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The role of empathy in food literacy initiatives in schools

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ABSTRACT

The multidisciplinary research on empathy, commonly agreed to be the ability to take another person's perspective, has come a long way in the attempt to describe and understand its wide scope of action. This master's thesis intends to explore the role of empathy in food literacy initiatives in the observed case studies, specifically in their attempt to foster prosocial food choices. Food literacy is part of a larger paradigm which intends not only to educate people about healthy eating, but providing both critical and functional knowledge regarding food-related decisions. As this thesis' focus is to understand the role of empathy in promoting prosocial food choices, food literacy inside the school environment was utilised as the channel. In order to understand the role of empathy in food literacy at school phenomenon in practice, this thesis' methodological approach was a multiple case study, which brought together 3 food literacy initiatives in 3 very diverse school scenarios: the Food Literacy course in Britannia Secondary School in Canada, the Landless Workers Movement Itinerant School in Brazil and the Fairtrade Schools in the United Kingdom. The adopted data analysis method was an inductive content analysis of the cases official releases, other relevant documents and two open-ended interviews. The conclusion is that the role of empathy in food literacy initiatives in schools are three: expanding affiliation, betting on the collective and biosphere consciousness. This thesis did not test the causal relationship of empathy in food literacy and food choices, but utilised a combination of literature on empathy and food consumption as well as case studies to justify its positions in the findings.

Keywords: Empathy Education, Empathy Neuroscience, Food Literacy, Biosphere Consciousness, Prosocial Food Choices, Collective Empathy

FOREWORD

When I think of the master thesis writing process, I think of three specific things: the corner spot at Mikrohalli (computer room available 24/7 at the University of Oulu), the many moments I was inspired by the things I learned while constructing this thesis and the support I received to reach the moment where I am now, and I will do my best to be brief in my thanks:

First and foremost, thank you **Janis Anthony** for the 5-year scholarship which allowed me to pursue my entire higher education at the University of Oulu. I would not have managed otherwise, and will ensure that this will be an investment of great return.

Thank you **Hosana Celeste** for being a friend, a source of inspiration and for the valid contribution to my research. You inspire me as a person, as a researcher, as an educator and as a friend. I love who we are when we are together.

I would like to express gratitude for the 19 other incredible human beings that composed the Intercultural Teacher Education class of 2014: our unique group made those years some of the most fruitful of my life. I admire each one of you and could not have made this far without the assistance of Alyssa and Hannele, who seemed to always know where to get information (or perhaps I was the one who never knew where to get it). This gratitude should also be extended to **Gordon Roberts**, who was our program coordinator during our first year and demonstrated what leadership in the academic scenario is and touch each one of us immensely (I would still like to learn how one could be so busy and still find time to address our individual needs making it seem like your top priority was to be there), and to **Katri Jokikokko**, for investing time and for the valuable contribution for this work and for my journey as a masters student.

The many friends I made in Finland deserve not only my gratitude, but also a huge piece of my life's dedication for them. They helped me build a home in the world's most opposite place to where I came from, turned me into a much better version of myself and no distance will change what we have built. Amon all those friends, I would like to leave a special thanks to **Essi Kyllönen**, one of those friends who touched and empowered me so greatly I can no longer imagine life without.

Furthermore, it is important to recognise that this opportunity came from a series of factors: my privilege to have been born to a family that prioritised my education and being a safe haven whenever I needed; my mom, who has empowered me and made me believe beyond imagination in what I can do; my Amazonas, my home place and treasure; **Vanessa Almeida**, the person who encouraged me and prepared me to start working as a teacher when I was as young as 18 years old; **Nelia, Renata** and **George**, who adopted me into their nuclear family circle when I moved to Connecticut; to **AIESEC**, who took me to over 30 countries bringing the best of me, teaching me to inspire others and making a leader out of me.

Finally, to all those who come across this thesis looking for means to understand empathy in a practical manner, know more about food literacy and even understand more about using food in the educational sphere, I hope this master's thesis can be inspiring and that it can be helpful for your work.

Proudly,

Gilberto Oliveira Neto

Oulu, Finland

May, 2019

CONTENT

"Something I understood from becoming vegetarian is that no life has rights over the other. It doesn't matter if it's a cow, dog, or even a fish, they are all lives, you see? That's exactly why I called Cida today and told her not to bring meat to be eaten at my house anymore. Cida said she ate straight from her container, that she'd never gotten a single pan dirty with her food. But then there's the energy thing, right? In the end she would still bring the animal's suffering into the house, there's no way out of it. I told Cida that after we understand this, it gets easier, we even get disgusted at eating dead bodies. Cida said that her food was prepared from a different service, and that she 'barely looked what they picked for her'. That's when I had to be direct, when there's a will there's a way, and when there's no will there are excuses, and that was a bad one. What do you mean 'barely look'? "There's no time", she said. I answered in my grandfather's words, that the day has 24 hours for all God's children and that what matters is the priority each gives to each thing. Cida was quiet, I think she had never thought about that. I said that it was just a matter of exemplifying, that I wasn't vegetarian until a friend gave me the hint, I thought it would be too much work, that I would have no time to eat. I was an idiot, you see? If it wasn't for my bro showing me things, I would always be enslaving other living beings, would always be damaging the world when there are ways not to do that, there are was to become a better person.

Cida kept quiet. Sometimes I get excited speaking 'cause I'm really into this vegetarianism thing, I feel inspired to change the lives of those I know, stimulate empathy, you know? Then I realised we had been talking for hours and that Valentina hadn't come down to do her needs. I asked Cida a last favour, I told her to bring Valentina down quickly before she left.

Cida blushed, apologised and said that if she did that, she would miss her bus.

It's messed up, you know? Seeing the puppy in need…

I spoke and spoke and spoke and it seems like Cida didn't understand anything."

<div align="right">(Natália Nodari, 2018[1])</div>

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[1] Translated from Brazilian Portuguese from: Osegundocu. (2018, July, 23). Um negócio que eu entendi quando eu virei vegetariano é que nenhuma vida tem direito sobre a outra. Não importa se é vaca, cachorro ou até peixe, tudo é vida, tá ligado? Por isso mesmo eu chamei a Cida hoje e expliquei [Facebook post]. Retrieved from:
https://www.facebook.com/osegundocu/posts/um-neg%C3%B3cio-que-eu-entendi-quando-eu-virei-vegetariano-%C3%A9-que-nenhuma-vida-tem-dir/1864207610541510/

INTRODUCTION

There is a popular online animated video entitled *The Power of Outrospection* (2012), based on a speech by the Australian author and philosopher Roman Krznaric, which takes the viewer on an engaging journey to understand how a revolutionary way to live a wise and good life, for one and the others, is to step outside of oneself. In the video, empathy is introduced as a guiding principle for our philosophies: it is considering the well-being of others prior to decision-making. It is not only good for others, it also does good to the empathiser. Watching that video sparked my interest to engage empathy in volunteer pre-service training, inside my practice as a teacher and as a university student in my research projects.

By observing how powerful it was to see what young people can do when they gather and strive to achieve something, I decided to look further into empathy and its engaging capacity, and dedicated my bachelor's thesis to do so. The research process for my bachelor's thesis demonstrated that empathy-induced prosocial behaviour, equipped with contextual understanding, skill building and opportunity for participation can bring the young person a sense of psychological empowerment, highly benefitting not only themselves, but also the matter they care for (Oliveira Neto, 2018). However, the work also brought a series of new questions and fields that were left unexplored by the theme. For instance, considering the challenges and the limitations of empathy research, Krznaric (2008) presents two main limitations: limitation of vision and limitation of scope. Vision because there tends to be little emphasis on understanding empathy as a large-scale social change factor. When talking about empathy and curriculum, a default tendency is to find its development as an individual skills in social emotional learning - the United Kingdom, for example, has been heavily investing on means to tackle early development of social and emotional skills via educational interventions[2] and even the creation of a ministry of loneliness, in order to address the striking fact that over 9 million people feel lonely[3]. Limitation of scope because it has little been explored in terms of global-basis change, across time as well as across space, especially in the contemporary globally interconnected scenario, in times when issues such as climate change do not only affect isolated nations, but compromise the future of the planet as a whole.

Therefore, the theoretical framework in this thesis will be largely based on works from neuroscientists Jamil Zaki (2014) and Antonio Damasio (2018), the social psychology of Daniel Batson (2008) and takes further consideration on empathy as opportunity for global-scale social change based on

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[2] Research findings have showed a link between social emotional skills and disadvantaged backgrounds and the importance of it at work. Also, how the opening of these skills gaps can start in childhood and remain open throughout lifetime. For more resources visit: https://www.gov.uk/government/publications/social-and-emotional-learning-skills-for-life-and-work (Social Mobility and Child Poverty Commission, 2015)

[3] New York Times 2018: https://www.nytimes.com/2018/01/17/world/europe/uk-britain-loneliness.html

Gregory Peterson (2015), in order to explore beyond to the limited scope of present interpersonal relationships.

Considering that, I thought about how empathy could be developed inside the school environment in a way that the students understand their place in time and space and how their actions and attitudes that would affect others - from close affiliates to far-away, unknown others. Moreover, I was looking not for a brand new initiative, pedagogy or organisation, but for something simpler than that. I was looking for means which would bring the element of "otherness consideration" to students' daily basis trivial living. People and what they consider to be a 'daily need', people and their consumer behaviour. I thought about food.

> *"There is a social conscience about the food chain: Once one interferes in the food chain,*
> *they also affect the entire human chain behind it"*
> Alex Atala (2015)[4]

Having never searched about food beyond recipes and flavours and culinary techniques, I found myself watching tens of documentaries and reading articles after articles in order to find the terms and movements that had before addressed food in a way that those involved have developed and demonstrated empathy-induced prosocial behaviour. In this process, I found initiatives such as Jamie Oliver's *Food Revolution*, aimed at educating children about food as well as tackling policies that support their healthy eating and the *Landless Rural Workers' Movement* in Brazil, movement that fights for agrarian reform and food sovereignty in Brazil, among other initiatives which will be mentioned in this thesis. I also found terms and concepts which exemplify what is already being done, researched and developed when it comes to all things food: the slow food movement, vegetarianism, locavorism, among others. The one that I chose to be the central object of exploration for this Master's Thesis was food literacy. Food literacy, according to Truman, Lane & Elliot (2017), stands for the idea of one's proficiency and awareness of knowledge and skills involving food, enabling their choices and abilities to affect their decisions regarding food. Truman et al. (2017) also highlights the fact that there has been little research on the functional outcome of food literacy, or in practice how it impacts health, consumption and/ or consumer behaviour, for example. I see there an opportunity to explore and link these two fields: empathy and food literacy - and, with this, understand the role of empathy in the initiatives of food literacy in basic education schools.

