC PONTOS: 1 ecológico, 1 uso comum BENEFÍCIO: 50 MI/MC de renda das pessoas que passam nesta casa



# LOJAS E CAFÉS

LOJA DE ROUPA ALTA COSTURA (internacional):
Loja só com roupa exclusiva e muito cara, fabricada no estrangeiro com custosbaixos, más condições e pagamentos baixos para os trabalhadores
CUSTO: 2000 MI
POntos: 1 lixo, 1 exclusivo
BENEFÍCIO: 300 MI das pessoas que passam nesta casa



LOJA DE PRONTO-A-VESTIR (internacional): É uma loja convencional de roupa "inglês: fast fashion" onde a roupa é feita noestrangeiro com custos baixos, más condições e pagamentos para os trabalhadores

CUSTO: 800 MI PONTOS: 2 lixos BENEFÍCIO: 80 MI das pessoas que passam nesta casa



## CAFÉ DE REPARAÇÃO(local):

Espaço de café e reparação que todas as pessoas podem usar gratuitamentepara reparar as suas coisas em vez de comprar coisas novas

## CUSTO: 200 MI/MC

PONTOS: 1 uso comum, 1 cooperação BENEFÍCIO: ponto cooperativo para ti se alguém passa nesta casa e pessoasque tiram um cartão relacionado com reparação não têm que pagar nada



#### LOJA GRATUITA (local):

Loja onde todos os objetos estão disponiveís gratuitamente à base de doaçõesde coisas que as pessoas já não usam ou precisam

## CUSTO: 100 MI/MC

PONTOS: 1 uso comum, 1 cooperação BENEFÍCIO: ponto cooperativo para ti se uma pessoa passa nesta casa e pessoas que tiram um cartão relacionado com a compra de roupa não tem quepagar nada



LOJA DE EMPRÉSTIMOS (local): Aqui pessoas podem pôr os seus bens à disposição para o uso communitário

CUSTO: 100 MI/MC PONTOS: 1 uso comum, 1 cooperação BENEFÍCIO: ponto uso comum para ti se uma pessoa passa nesta casa e pessoas que tiram um cartão relacionado com a compra de materiais não têmque pagar nada

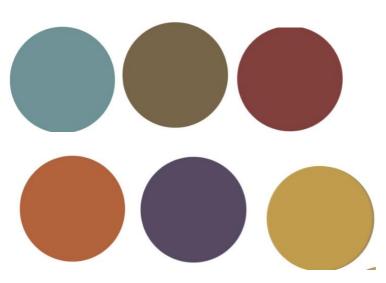
## LOJA EM SEGUNDA MÃO (local):

Loja que só vende roupa e materiais usados. Desta forma, as pessoas nãotêm que comprar roupa nova e podem poupar recursos



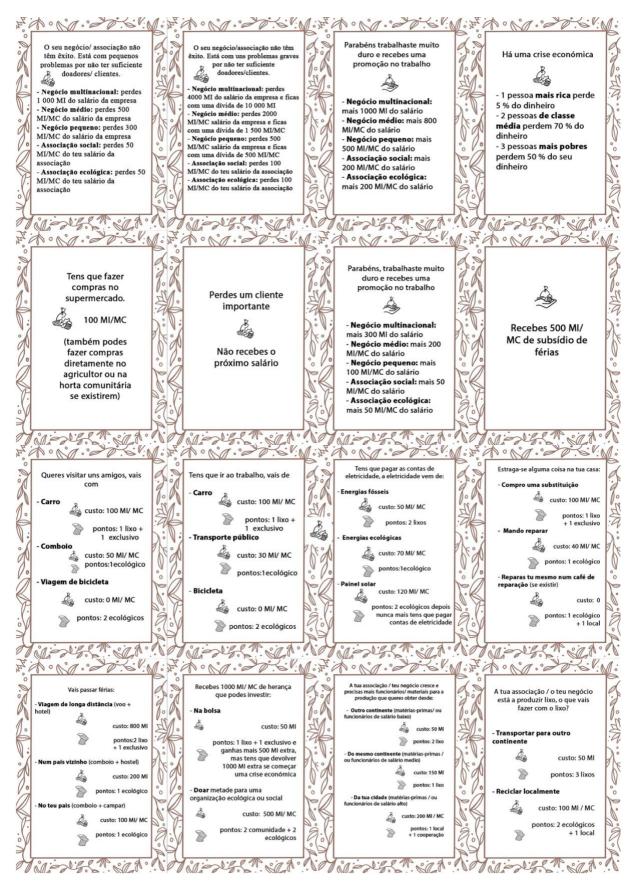
## CUSTO: 400 MI/MC

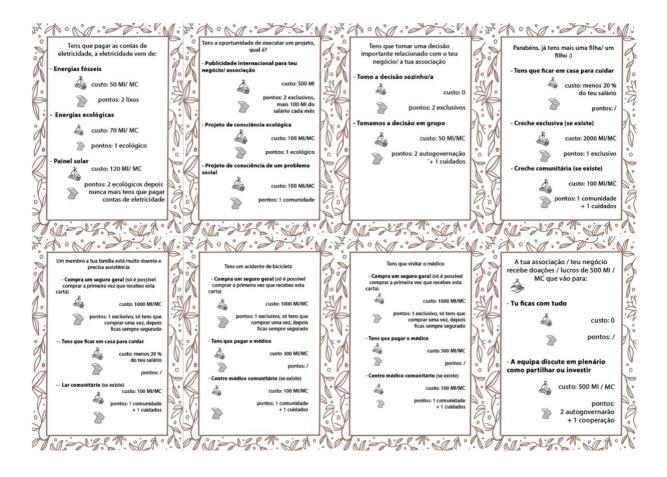
PONTOS: 1 ecológico, 1 uso comum BENEFÍCIO: ponto ecológico para ti se uma pessoa passa nesta casa e pes-soas que tiram uma carta relacionada com a compra de roupa ou materiais têm que pagar metade do preço



## Annex L – Pontos cores

## Annex M – Event Cards





# Annex N – Tables Accounting

Estabelecimentos próprios	Salário	Dinheiro total

## Tabela 1 – Contabilidade primeira fase do jogo

# Tabela 2 – Contabilidade segunda fase do jogo

Estabelecimentos próprios	Salário	Dinheiro total	
		Moeda internacional	Moeda Comunitária