The reason why I chose this topic for this master's thesis is that I believe that a change of consumer behaviour via daily conscious choices which mind the common good across time and space can bring long-term social, economic and environmental change. Considering the alarming effects of climate

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[4] Brazilian chef, during a short documentary from YouTube channel "Munchies" (See Appendix A for a reference list of all videos referred to in this thesis)

change and the proliferation of weapons of mass destruction, the only means to counteract that - if we are not too late already - is by mass transformation of paradigm towards a consciousness which minds how our actions and consumption of resources affect the lives of other humans and creatures on the planet (Rifkin, 2009).

For instance, the Food and Agriculture Organisation of the United Nations (2018) points out in their official website that since 2014, hunger is consistently on the rise at the same pace while we waste and lose a third of all the food produced, from which a quarter would be enough to feed the malnourished population. Furthermore, around 14.5% of all human-caused greenhouse gas emissions come from livestock supply chains.

The documentary *Sustainable* (Speicher & Wechsler, 2016) raises a discussion based on the observations that, across time, there has been a strong correlation between the lesser time people spend in the kitchen[5], and the increase of ready-made food consumption and takeaways in the United States. Food traditions are losing space to fast food. What it means in terms of health is that people have created a culture of consuming industrialised food which is making them sick[6]. So not only has food become a gigantic profit-making commodity, its "side effect" also create a billionaire business as, for example, the pharmaceutical industry and "zero food" industry (zero calories, zero sugar, zero fat, but that may end up as harmful due to use of chemicals).

In short, our food choices affect the climate, the environment, our health, other living beings, and the economy as a whole. If we consider Krznaric's speech in *The Power of Outrospection* (2012), when he mentions empathy as a global-basis change factor, which aims at echoing across time as well as across space, no other channel appears to me as deep-rooted, essential and accessible as food. For that reason, the research question for this thesis is the following: *what is the role of empathy in food literacy school initiatives?*

The question aims at understanding how empathy is used in food literacy school initiatives aiming at fostering prosocial food choices. The initiatives observed all took place in primary or secondary schools. In order to answer the research question, this thesis starts by exploring empathy in its first chapter from a multidisciplinary stand as well as the use of empathy in education. In the second chapter, it will further understand food literacy as a proposal and how it has been applied in practice. Also, what food choices can be impacted and expected to change as an outcome of food literacy.

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[5] Data presented in the documentary reveals that an average American spends around 27 minutes in the kitchen per day. (Jabs & Devine, 2006) reaffirm the statement and also observe the correlation between the less time spent making food and the increase in the consumption of fast food, ready-made meals and processed food, all associated with a less healthy diet.

[6] Dietary, lifestyle, and metabolic risk factors account for an estimation of 18,000 deaths averted annually in the United States (Danaei, Ding, Mozaffarian, Taylor, Rehm, Murray, & Ezzati, 2011). Claude Fisher (2011) presents a correlation between the rupture with traditions around food and the increase in obesity in the United States.

Finally, this thesis conducts a multiple case study from three different food literacy initiatives: the Food literacy course in Britannia Secondary School in Vancouver, Canada, the Landless Workers' Movement itinerant schools in Brazil and the Fairtrade School initiative in the United Kingdom. The qualitative data was collected from three main sources: an archival review of the official releases about the initiatives, a collection of other relevant documents, such as articles, news, scientific articles, among others and in-depth interviews with two key informants from two of the case studies. The aim of this thesis is to explore the role of empathy in food literacy initiatives in the observed case studies and propose further discussion on how it can be used to foster prosocial food choices in other schools as well as other contexts: the community, the city, NGOs and others.

1. THEORETICAL FRAMEWORK

In order to understand the role of empathy in food literacy in the school environment as an alternative to foster prosocial food choices, this chapter will define the main concepts taken into consideration in this thesis, starting with empathy from the standpoint of social neuroscience, evolutionary biology and social psychology, based mainly on the works of Jamil Zaki (2014), Antonio Damasio (2018), Daniel Batson (2008) and Frans DeWaal (2010). With this, further understand empathy and empathy-induced behaviours.

In addition to that, the second subchapter will explore empathy inside the context of education, and factors education institutions and policy makers have been taking into account.

The third subchapter 1.3, focus on understanding food literacy, its scope of action and its components based on Cullen et al.'s (2015) and Block et al.'s (2011) proposals. Moreover, it will discuss different social implications on choice making and what previous research has suggested on the matter.

Finally, the fourth and last part of this chapter (1.4) brings the concepts of empathy and food literacy together and clarifies the concept of *prosocial food choices* in order to conclude the theoretical framework needed to understand the research question and what it aims at finding.

1.1. The phenomenon of Empathy

Most theoretical works on empathy begin with a statement on how many definitions and scopes there are for empathy itself. For instance, the compilation by Jean Decety and William Icke entitled *The Social Neuroscience of Empathy* (2009) begins with Daniel Batson's *What is empathy?*. In the article, he describes eight distinct phenomena, but that are all considered to be empathy. That does not mean that there is no agreed definition for empathy. What it means is that under the superficial known definition of "taking the perspective of the other" there is a wide variety of more complex phenomena in different levels of cognitive skills.

In this thesis, we will depart from the premises that empathy stands for "an awareness, an understanding, a knowing of another's state, condition or consciousness" (Håkanson, 2003). Håkanson definition recognises the different phenomena that could take place between the empathiser and the target, but it also contains the core elements so that empathy may take place: one individual attempting to reflect or understand what happens to another.

Another important consideration on empathy is that it can be both automatic and contextual (Zaki, 2014). Empathy occurs in the level of experience sharing, which consists of mirroring what one understands the other feels, and it is also mentalising what it would be like be in someone else's situation. Although both automatic and contextual demonstrate empathic behavior, there are many levels in which they dissociate (Zaki, 2014). Decety & Jackson (2004) iterate that in order for genuine empathy to take place, three elements are essential: the ability to share the other person's feelings,

the cognitive ability to intuit what another person is feeling, and the intention aiming at the well-being of the other.

When drafting this thesis, I also found it important to read further what has been said against using empathy as an engagement tool. Paul Bloom, for instance, author of *Against Empathy* (2016) has gained a lot of credibility arguing how empathy can be easily deceiving and prone to partiality. We will be taking many of Bloom's and other author's points in understanding the risks involving empathy. However, although they present a set of valid points and risks, the main issue in the matter seems to be that many of these studies choose to consider more specific terms such as concern and compassion instead, under utterly valid reasoning, but I will chose not to enter the merit of the debate on terms and limit the discussion using the definitions presented in this chapter in order to focus on the research question proposed. Nonetheless, I will dissociate perspective-taking skills alone from cognitive empathy abilities. For this thesis, I will be following the premise that it may not be considered empathy per se, if the phenomenon does not show prosocial motives (Håkanson, 2003).

In order to look deeper into those distinctions, empathy will taken into account in this thesis by being defined in three types, as did Krznaric (2008): *Affective Empathy*, *Cognitive Empathy* and *Empathy as an Appropriate Response*.

Affective Empathy

Affective empathy stands for a shared emotional response, where one feels what one understands to be what the other is feeling. Mirroring another person's state, such as feeling sad when the other is sad, happy when the other is happy, and so on. It accounts for what Zaki (2014) described as the one common thread in how empathy is perceived across fields - philosophy, cognitive and social psychology, and neuroscience, and more - that empathy can function automatically, and that it has been a key factor to preserve our species (DeWaal, 2010, Damasio, 2018).

De Waal (2010) observed how the state of other people awakens within us hidden memories of similar states that we have experienced - an automatic reactivation of neural circuits, performed by the *mirror neurons*, which are neurons that are activated when an action is performed or when the same action is observed, allowing a shared representation of actions (Kaplan & Lacoboni, 2006) or, as De Waal (2010) iterates: empathy begins "not in the higher regions of imagination(...), but with the synchronization of bodies: Running when others run, laughing when others laugh, crying when others cry or yawning when others yawn", and it was essential as living being to survive, and to preserve the species. In stronger relation to shared emotions, there is another aspect, which is limited to hominoid brains: the *Von Economo Cells* (VEN cells)[7]. VEN cells allow a quick and intuitive reaction on emotionally charged situations. Its main functions have not yet been proved; however, after

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[7] Recent research suggests that neuroscientists have found them in some cetaceans and elephants as well (DeWaal, 2010).

examining a number of patients who had damaged the brain area where VEN cells are found, in all of them it was noticed a breakdown of social functioning: loss of empathy, self-awareness, perspective-taking abilities (DeWaal, 2010, Kim et al., 2011)

> *"This approach, which rests on an impressive amount of data, holds that experience sharing is an evolutionarily preserved, early-developing mechanism that matches an observer's state to a target's state rapidly and often irrepressibly." (Zaki, 2014, p.1611)*

However, it is important to iterate that this does not mean people empathise involuntarily with everyone and in every situation. Firstly, because involuntary empathy occurs primarily with those one affiliates with. Decety & Chaminade (2003) state that affiliation, or identification, is a precondition for empathy: cultural background, ethnic features, age, job, and especially if they are closer to us, like a significant other, family, friend and so on. This is an evolved trait shared with other living beings and has played - and may play - a significant role in the survival of the species (Carter & Keverne, 2009), and until today, it is harder to identify with those who seem to belong to a different group (De Waal, 2010).

Another important factor to add here is that, to a certain extent, empathy can also be controllable: one may "think their way out" of certain empathic responses - such as by impeding them through some value judgements, for example (Walker, 2013). This means that we do have an innate capacity to feel empathy which takes place when our mirror neurons are triggered by certain events - usually events we can recall from a similar past experience, or events with other people we can identify with, - and even though it is an automatic response, we are able to control, to some extent, how we respond to it. We can do so by means of selective attention and identification, as De Waal (2010) exemplifies: "If you don't want to be aroused by an image, just don't look at it". Another good example for this is how physicians and nurses, in order to both preserve their sanity and be able to better assist their patients, tone down the empathy towards the pain and suffering in means not to mirror it, but still be considerate towards, for example, how to communicate with the patient and the family. Furthermore, Zaki (2014) presents evidence on how individuals might avoid or approach to empathise by down-regulating or by shifting their attention toward affective cues. The main reasons people may avoid empathy are pain, costs and interference with competition, while the main reasons people demonstrated to approach empathy were affect, affiliation and desirability.

As empathy moves more from automatic to context dependent, it is important to understand the following: that empathy does not limit itself to an involuntary reponsonse. We do have the capacity to control as well as/or inhibit responses when done consciously. The cognitive, conscious use of empathy will be referred to as *cognitive empathy*. We shall take it from what Zaki & Ochsner (2012) described as two "fundamentally dissociable routes to empathy".

Cognitive Empathy

Going back to the example of physicians and nurses, it was used to understand how mirrorring affective cues can be avoided. Also, we could observe a different phenomenon: taking the perspective of the patient and choosing the best way to communicate with them. This second action differed to the first one in terms of response. In there, the physician mentalises the context where the patient is, and chooses the action appropriate to the intention they would communicate with. In short, *cognitive empathy* consists of imagining another being's perspective (Kaplan & Lacoboni, 2006). But not only that, it contains at least a minimum degree of care to the other's welfare (Håkanson, 2003).

Håkanson (2003) described it as the ability to see the other as a subject, not an object: it means that one acknowledges the other's first-person perspective, that we build a sense of similarity of identity when recognising the other.

Perspective-taking is a key expression used to describe cognitive empathy. However, as much as perspective-taking as a skill in its own is a neutral capacity, big crimes against humanity rely greatly on this ability, but with lack of empathy. For illustration, when thinking of manufacturing torture objects and techniques, it contains all the cognitive capacity of perspective-taking used to understand others' needs, weaknesses and wants, but the emotional, caring factors, which are essential for positive other-centred behaviour, are not there (DeWaal, 2010). This highlights the importance in dissociating the skill alone from empathy, which contains the prosocial intention factor.

One important component of cognitive empathy - and which is fundamental for this thesis - is that it can be learned and developed throughout the lifespan (VanCleave, 2006). Peterson (2016) illustrates that not only can it be learned, but it can be learned by many and collective, considering that culture plays a significant role in how much individuals are willing to cooperate and play by moral rules.

That also means different people present different scales of empathic capacity. The more one develops their cognitive abilities, the more they improve their conductivity across the brain network, developing also other emotional skills and cognitive capacities, such as communication, decision-making skills, complexity, integration, social functioning within the world, among others (Grühn, Rebucal, Diehl, Lumley, & Labouvie-Vief, 2008). For instance, Kaplan and Lacoboni (2006) present the understanding of intention behind actions as a complex cognitive empathy skill.

Taking into account the stance that cognitive empathy can be deliberately developed, several projects and initiatives have been conducted worldwide with the intention to develop cognitive skills in people of all ages One example is the *Empathy Museum*[8] - the initiative consists of a an itinerant museum which exhibits a series of art projects across the world and aim at making participants see the world

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[8] For more information on the Empathy Museum, check their official website, as follows: http://www.empathymuseum.com/index.html

through others' perspectives by focusing on storytelling and dialogue - like the *Human Library, A Mile in My Shoes* and *A Thousand and One Books*.

Empathy as an appropriate response

People have the ability to pursue (or reject) certain affective cues and, from there, engage in further understanding the perspective of the other. Understanding these motives demonstrates also an important process that follows: a psychological reflection of costs and benefits which provide a net signal to the individual, signalling if they should engage in action towards that, or not (Zaki, 2014).

Damasio (2018) complements the idea by differing humans from other species by our ability to advance a working hypothesis on the basis of feeling and cultures - a motivated account for inventions such as arts, philosophical inquiry, political governance systems, economic institutions and many more, solely motivated by feelings. Inside a context with others, provoked feelings involving other people deploy empathic response, which can later be used to stimulate creative imagination in how to respond to those feelings.

One of the expressions used to identify that response process is *Empathy as an appropriate response* or, as Walker (2013) defines, *Empathic response.* For Walker, empathic response is an impulse to action that aims at alleviating the need of the other - once again, not separating the process from prosocial behaviour. The definition is reinforced by Batson's (2008) *empathy-altruism hypothesis*: the empathic concern that one feels towards a person in need produces altruistic motivation[9] to act towards relieving that need - hence, the use of the term empathy-*induced*.

> *"Those who bring in this third definition often emphasise that if you have shared the emotions of someone, or gained an understanding of their perspective, yet take no action as a result, then you have not fully experienced empathy. In a sense, it hasn't really touched you. Empathy, by this definition, needs to make a difference. It has to inspire moral action of some form."* (Krznaric, 2008, p. 11)

Moreover, other forms of prosocial behaviour may take also other factors of empathy-induced motivation for action. According to Batson (2008), they are two: *Collectivism*, which means motivation to benefit a particular group as a whole, as opposed to one's own welfare or the welfare of specific others who are benefited. Another motivation is called *Principlism*, or upholding moral principles, seeking for justice - here the concern shown for others appears to be prompted by duty to moral principles.

This is the cue when Paul Bloom (2015) raises awareness about the risks in engaging with empathy. Among these are ingroup bias and the issue of innumeracy - when in the attempt to help a person or

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[9] *Altruism* defined as according to the author: "a motivational state with the ultimate goal of increasing another's welfare. Altruism is juxtaposed to *egoism*, a motivational state with the ultimate goal of increasing one's own welfare. " (Batson, 2008)

a cause, one may ignore a much bigger number of negative consequences it may cause to others. The risk of actions when ignorance or lack of knowledge are present are countless. So here we may observe and agree that empathy alone may go astray, and may also be highly dangerous as being the only reference for moral functioning. However, the statement here is that empathy is not sufficient for moral functioning. Not that it is not necessary for it (Peterson, 2016)[10].

Another famous debate within empathy is whether other-centred behavior is truly altruistic or do they stem from egoistic motivations. Batson et al. (1981) present the altruistic action as the intermediate means to the end goal, as opposed to the end goal itself. For instance, if one was to save another person from a situation of danger, their end goal was to avoid the unpleasant emotion they would feel if they had not helped - e.g. shame or guilt. Another factor which may affect the response is when the opportunity to help occurs in a moment where the helper has been through a mood-enhancing event, or phase which led them to a negative emotional state. Hence, the helping the other situation would function to relieve one's own negative state (Dovidio, Allen, & Schroeder, 1990). De Wall (2010), concludes the story with a win-win standpoint: he states that one has always the opportunity to simply walk away and not partake in the situation. However, in the end, whether those empathy-induced actions were self-oriented or not, it does not only benefit the one in need, but also benefits the one helping.

Steven Pinker (2011) identifies six historical trends which potentially cause the considerable decline in violence worldwide. One excerpt I would like to point out is the one he calls the "Humanitarian Revolution", which took place starting in the 17th century onwards, and it is contemporary to the advent of literacy and the enlightenment: a wide replacement of ignorance for knowledge, and the possibility to understand the other, give place to different means to read the world - Pinker mentions cosmopolitanism, for example. The humanitarian revolution was also when torture, capital punishment, war, slavery and other matters were considered morally questionable. The equation pointed that the more empathic peoples became, the less cruelty was acceptable, proved by how those years were followed by abolition of slavery, abolition of death penalty for non-lethal crimes and judicial torture, for example. This humanitarian revolution illustrates Peterson's (2016) idea that empathy can not only be learned, but learned by many, bringing mass chain reaction - the effect which Krznaric (2015) calls *mass-empathic movements*.

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[10] For further discussion on empathy and moral functioning I recommend reading Peterson's *Can one love the distant other? Empathy, Affiliation and Cosmopolitanism* (2016).

1.2. Empathy in Education

The deliberate use of empathy as part of schooling has been experiencing a fast rise since the creation of the Social and Emotional Aspects of Learning (SEAL) in the United Kingdom in 2005 - empathy being one of these core aspects -, now already reaching over two thirds of English schools . The attention given to SEAL has increased the demand to bring more insights together in order to incorporate it to formal education. Another factor that contributes to this rise of the empathy talk inside education is the increase of the 'well-being' agenda in government policy circles in the past decade (Krznaric, 2008). Such has as gained considerable empirical attention as means to bring a more preventive approach and guide children onto successful developmental paths, as opposed to focused on what they ought not to be (Schonert-Reichl, Smith, Zaidman-Zait & Hertzman, 2011).

Inside the school environment, there are two main functions to be associated with empathy: teachers' empathy towards students and students' own development of empathy (Feshback & Feshback, 2009). Teacher Empathy stands for the teacher's ability to express concern, understanding and take the perspective of a pupil. Such involves both cognitive and affective domains of empathy, and may influence not only the student's perception of their teacher, but also their academic motivation and their own development of empathy skills (Barr, 2010).

In terms of students' empathy, there is strong evidence that prosocial behaviours, such as cooperation, sharing, donating and other altruistic acts positively correlate with high levels of empathic skills which, on the other hand, presents an inverse relationship with negative behaviours like aggression and social prejudice (Feshback & Feshback, 2009).

However, as much as research looks optimistically at the teachability of empathy, Hatcher, Missi, Walsh, Reynolds, Galea & Marz (1994) point out the importance of developmental readiness for that. This means that there is, across lifespan, a readiness for effective empathy training, which ought to be taken into serious account for empathy training in schools.

> *"Our findings suggest that a readiness for effective empathy training develops during the same time period that secure abstract thought, augmented moral development, and the ability to introspect appear during the college years."* (Hatcher et al., 1994, p.969)[11]

There are many activities performed in order to develop empathy in schools. For instance, projects like *Roots of Empathy*, which aims at facilitating the development of their social emotional

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[11] The method utilised by Hatcher et al. (1994) included comparing the Interpersonal Reactivity Index (IRI) (Davis, 1980) of One hundred and four high school and college students both before and after a standard course of empathy skills training. Among the findings was that the teachability of Empathic Concern (EC) and Perspective-Taking (PT) seemed more inclined to become feasible by the junior year of college, and that the capacity for true empathy in adolescence seems to begin in an identification with fictional characters, as evidenced by the strong increase in FS change scores for trained high school students, which evidence the importance of the developmental readiness for empathy training.

understanding as well as prosocial behaviours through recurrent visits by an infant and their parents in order to allow lessons on emotional understanding, caring for others, perspective-taking and so forth (Schonert-Reichl et al., 2011). Empathy education can also be a change of discourse towards more perspective-taking orientation. For instance, a class of eight-year-olds in Oxford studying Geography imagine what it is like to be street children in Delhi, and then write a story in the first person about the experience of leaving their village to find work in the city (Krznaric, 2008).

Moreover, as simple as first-person literature and fiction reading - studies have found that people who read less fiction report themselves as less empathic (Zaki, 2011). Thompson & Gullone (2003) propose empathy as core for *Humane Education*, which presents a rationale that by developing a bond with animal as means to intervene in the cycle of abuse, the prosocial behaviour towards human will be a consequence of it.

Overall, a growing body of policies, initiatives and literature demonstrate the direct effect of empathy on academic achievement:

> *"Learning, particularly in the curriculum areas of reading, literature, and social studies, should be facilitated by empathy because the empathic child is better able to place him- or herself in the role of central characters portrayed in the fictional and historical readings."* (Feshbach & Feshbach, 2009, p.87)

These feelings of that stem from empathy spark motivation to learn, fostered by conscious, problem-oriented and dialogue driven presentations of learning side by side with course literature, ideally as well added with differentiated treatment and availability of tutors and advisers (Holmberg, 2003). This systematic empathy training can be developed across a wide age range, however, due to a variety of research gaps, the full potential of empathy in education remains unknown (Feshbach & Feshbach, 2009). With this, this thesis intends to explore the role of empathy in a specific context involving learning about and through food and, with this, provide new insights for empathy education as well.

1.3. Food Literacy

This thesis did not have the expression *Food Literacy* at hand when it started, though it started with its core elements: an educational intervention through learning about food. Culinary arts could be a part of it, but it would be only a limited segment of the scope. Food science was even further away from containing all the elements needed, until I came across Eric Schofield's TED talk called *Food literacy - it's about more than just reading labels.* In the video he describes food literacy as an interdisciplinary model which he used to teach *through* food as many subjects as culinary, human geography, social justice as well as skills that go beyond the classroom, such as connecting with people and places, creativity, learning from mistakes and more. Having found scientific articles using the term

and describing initiatives, the term was adopted, and this part of the chapter will specify the scope to which we will refer in this thesis.

According to Truman, Lane & Eliot's (2017) scoping review of *Food Literacy*, the very first article found using the term was *Food Literacy Partners Program: A Strategy to Increase Community Food Literacy* (2001) by Kathryn Kolasa, Annette Peery, Nancy Harris, & Kim Shovelin. The article describes a local initiative in a small county in the United States which consisted of a big number of volunteers and health specialists delivering credible, practical and understandable nutrition information to the community as a response to the alarming health rates: alarming increase in obesity, amount of sedentary adults of over 60% and a the lack of nutrition trained professionals as well as other professionals' - such as physicians, nurses, teachers, farmers - basic nutrition knowledge. In this article, Kolasa et al.'s (2001) definition of food literacy was presented as a derivation of health literacy, with its goals and outcomes measured mostly on health improvement indicators.

For Truman et al. (2017), the different definitions of food literacy ever since have focused on three main types of knowledge: *Critical knowledge* - acquisition of knowledge and understanding of food and issues surrounding food, *functional knowledge* - focuses on skills, abilities and choices related to food - or initiatives that encompass both knowledges. Based on these types of knowledge, there are 6 most common components which can be found when trying to develop food literacy: knowledge, food/health choices, skills/behaviours, food systems, culture, and emotions.

Canada has presented a big advancement[12] in implementation of food literacy programs[13], as well as in policy development aiming at increasing population's skills and knowledge around food. However, according to Cullen, Hatch, Martin, Higgins & Sheppard (2015), in order "for an individual or population to be food literate and to fully engage in their food systems an ecological approach is necessary; one cannot be separated from their environmental or social context."

The statement takes me back not only to Alex Atala's quote on how by interfering in the food chain, one consequently interferes in an entire human chain, but also to Eric Schofield's practical use of the opportunity to use food literacy to transcend across school boundaries to real life settings. Taking these into consideration, the following subchapters will define the chosen scope of food literacy for this thesis, understand important aspects surrounding food and food choices and elaborate on the relationship between empathy applied, food literacy and food choices.

Scope and prior research

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[12] At the same time, it is important to consider that 39% of identified articles on food literacy were published in Canada (Truman et Al, 2017), which is where most theoretical and scientific work can give information on.

[13] A great example of food literacy initiative is Appetite4Change, also started in Canada. Their website contains numerous resources - including materials and a curriculum - to support implementing food literacy at school level. More information can be found on their website https://appetite4change.wordpress.com/

For the definition and scope used to define this thesis, food literacy will start from the definition proposed by Cullen et al. (2015, p.143):

> *"the ability of an individual to understand food in a way that they develop a positive relationship with it, including food skills and practices across the lifespan in order to navigate, engage, and participate within a complex food system. It's the ability to make decisions to support the achievement of personal health and a sustainable food system considering environmental, social, economic, cultural, and political components."*

Taking into account all the critical and functional elements identified in food literacy initiatives by Truman et. al (2017), the definition presented by Cullen et al. (2015) is one of the most complete scopes amongst the ones presented. It aims to capacitate individuals in terms of knowledge, food/health choices, skills/behaviours, food systems, and emotions. However, it does not consider culture as a focus element, in spite of the fact that she mentions its sustainability also in cultural terms. Nevertheless, when reading further, I have encountered approached not only towards a culture of sustainable or healthy food consumption, but also perception of food itself, food time and social norms around eating events, as observed by the French sociologist Claude Fishes, on an interview to the Brazilian Journal *Horizontes Antropológicos* (2011). Fishes makes a comparison of eating habits between France and the United States of America: in France, eating time is a shared event. It lasts long, families tend to do it together and there are norms around it. Such impacts eating habits in terms of how often, how much and what one eats, there is more control. On the other hand, a more individualistic culture like the USA, opened means for food to be fast, accessible, cheap and it can be eaten in accordance to one's own timing and convenient. He relates those habits as correlative to obesity, for example. Moreover, Fishes (2011) explains the difference between *faire à manger* - food made during the week, on busy days, with the intent to feed (and, indirectly, keep the eating tradition) and *faire la cuisine* - made on social occasions where food is made for entertainment, pleasure, and even art. A culture in which the tradition strongly surrounds the eating habits as opposed to a culture which has worked towards a rupture with traditions around food[14]. These societal aspects about the food, on the keeping certain traditions alive, on the means to perceive this universe, is what Truman et al. (2017) meant by *culture*, and the element not present in Cullen et al.'s (2015) definition.

When thinking of the intended scope for this thesis, I thought heavily on the perception of food beyond both pleasure and physiological need, and found a similar intention when I came across *From Nutrients to Nurturance: A Conceptual Introduction to Food Well-Being* (Block, Grier, Childers, Davis, Ebert,

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[14] Another fruitful discussion happens in an interview entitled *Is fast food a drug?* (2017) (in Portuguese, *Fast food é droga?*), when Fernando Grostein, a Brazilian director, refers to wine culture in Portugal, and exemplify how its consumption is healthy until it is stripped from its traditions. As it loses its tradition, overconsumption of alcohol on a regular basis becomes a new issue. These limits and norms is what Claude Fishes (2011) referred to in his interview.

Kumanyika & Bieshaar, 2011), where Block et al. propose of paradigm shift: the authors propose a halt in seeing food as merely nutrition for the body and recognise that nourishment that goes beyond the body: they call it *food for well-being*, and it stands for "positive psychological, physical, emotional, and social relationship with food at both the individual and societal levels".

Block et al. (2011) also bring five primary domain that represent the very core of the concept of food for well-being: food socialization, food literacy, food marketing, food availability, and food policy. Although this thesis' scope is food literacy, it is important to recognise other important factors that heavily affect food and food culture - therefore, this thesis will often refer back to them. As an example, food socialisation - how we grow to learn about food and food-based rituals - entails a large influence on how individuals and societies approach food, think about them and make their food choices. Common food socialisers are, for example, guardians, ethnicity, social class, culture, media and food marketing itself.

Having understood the components that build food for well-being and their strong reference to culture, socialising and media, it can be understood why Truman et al. (2017) identified *food/ health choices* and *culture knowledge* as the main elements addressed in Block et al.'s (2011) definition of food literacy as component of food for well-being. By adding food for well-being's components to this thesis' final scope, it is able to embrace a definition that contains all six elements of food literacy: knowledge, food/health choices, skills/behaviours, food systems, culture, and emotions. Therefore, this thesis' scope will be looking at food literacy from both lenses:

> *"the ability of an individual to understand food in a way that they develop a positive relationship with it, including food skills and practices across the lifespan in order to navigate, engage, and participate within a complex food system. It's the ability to make decisions to support the achievement of personal health and a sustainable food system considering environmental, social, economic, cultural, and political components."* (Cullen et al., 2015, p. 143)

as well as:

> *"understanding nutrition information and acting on that knowledge in ways consistent with promoting nutrition goals and FWB [food well-being]"* (Block et al., 2011, p. 7).

Food literacy and food choices

The element *Food/health choices* could be found in 66% of the food literacy definitions in Truman et al.'s (2017) scope review. This means that out of all the definitions present in the article, 66% of them presented an intention to cause an impact on how those educated by it make informed choices regarding food and nutrition. It came as second most present component, right after knowledge (69%), commonly together. Thus, a balanced combination of critical as well as functional knowledge.

However, an entire new perspective opens when the question *Do we really have a choice?* is introduced. Paola Carosella, a famous Brazilian chef and activist, during her interview in the short documentary *Is Fast Food a Drug?* (2017), states that we do not. The chef states that when everything contributes so that great masses of people choose something because they cannot choose something else, then it is not a choice. Also, that when one is deprived from education about food, access to culture and dignity, they become this kind of "zombie-like individuals seeking for flour and sugar all the time". What chef Paola Carosella relates to here, is the same issues Block et al. (2011) referred to when she categorised the five main components for food for well-being, and with these we may understand why they are so essential. They are: 1. food socialization, 2. food availability, 3. food marketing, 4. food policy, and 5. food literacy. In the following paragraphs, they will be explored from the attempt to understand how they influence one's food choices.

Booth, Sallis, Ritenbaugh, Hill, Birch, Frank & Hays (2009) present a table of top influencers in food choice. For instance, they present how the fast food restaurants available in one's neighborhood, the kind of snacks parents purchase - or have been purchasing throughout the years at home-, the kind of snacks available at the school cafeteria, among other influencers, have direct effect on one's eating patterns and habits - this exemplifies both matters of food socialisation and food availability.

Another research done about the influence of food availability was Ball, Timperio & Crawford's (2009). In their article, Ball et al. (2009) present the effects of geographical accessibility of healthy food stores and observed how in Australia they tend to be located in more advantaged neighborhoods. In addition to that, the article also presents socioeconomic limitations as one of the most reported barriers to consumption of fruit and vegetables, which are usually perceived also as less value for money in comparison to more energy-dense, satisfying options like fast-food, cakes and pastries. Giskes, Turrell, Lenthe, Brug, & Mackenbach's (2006) also iterate the effect socioeconomic capacity has in affecting lower social class individuals in what kind of food they tend to consume and bring home, which again influences the eating habit of the children being socialised in that household (Ball et al., 2009).

Food choice patterns can also be heavily influenced by time scarcity: both parents employed, long working hours - especially families in poverty, availability of ready-made meals and media trends for unhealthy foods. With this, there has been an increase in the consumption of fast foods and convenience meals, decrease of homemade food - all associated with less healthy diet (Jabs & Devine, 2006). Although Jacob & Devine's (2006) article was mostly based on data from the United States (US), the trends and implications described there can also be applied to other industrialized nations. On the other hand, in order to illustrate different scenarios, Claude Fishes (2011) describes well how the different approach to meal times in France, in spite of the working time outside of the parents and

the reminiscent gender roles, strong social norms around the meal time directly affect food consumption in terms of how much, when and what to eat.

In order to further understand the agency behind food marketing and the other components, Magdoff (2012, p. 16) raises awareness of how capitalism handles the food industry in seek for profit:

> *"The endless accumulation of profits, the motive force of the capitalist system, occurs through the production of commodities or services to sell at a price in excess of the production costs. Production for the purpose of sale and profit, instead of production for use."*

At the same time, consumer's naturally desire lower prices, and in order for suppliers to meet those needs, what happens is that suppliers yield to an overproduction of the same cheaper products, also cheaper to package, store and transport (Block et al., 2011). This results in easy and cheap availability of foods that contain the same components. For instance, according to the Food and Agriculture Organization of the United Nations (FAO) (2014), three edible plants alone - rice, maize and wheat - consist almost 60% of calories and proteins consumed by humans from plants. Furthermore, the food industry is heavily sponsored and advertised with the prior intention to sell, not necessarily public health. This means it will take over mass-media channels to attract views of all ages, including children and teenagers, when they create cartoon characters to attract children to buy their cereals, for example (Peterson, 2012). In this paragraph alone, we could see the overlapping nature of food for well-being's components by noticing that certain foods will be made more available, accessible and will be advertised more, thus being more commonly used to socialise the eating habits.

Finally, the government's relation with food choice: food policy is presented as one of the core components of food for well-being because it overlaps with all the others: the government defines food safety and production policies, pricing systems, food and nutrition labeling policies, agricultural policies and nutrition policies are examples of how they affect all the aforementioned cases[15]. The government regulations also set how schools are to feed their children. Schools are not only one of the most important socialising agents, but also one of the main providers of daily food to children and adolescents (Block et al., 2011). In addition to that, due to the amount of schools across the nations, the choice of supplier and products become an impactful economic decision.

Referring back to chef Paola Carosella's statement, when she asks *Is it really a choice, if people are being deprived from education about food, access to culture and dignity?*, we could reflect that there is a number of societal factors that contribute for them to choose the way they choose. Therefore, when addressing the topic of food literacy, which, as defined in this thesis, considers both critical and

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[15] An example which illustrates a real scenario campaign towards better food policies is the activism of Jamie Oliver's suggestions for the United Kingdom's "Childhood Obesity Strategy". You can further check Jamie's suggestions and the responses given in 2016 in the following link: https://www.jamieoliver.com/news-and-features/features/failings-new-governments-childhood-obesity-strategy/

functional skills around food, in special food/ health choices, one must always consider the country or region's regulations, socioeconomic situation of the students, teachers and parents, the geographical space they come from and its food availability.

Food literacy comes as the empowering element which educates the individuals with critical and functional knowledge to make their own choices, but it is important to consider how they have been socialised, what is available in their surroundings, how they are being advertised to consume and what their country or state's policies support.

1.4. Empathy applied to food choices

At an education conference at the University of Oulu, in January, 2019, I had the chance to have lunch with one of the conference's guest speakers. During lunch, he shared a story about an encounter with coffee farmers they had picked up for a school visit. In the end of their coffee-break, he went and poured the leftover coffee in the sink in order to wash the pot. One of the farmers immediately cringed, touched about how that was how their 100% arabica pick was being wasted. The speaker realised he had never before considered that amount of agency behind products they consumed, sold and advertised themselves in the organisation he was representing. He used that story to justify his loyal choice to consume fair-trade only in minimum-possible waste.

Hudson & Hudson (2003) talk about this tendency to not perceive any agency behind the end product using Karl Marx's concept of *commodity fetishism* - a "tendency of people to see the product of their labor in terms of relationships between things, rather than social relationships between people", and recognised that as a veil which hides an exploitative and undignified relationship between classes. The fair-trade movement, in counterpart, attempts to include the conditions of production as an essential and explicit component of the product itself. The results, according to Ladhari & Tchetgna (2015, p. 470) were the following:

> *"(...)in the UK, consumer awareness of the FT brand increased from 20% of the population in 2002 to 70% in 2008. In many European countries, especially the Netherlands, the UK, and Switzerland, FT has acquired a substantial market. FT products are now widely sold in conventional and specialized retail outlets, notably in specialized and conventional supermarket stores, which are becoming important purveyors of FT products. FT products are also marketed via the Internet and catalogues. Many FT products are sourced from the FT movement, whereas the others are sourced directly from producers and sold under specific brands - products increased in 2011 compared to 2010: cocoa (14%), coffee (12%), flowers and plants (11%), bananas (9%), sugar (9%), and tea (8%)"*

The article introduces the idea that consumers commitment to their environmental and social values are key factors that drive their preferences and decisions (Ladhari & Tchetgna, 2015). This commitment and motivation were widely studied by Daniel Batson (2008) and his empathy-altruism hypothesis, which describes how empathic concern towards one in need produces motivation to act

towards relieving that need. Furthermore, the subject in need can also be non-human: empathy can also be a motivating factor to protect other forms of life, such as the environment, animals and plants. Many of such environmental attitudes can also be associated with how people affiliate themselves as part of the natural environment (Berenger, 2007) - which highlights affiliation, a primary aspect of empathy (Decety & Chaminade, 2003).

By referring back to Peterson (2016), when he associates empathy as a core element of moral development and that by consequence of this development, more morally developed (thus, more empathic) individuals would eventually see a need to reflect their decisions onto choices that also enable the other - whether an affiliate or a distant other - to flourish. This thesis recognises food choices as means for dignifying, considering the well-being of the other - be it humans, animals or the environment itself. A study by Preylo & Ariwaka (2008) showed that as much as 60% of people who adhered to vegetarianism adhere to the different forms of vegetarianism with the intention to avoid animal cruelty[16]. Thus, it reaffirms the role cognitive empathy's increased level in ethically-motivated food choices, such as vegetarianism and veganism (Ruby, 2012).

Empathy as a reference for food choice is widely discussed by Anna Lappé, activist for sustainable food systems and co-author of the book *Hope's edge: the next diet for a small planet* (2002)[17]. In a blog entry entitled *The Empathy of Food* on May 10th, 2017, to her personal website, she compares food choice as being something usually presented under a "me-first framework" to food choice as an expression of collective empathy:

> *"the choice for organic food is a choice for farmworkers who shouldn't have to face toxic chemicals to do their job (...) It's a choice for communities that shouldn't' have to live in the shadow of chemical manufacturers."*

Some European countries can demonstrate the accuracy of Lappé's remarks: according to Zander & Hamm (2010), not only are people across Europe becoming more aware of their global responsibility of food consumption, they are also increasingly responding to this by shifting their consumer preferences to products that show respect to certain ethical standards. Ladhari & Tchetgna (2015) take this into account, and iterate the importance of communicating values such as "unity with nature, equal opportunity for all, brotherhood, and correction of unfairness" when marketing and selling fair-trade products.

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[16] What the authors define in the article as *moral vegetarians*. The article also demonstrates a correlation between vegetarianism and higher human-directed empathy (Preylo & Ariwaka, 2008). In addition to that, it is important to highlight that the study was conducted in Europe and adhered moral vegetarianism differs a lot from those coming form a society where one is socialised as vegetarian and has wide access for good, affordable, diverse and tasty vegetarian meals - India, for instance, has 40% of its population vegetarian (Ruby, 2012).

[17] In *Hope's edge: the next diet for a small planet* (2002) Anna and her mom share a collection of stories of clever local initiatives thriving against hunger, against undignified living and policies and how those people resist using their food production and consumption to do so.

There are a series of movements that were born out of collective prosocial care for the environment, for all the people involved in food production - from land to fork, for animals or even all of those. Among them is the Slow Food movement, global organisation that works to prevent the disappearance of local food traditions, present a counter alternative to the fast life and foster interest in food, where it comes from and how it affects the world. Its mission is to ensure everyone has access to goof, clean and fair food. The Slow Food movement works through biodiversity projects that aim at saving endangered food, provide education on how to make good clean and fair food choices through food and taste education, international events and rising conversations regarding important themes regarding food[18].

Another example is the Atá Institute, in Brazil. The Atá Institute has as mission to take better care of the relationships between men and food - not only the men that eat, but also those who produce the food. Their projects vary from encouraging sustainable production of indigenous ingredients, to building strong networks of people who work with food - social projects, chefs, policy makers, and more. Their aim is to strengthen the territories from their biodiversity, agrodiversity and social diversity and, with this, ensure good food access for all produced in means that is sustainable for both the environment and the producers[19].

This thesis will explore 3 specific food literacy initiatives inside the school environment in order to further understand the role of empathy development in food literacy in fostering prosocial food choices. In summary, those choices stand for conscious food choices that aim at others' well-being - be it the environment, the people producing, the animals or all of them.

The causal link between empathy driven food choices and food literacy must be further investigated and explored for more sound understanding, as there is little literature available addressing the topic. However, the three case studies presented in this theses attempt to contribute to filling those gaps by analysing concrete eliciting of prosocial food choices in the schools from utilising empathy in food literacy.

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[18] Slow Food International, 2019. Retrieved from https://www.slowfood.com/
[19] ATÁ, 2019. Retrieved from http://www.institutoata.org.br/

2. METHODOLOGY

This chapter elaborates the chosen methodological approach to conduct this thesis' research in order to understand the role of empathy in food literacy school initiatives. The methodology chosen was multiple-case study, which will be further explained in the first subchapter.

The data collection process and where the data came from is presented in subchapter 2.2.

Finally, the data analysis section elaborates on how the process of interpretation of the gathered content analysis took place. The theoretical foundation behind this methodological approach are composed mainly by Yin (2006), Ventura (2007) and Hamilton & Colbert-Whittier's (2013) works on research using case study investigation.

2.1. Multiple-case study

Choosing case study was pertinent given the nature of this thesis' guiding question: context is a central aspect of how its research process needed to be developed (Yin, 2006). In this case, empathy is the phenomenon that takes places in food literacy education inside the school environment. Additionally, as affirmed by Hamilton & Colbert-Whittier (2013), successful case study contributes to our knowledge of real-life phenomenon, through enhancing our understandings of contexts, communities and individuals, which means the method is also aligned with this thesis' aim to provide knowledge contribution towards further discussion on how to foster prosocial food choices in larger scale.

Taking into account Ventura's (2007) concern about how a chosen case study may not represent a phenomenon holistically, this thesis observed three cases which represent three very distinct contexts which differ in, for example, social political aspects, paradigms and desired outcomes. Therefore, it investigates multiple cases and keeps the research focus on the holistic phenomenon under study. The phenomenon under study is the role of empathy in food literacy projects aiming at fostering prosocial food choices, all inside the school environment.

The cases are the following: (1) the *Food Literacy Course in Britannia Secondary School in Vancouver,* Canada, one of the pioneer projects in bringing food literacy into regular school activities (2) the *Landless Worker's Movement Itinerant School*, independently organised schools by the Landless Workers' Movement, in Brazil and (3) the *Fair Trade School Award,* in the United Kingdom: an independent initiative which has reached over 700 schools.

The case studies were selected considering the scope chosen to observe food literacy in this thesis - Cullen et al.'s (2015) definition focusing on empowering the individual to partake in a complex food system, achieving personal health and promoting a sustainable food system, as well as Block et. al's (2011) concept of food for well-being, considering especially its 5 components: 1. food socialization, 2. food availability, 3. food marketing, 4. food policy, and 5. food literacy. Taking that into account,

not all the cases label their education about food explicitly as a food literacy, and in some they were neither mentioned as such in the curriculum, but addressed the food literacy scope mentioned above. Another aspect that had influence in the selection of case studies was the availability of data, such as available resources in the official communication channel, availability for interviews and available literature on the cases.

When relating back to research question: *what is the role of empathy in food literacy initiatives that aim at fostering prosocial food choices?*, it was important to gather diverse evidence that can demonstrate how empathy was being applied in food literacy education in schools. Also, whether this exercise of empathy provoked any change in the students' prosocial behaviour towards food after the school intervention. For that reason, there were 4 main aspects chosen to constrict the focus of the investigation during the data collection process and select relevant data. The aspects are presented in Table 1. below:

Table 1: The 4 aspects to be investigated

1. How empathy appears in the food literacy curriculum
2. What activities were performed during food literacy intervention
3. How the initiatives considered the social limitations and the local context and how they adapted their food literacy practices to it
4. What changes in the students were the most observable during or after food literacy - and food choices?

The method chosen to collect the data from the case studies in order to examine the aspects mentioned above can be found in the following topic.

2.2. Data collection methods

 The data collection process of this thesis adopted 3 different sources of data, which allowed the research not to rely excessively on a single type of evidence (Yin, 2006) - data through which the 4 aspects presented on Table 1 were analysed.

The data was collected from three different sources: (1) the report archives, which consist of official information reported by the case study entities themselves, such as information on their official website, printed documents, curricula, and others (2) other relevant documents, such as previous

research, news articles and press releases and (3) in-depth interviews, which served as support in providing more detailed information on two of the cases.

All the references utilised to compose the data collection can be found on Appendix C at the end of this thesis. Interview questions can be found on Appendix B.

Report archives

The report archives is a compilation of reports released by the stakeholders themselves on the cases chosen to compose the case study. During this investigation, it is under report archives every piece of information collected from official releases of the case study subjects themselves: official website, official published reports, curriculum, classroom resources and official documents. For instance, the food literacy course in Britannia Secondary School, Canada, had a website where Eric Schofield (Canada, 19-), the project creator, organiser and teacher, made available the course description, curriculum, material, resources and a detailed learning journal of the experience as a whole. The Landless Workers Movement had an official website and a series of official Education Booklet releases. The Fairtrade School awards also had a very complete website with an extensive database of resources which could be used by the schools.

Table 1 served as basis to guide towards what kind of information would be needed to address the research question. Due to the nature of information needed, the archival analysis enabled the understanding of the core information needed to observe the phenomenon: the programs' definitions, the curriculum content, samples of activities, their desired outcomes and evidence of outcomes from already implemented initiatives, such as statistics or progress tracking reports.

Other relevant documents

After collecting data from the official reports, it could be seen that more context-based information was needed in order to strengthen the correspondence of information. For this reason, this thesis looked at different sources of information about the cases, making it possible to find alternative data for the concepts, the cases and other elements which could complement the holistic perspective on the case study (Freitas & Jabour, 2011, Frey, Botan, & Kreps, 1999).

The main source of alternative data in this part of the data collection process was academic articles that would refer to the case studies' subjects, but were not produced by themselves. The Landless Workers Movement Itinerant School and the Fairtrade Education had a series of academic articles and theses that were used to further understand each case.

Moreover, other sources with the objective of understanding the social context of where each case study took place were also used: national food policies, food media, government stands, non-

governmental initiatives, among others. The Conference Board of Canada, for example, released a report entitled *What's to eat? Improving food literacy in Canada* (2013), which contained a large amount of specific background information on the context of adopting and improving food literacy nationwide.

And, lastly, illustrative examples where each case study could be depicted under different lenses: news, blog posts, and videos. The use of a variety of documents enabled this thesis to have a more holistic understanding of the case studies as well as a more critical view on the implementations, avoiding information with conflict of interests and gathering a wider source of data to reach conclusions.

Having collected a set of data so far, a first round data analysis needed to take place in order to acknowledge possible information gaps. After this first round of data analysis, interviews were conducted with key informants who could provide the missing pieces of information still needed thus far.

The interviews

The two interviews were open-ended, one-to-one and guided by a set of questions based on Table 1 and on the main pieces of information still needed that could not be suffced by the report archives and other documents (see Appendix B for question). The criteria for selection of interviewees was based on, firstly, selecting individuals who had enough first-hand experience to account for the food literacy practices. Additionally, the participants needed to be individuals who were able to provide the pieces of information that could not be collected in the first two stages of data collection.

The first interviewee was Eric Schofield, the creator, organiser and teacher at the food literacy course in Britannia Secondary School. The interview took place over a phone call and took approximately one hour. Eric was able to provide very specific insight of how the project took place, as he had been part of its entire idealisation and implementation.

The second interviewee was Pertti Simula, founder and director of the Conscientia Institute for Psychoanalysis and Organizational Development. Pertti has worked with the Landless Workers Movement for over 20 years, and has based his work called *Conscientia Method*[20], as a method based on the collective philosophy of the Landless Workers Movement. Pertti's insights from the itinerant schools, the movement's context as a whole and the management of the educational initiatives were

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[20] The *Conscientia Method* is a "method of human social and natural values" (P. Simula, personal interview, March 17th, 2019). The method was developed in Brazil, especially in educational institutions inside the Landless Workers Movement and other organisations that work towards agrarian reform. In Finland and Sweden the method is applied mostly in schools, social services and health care through workshops and visits he makes to Finland. For further information on the *Conscientia Method* and the Conscientia Institute for Psychoanalysis and Organizational Development, visit the official website on http://www.conscientia.se/en/index.php (last assessed on 07.04.2019)

essential to clarify all the information available on the official websites, education booklets and articles. The interview lasted around 45 minutes and was conducted face to face in Portuguese, translated to English by me.

Taking into consideration the time efficiency of the process as well as the respect for the time given by the interviewees, the interviews were all agreed by both parties in advance, and the questions were shared prior to the interview day. Both interviewees gave permission to have their names used in this thesis.

The Fairtrade School awards initiative had extensive data in their official website and academic articles which were enough to address all the aspects on Table 1, hence the interviews were used to compliment solely the other two case studies. Both interviews were able to provide in-depth understanding of the phenomenon under study as well as further understanding of each context. Once all the data collection process was completed, the data analysis process started.

2.3. Data analysis

The data analysis method chosen in this thesis was an *inductive content analysis*, which suits the nature and purpose of this thesis of understanding a phenomenon in context - in this case, understanding the role of empathy in the food literacy in schools. Also, due to the lack of previous research on the same topic, an *inductive* content analysis means that the categories emerge from the interpretation of the data collected. Once the content analysis is complete, its results aim at making valid and replicable inferences about the phenomena inside its context (Hsieh & Shannon, 2005, Elo & Kyngäs, 2007).

This content analysis was realised in three parts, as described by Lakatos & Marconi (2003), they are: (1) Selecting, (2) Coding, (3) Tabbing. And they happened as follows:

(1) Selecting: the part of the process that focused on reducing the data in order to focus on the related factors that elaborate the phenomenon. This is the stage in which the important data was ranked, mistakes and gaps were found, and confusing or unclear information were removed. During this process, the 4 aspects of Table 1 were used as criteria to select all the data that would be relevant to addressing the research question[21].

For example, as the first aspect (Table 1) was *How empathy appears in the food literacy curriculum*, only the parts of the curriculum which contributed to the holistic context and to specifically addressing whether and how empathy is a part of it were kept. The same was done for all the remaining three aspects.

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[21] All the selected content according to the aspects presented on Table 1. can be seen on chapter 3

(2) Coding: this stage began with interpreting the selected data and clustering the data based on common topics that emerged and then were categorised according to these commonalities.

For instance, all case studies demonstrated strong focus on understanding the perspective and the life of the people producing the food the students consume: *"when they understand what it is like to live on a budget and be creative with the food they have"[22],. "How people in other regions eat in according to what the weather is like across the country, learn about hunger and so forth"[23]*, and *"In addition to that, there is always a real human subject, called by name and whose life story is used to understand the context in which the product is produced"[24]*. This was clustered together and coded as "understanding the other", my first inference about the commonalities presented.

After the first round of coding, the categories were compared with the theoretical framework on empathy and it could be understood that the process of taking the perspective of the other also means acknowledging them as a subject, and hence affiliate with them, in means to care about their well-being (Håkanson, 2003, Decety & Chaminade, 2003). That could be confirmed, in the example of the Fairtrade Schools, with the extensive research on the increase of consumption of ethically produced food as well as their explicit intention to ensure the students consume such products as means to use their power as consumers (Zander & Hamm, 2010, Fairtrade Foundation, 2019, March 1). Therefore, this specific category, strongly present as premise in the three cases and justified by the theoretical literature, was named *Expanding Affiliation[25]*.

(3) Tabbing: After coding all the content, they were visually displayed on a tab (see Table 3). By visually representing the data after it was coded, the data could be more easily understood and allowed a first tentative conclusion in order to evaluate and reiterate the process - giving opportunity for new questions, identifying gaps, testing interpretations until the main research question could be addressed (Freitas & Jabbour, 2011).

According to Freitas & Jabbour, when case study is used in qualitative research methodology, the interpretation of the studied phenomenon is the research objective itself. In the end of this thesis' content analysis, there were three categories which emerged from the three cases and that allow better holistic understanding of the phenomenon. They are: *Expanding Affiliation*, *Betting on the Collective* and *Biosphere Consciousness*.

Among the challenges of this method of data analysis is the fact that it is highly value-based and interpretation-bound. This means that there are risks of confusion between affirmations and facts,

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[22] Extracted from the food literacy course at the Britannia Secondary School selected text

[23] Extracted from the Landless Workers Movement selected text

[24] Extracted from the Fairtrade schools selected text

[25] Full justification of the coding results can be found on chapter 3.

issues with the logic behind the analysis process, poor interpretation and findings that do not accurately represent the data (Lakatos & Marconi, 2003, Hsieh & Shannon, 2005).

This thesis seeks to avoid those risks by keeping a systematic and transparent data analysis criteria throughout the research process. In addition to that, it reports all the gaps which emerged, the challenges faced and the opportunities for further research in the following chapters.

3. CASE STUDIES AND RESULTS

This chapter elaborates on the chosen case studies and their context. In section 3.2., the research results of the inductive content analysis are presented.

3.1. Food Literacy course at the Britannia Secondary School, Canada

As previously mentioned, Canada is the main producer of academic work and practices in food literacy (Truman et al., 2017). Currently, the term is utilised and highlighted by a series of different parties, such as *Food Secure Canada*, which released a flier which compiled information on the benefits of food preparation and a series of practical opportunities to incorporate food literacy to already existing programs[26]. Other regional parties have also made a statement, such as the Ontario Federation of Agriculture (retrieved in 2019):

> *"OFA strongly believes food literacy contributes to lifelong wellbeing, a sustainable health care system and supports our agri-food sector. OFA wants food literacy programs reintroduced in our schools to teach Ontario's young adults to make better, healthier food choices."*

Another important publication was *"What's to Eat? Improving Food Literacy in Canada"*, by the Conference Board of Canada (2013). The report brings a much bigger scope than the flier from Food Secure Canada and elaborates on the importance of food literacy for the environment, health, and other relative factors.The aim of the report is to call for further research, collaboration and engagement on food literacy practices. According to the report, the main issues mentioned to justify the call for food literacy initiatives are: gap in Canadian's nutritional knowledge, increase in the consumption of processed foods, not passing on cooking skills to the next generation, time scarcity and immigrants' change of food environment.

The food Literacy Course held at Britannia Secondary School was a 5-week summer course on home and economics and human geography[27], created as an independent project by Eric Schofield, who designed, organised, taught with a grant he received from the University of British Columbia while earning his degree in education. Schofield gave an interview that contribute to this case study.

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[26] The flier can be found on the link:
https://foodsecurecanada.org/sites/foodsecurecanada.org/files/foodliteracy_flyer_final_rs_1.pdf , retrieved March, 1st, 2019
[27] All the detailed information is available on the food literacy course in Britannia Secondary School's official website on: https://appetite4change.wordpress.com/

Figure 1: The Britannia Secondary School.[28]

The goal of this course had two lanes: for Schofield himself, it was to be able to demonstrate that it is possible make Human Geography and Home and Economics both engaging and relevant, where students genuinely take ownership for their learning. For students, the goal was firstly to see them engaged, participating, attending in order to learn new recipes each lesson, develop the students' critical skills and explore the world of food in Vancouver (E. Schofield, phone interview, March 7, 2019). The 5 weeks were divided as follows: (1) Introduction to Course and World of Food (2) Nutrition and Food Science (3) Thinking Critically About Food and Media Literacy (4) Socioeconomic Factors and Etiquette and (5) The Big Picture: Globalization, Localization, and Sustainability. The content was highly interdisciplinary and raised students' awareness and skills also on media literacy, nutrition, economics, ecology, among other subjects.

3.2. The Landless Workers' Movement (MST) Itinerant School, Brazil

The Landless Workers Movement (MST) is one of the world's largest social movement. Originated in Brazil, the movement gathers rural workers from every state in the country aiming at an agrarian reform, food sovereignty, dignified living for rural workers and organic production on food focusing at local consumption with sustainable use of the environment.

The premise of the Landless Workers Movement consists on the basis of article 186 of Brazil's national constitution of 1988, which talks about the social function of the land - the constitution act states that the social function of the land includes responsible use of the environment and that the land use favours the well-being of the workers. The movement is strictly against latifundia and acts upon occupation of privately-owned land deemed unproductive. Once the settlers obtain the

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[28] Image source: *http://britanniarenewal.org/news-events/help-save-britannia-secondary-school/* (Retrieved: 22/04/2019)

compulsory purchase order[29] of the land, the families camping there settle to live and produce organic agricultural products according to the principles of agroecology.

According to the *MST Education Booklet* (2005), the true objective of education is to elevate students' social conscience level, culture and knowledge which truly free people. Dalmagro & Vendramini (2010) points social transformation as the movement's main guiding principle. They recognise school as a non-neutral, non-historically detached arena, a product as well as a producer of how society works and should work. Hence, the Landless Workers Movement explicitly uses their education on the formation of class consciousness and the class struggle which the movement takes part: school as a social inclusion place, but also a place under transformation so that it serves the objectives of the working class, where knowledge is a socially relevant tool, which can be used to interpret as well as transform reality.

The Landless Workers Movement education recognises the importance of the development of non-cognitive skills and well as functional skills: it embraces work as a part of the educational process in order to develop both consciousness and capacity to take action, from preschool until higher education. The work consists mainly of rural work in the company of an adult, where the pupils have the opportunity to ask, try, learn by doing and engage and contribute to the happenings in the settlements. As they grow, there is a bigger diversity of work opportunities like accounting, management, communications, volunteering in organisations, among others (*MST Education Booklet*, number 4, 1994) As a core of the movement's fight, the schools are not just an example but a centre of capacitation for agroecology: food produced organically, free of pesticides, with accessible price, providing availability, accessibility, nutritious food and sustainable production (Bastos, 2017, Schutter, 2012).

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[29] A compulsory purchase order is when the original owner loses the land for not keeping its social function, as according to the Brazilian Federal Constitution, article number 184.

Figure 2: Students at one the MST Itinerant Schoosl[30]

The itinerant school was created to ensure education for the people who are still camping[31] - from smaller children all the way to adults - and that they can also be educated and prepared to address current issues, that empowers them to fight for agrarian reform (Sapelli, 2015). The *itinerant* nature of the school represents a multitude of realities: the literal meaning, that of the reality of the camp, the school "on the move", as the camps are not fixed and if they move, the school ought to move too. As well as *itinerant* as a pedagogical ritual, of constant change and innovation that adapts to the people who already live on the move (Puhl, 2008). It is a school born in the camp, for the camping community, and which will go with them wherever they go. The itinerant schools are officially recognised by the state.

In this particular case, we will not look at a specific course or happening, like the case study from Britannia Secondary School in Canada. The analysis here will observe food literacy in a much more interdisciplinary fashion, as it is the core of the movement and does not take place as a subject, but as determining factor in all subjects.

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[30] Image source: *provided personally by Pertti Simula, on April 19, 2019*

[31] Before the land is awarded to the settlers, there is a long process of camping for occupation of a territory. Once the land is deemed unproductive and they may appropriate the land. Information taken from the Landless Workers' Movement official website

3.3. The Fairtrade Schools by Fairtrade UK, United Kingdom

Fair Trade Foundation in an independent non-profit organisation that sets standards on minimum social, economic and environmental requirements for any association of farmers or companies dependent on hired labour which produce one or more commodities[32]. For those who meet the standards[33], their products may be licensed the FairTrade mark, as can be seen on figure 1. Any product that has the mark on their packaging reassures the consumers that all stakeholders that take part in the supply chain, meet standards of, for example, occupational health and safety, working conditions, fair pricing, and other progres requirements that enhance the continuous improvement of the situation of farmers and organisations (Fairtrade Foundation, 2019).

> *"Our mission is to connect disadvantaged farmers and workers with consumers, promote fairer trading conditions and empower farmers and workers to combat poverty, strengthen their position and take more control over their lives."* (Fairtrade Foundation, 2019)

Figure 3: The fairtrade mark[34].

The Fairtrade School award is a certification for schools that commit to educating students about Fairtrade issues, implement Fairtrade school policies, consume, sell and promote Fairtrade products and promotes taking action for Fairtrade in school and the wider community. The school award is divided in 3 separate awards, in order of accomplishments. The awards takes place by implementing each of the categories' standards and completing the different audit categories in order to earn the award. The categories are the following:

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[32] The Foundation used in this thesis is the UK member, one of the over 20 other fairtrade members under *Fairtrade International*, which unites labelling initiatives across Europe, Japan, North America, Mexico and Australia/New Zealand as well as networks of producer organisations from Asia, Africa, Latin America and the Caribbean.

[33] For more information on the international Fairtrade standards, visit https://www.fairtrade.net/standards/our-standards.html

[34] *Image source:http://www.fairtrade.org.uk/What-is-Fairtrade/What-Fairtrade-does Retrieved on March, 1st, 2019*

(1) FairAware School: Teaches students where food comes from, discuss "fairness" and evaluate how Fairtrade can work to address unfairness in supply chain.

(2) FairActive School: Runs practical activities, such as community event, campaign or such in order to put the awareness into action

(3) FairAchiever School: Students have clear understanding how they impact the food industry and farmers behind it via the products they buy, and they are willing to make trade more fair.

In order to earn each award, the schools need to implement the standards and submit the audits, all available in the Fairtrade Schools' official website[35]. In addition to that, one can also find numerous resources for teaching, guidelines, videos and good case practices used by Fairtrade Schools around the world (Fairtrade Schools, 2019). Fairtrade also addresses the manufacturing of products from other industries such as the textile industry, thus some of the school practices also concern the issue. For the focus of this thesis, only the food commodity approach will be addressed.

3.4. Results

The analysis of the data was made considering primarily the guiding questions on Table 1 to select the relevant information that would address the research question. The entire reference list of the case studies - the official archives, other documents and interviews - can be found on Appendix B, for more transparent sourcing of information.

This subchapter is divided in two parts: the first one presents the selected data that address the four guiding aspects:

(1) How empathy appears in the food literacy curriculum

(2) What activities were performed

(3) How the initiatives considered the social limitations and the local context and how they adapted their food literacy practices to it

(4) What changes in the students were the most observable during or after food literacy - and food choices?

The second part answers the research question and elaborates on the 3 components that explain the role of empathy in food literacy in schools. The categories are: (1) *Expanding Affiliation* (2) *Bet on the Collective* and (3) *Biosphere Consciousness*.

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[35] Access to the awards, criteria and documents directly on the link https://schools.fairtrade.org.uk/fairtrade-schools-awards/

The selected data

(1) How empathy appears in the food literacy curriculum

Food Literacy Course in Vancouver, Canada:

The Food literacy course does not mention empathy as a term nor as one of its explicit objectives. However, across the entire curriculum throughout the five weeks of ongoing course, several elements that evidence empathy can be found, primarily perspective-taking, when they learn about poverty and food situations in Vancouver. Also when they understand what it is like to live on a budget and be creative with the food they have. Throughout the course, the students had the chance to donate their remaining supplies to the Kettle Society, charitable organisation which supports people living with mental illness, poverty, homelessness, and substance use with housing and mental health support. "After a few days, they were excited to prepare extra food having the people from the organisation in mind", affirmed the teacher during the interview. Other elements of empathy present in the course were global consciousness, and how their choices affect others - described in the official website as "bridging different cultures. Furthermore, the work with students on ecological footprint - realised during the week 5, which focused on the theme "globalisation, localisation and sustainability" - demonstrates also a paradigm shift from us versus the environment, to us as part of the environment, exemplifying what Berenger (2007) had iterated about affiliation with other forms of life and desire to protect them.

> *"We shared our food with our speaker, and then we sat down and ate a couple tacos each while Dr. Rees talked about the importance of understanding that we, people, are not in a place to be concerned with the environment, but in fact are a part of the environment. Water, carbon, oxygen, nutrients, energy, … all these things flow in and out of us as they make their way through their cycles in the environment. The students seemed perplexed during much of his lecture, but overall were intrigued by the way that he had them thinking about these things."* (Appetite4Change, retrieved in 2019)

Landless Workers Movement Itinerant Schools in Brazil:

As previously mentioned, food literacy for the landless workers' movement is embedded in their essence, as their fight entails agrarian reform, food sovereignty and agroecology.

> *"Their premise is ecological and empathetic production: always considering the dignity of the producer and the environment, and this conscience starts in the itinerant school and is taken with them to the settlements"* (P. Simula, Personal Interview, March 14, 2019).

Their itinerant school educational aims at educating for cooperation, hence the belief that a lot can be achieved together is recurrent in their education documents.

Although empathy per se was never mentioned in the values, mission or pedagogical practices, the discourse in the MST Education Booklet heavily exemplifies Davis' (1980) four subscales of empathy - Perspective-Taking (PT), Empathic Concern (EC), Fantasy (FS) and Personal Distress (PD). In order to illustrate how the subscales of empathy can be identified in the discourse of the MST education booklet, some excerpts were chosen: for example, in *Why should each family suffer to solve alone issues which can be easily and quickly solved by the community together?* (MST Education Booklet, 2005), perspective-taking can be observed. Personal distress in *"feeling indignant beyond situations of injustice or loss of human dignity"* (id.), empathic concern in "*Strive for equality combined with respect to differences of culture, race, gender, personal styles"* (id.). Nothing explicit was found to illustrate fantasy.

In adition to that, the MST booklet (2005) presents a series of objectives where empathy was a core skill. Among them, were the following:

- *"love for people's social causes, and the international sense of social causes"*
- *"companionship and solidarity among people and the collective"*
- *"cultive affection between people"*
- *"Overcome discrimination of value between manual labour and intellectual work, educating for both"* (id.)

> *"Defending minorities is a strategic fight of the Landless Workers Movement for radical democratisation of society - they are involved in movements that defend the LGBT community, the quilombolas, other field workers and city workers"* (P. Simula, personal interview, March 14, 2019)

Another feature that could be observed, is how the justifications behind the curriculum were also highly considerate of what skills and knowledge could provide better opportunities for the different lives people live in the camps and settlements. For example, when the booklet justifies the implementation of extra capacity building workshops - typewriting, guitar, public speaking, chess, painting, drama, textile work, woodwork, among others - skills the students could learn as hobbies as well as opportunities to generate income while living in the camps and settlements.

Fairtrade Schools in the UK:

Just as the previous two cases, the Fairtrade School award also does not mention empathy in its objectives or curriculum, nor do they name their activities as food literacy. However, because their very mission regards impacting farmers and food workers condition through licensing decent standards and promoting fairer trading conditions, understanding where the food comes from and the

impact of our consumption in it is in the core of the Fairtrade School proposal. Each award category has its own specific objectives, as can be seen in the previous chapter, as well as a wide collection of resources which can be used for students from nursery to secondary school, that range from storytelling, movies and songs to creating actual assemblies and events for the community.

A wide range of empathic elements can be developed by implementing the resources in Fairtrade School. For instance, in the first stage, FairAware School award, children should learn where food comes from, who it affects and discuss "fairness". Activities in this stage demand constant perspective-taking and set the ground for empathic concern, in order to take further action when attempting to become a FairActive School. For that, many of the activities in each stage contain perspective-taking. For instance, Fantasy (Davis, 1980) can be seen in *Pablo, the Super-Banana* activity[36], where Pablo narrates himself where he comes from and how he ends up on our table. For older years, they learn about Jamaica's banana production by understanding the song *Banana Boat Song (Day O)*, by Harry Belafonte.

Figure 4: Banana Activity with students in one of the awarded Fairtrade Schools.[37]

Each category of Fairtrade School encompasses higher skills and involvement not only from the students, but also from the teachers, the staff, the school consumption and the community. So not only do they entail developing and using different empathic skills, but a determining part of it is

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[36] For the detailed activity check the link https://schools.fairtrade.org.uk/resource/pablo-the-super-banana/

[37] Image source: *https://www.fairtrade.org.uk/Media-Centre/News/September-2017/Coop-confirm-first-ever-sponsorship-of-Fairtrade-School-Award-Programme. Retrieved on April 19, 2019*

empathic altruistic behaviour through responsible consumption, campaigns, claim for changes in product choice in the community, among others.

(2) What activities are/ were performed

Food Literacy Course in Vancouver, Canada:

Most of the topics throughout the five weeks of the course were delivered via discussions, visits, guest speakers and cooking[38]. Through the visits and workshops they had the chance to learn about a range of topics from people who work with them firsthand. An example of that is when they visited the University of British Columbia's urban farm to learn about urban agriculture and link farming, organic food, nutrition and consumption from a worker of the farm directly.

Figure 5: The visit to the UBC Urban farm.[39]

A set of activities which showed to have been very effective in terms of embracing both empathic skills and food literacy was during the fourth week, focused on Socioeconomic factors behind food: One day they got to have lunch at a fine dining French restaurant, where a meal would cost on average 30 dollars per person, and the next day prepare a meal that would cost 50 cents per person only in order to learn about poverty. Understanding poverty demanded a cross-disciplinary discussion that would entail elaborating on various factors, such as social inequality, economic inequality, absolute

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[38] A detailed description on what happened in every lesson from the teacher's perspective can be found in the official appetite4change website here: https://appetite4change.wordpress.com/lessons/

[39] Image source: *https://appetite4change.wordpress.com/lessons/ Retrieved on April 19, 2019*

poverty, relative poverty, systemic poverty, hunger, starvation, malnutrition, undernourishment, cost of housing, welfare, cost of living, and so forth. The next day was followed by the topic "resourcefulness 101 - eating well on a budget", so not only would they practice creativity in culinary but also consider how being resourcefulness is not a choice for many, but an imperative to survive (E. Schofield, phone interview, March 7, 2019).

One of the ways the outcome of this had an impact on the students' perspective-taking abilities could be observed in the teacher's learning journal[40] when the students raised themselves the topic on expensive food: *"Is it necessary? Is it ethical in a world where 1 billion people are hungry?"*. Another intriguing activity was when each student was given 10 dollars and the freedom to choose the food they would donate to the food bank[41], followed by strong reflections on food choice and socioeconomic status, as well as marginalisation. The lessons demonstrated a series of opportunities to practice perspective-taking, empathic concern and, as could be observed with the reaction of the students, personal distress was also experienced.

In a nutshell, food literacy was an opportunity to explore the multiverse of aspects that affect people not only in the British Columbia area, but globally. Additionally, students had the chance to learn a variety of ways they can make prosocial food choices.

Landless Workers Movement Itinerant Schools in Brazil:

Because the Landless Workers' Movement school curriculum takes the importance of linking knowledge with practice upfront, the activities in the itinerant schools tend to be always tied to practical tasks, work in the field and time dedicated for practical activities.

> *"The camp is a mini society and food is party of it - as well as health, safety, culture, schooling. Formation works as base for socialising so school is an essential part of the community, and agricultural production is extremely important, especially with the children - they participate as they can."* (P. Simula, Personal Interview, March 14, 2019)

For instance, in order to understand how the market works, they are encouraged to develop during the studies an actual income generating activity which serves the needs of other people - here we can already see in practice the constant evoking for collective thinking and perspective-taking. Another way the itinerant schools organise work as part of their schooling is by raising awareness as well as educating using both *individual productive process* (PPU) and *socially divided productive process*

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[40] Available in the food literacy course official website: https://appetite4change.wordpress.com/lessons/

[41] The food bank is a non-profit organisation dedicated to both provide food and assistance to those in need, but also create empowering environments that provide and promote access to healthy food, education and training. For more info check: https://foodbank.bc.ca/

(PPSD), where they would learn and act on issues in both individual and collective levels, with more awareness of what responsibilities can be taken individually and which are better done together. These issues include matters of living, health, leisure, the involvement of the movement with the township, family structures, among others. Other practical activities mentioned in the curriculum, such as farming, agroindustry and agricultural work are offered depending on the available resources and needs of each camp or settlement.

Furthermore, the itinerant schools have a range of activities which join interdisciplinary dialogue, problem-solving for real issues of the camp or settlement seeking for solutions that benefit the entire community - to those activities they give the name *thematic áxis*.

Rosetto (2016) presents the practice of international solidarity as one of the stronger in the MST children human formation, reflecting the movement's values of companionship and solidarity. The itinerant schools realise joint conferences, learn about other rural movements worldwide, communicate with children from rural workers' movement all across the country, the continent and the world. For instance, Rosetto's observations include a series of drawings the children made in solidarity with the children in Palestine, claiming that they also have the right to play with their friends and have a home, just like them.

Figure 6: Children of the Landless Workers' Movement planted an olive tree as a solidarity act at the Palestinian Embassy in Brazil in July, 2018.[42]

Another concept highly present in the itinerant schools is that students learn to be self-driven. For that, the school ought to provide time during school hours dedicated for students to organise themselves and build their individual productive process - such as reading or responsibilities they have at the school. Some time is also provided for group meetings so that students have time to research, discuss and participate in decision-making inside the school. The Landless Workers Movement is strictly against the school taking over a role of giving orders for students to obey, hence self-drivenness is a pillar for an education for cooperation and democracy.

It could be observed in the practical and collective nature of the activities proposed by the itinerant schools that empathy incorporates both mentalising - cognitive empathy, in activities that foster perspective-taking and fantasy -, as well as mirroring components - affective empathy, demonstrating empathic concern and personal distress. In special due to the high involvement of the kids with the general activities of the movement.

In summary, the school activities reflect the concrete context of the camps and settlements. Students learn to think and act collectively by having the space to work and grow to fight for the movement's mission and work towards the well-being of not only their immediate community, but also the environment and other social causes.

Fairtrade Schools in the UK:

The beginning of the process of applying for the Fairtrade School certification consists of an assessment of the teachers, the students and the products purchased by the school. With that, there is an indication of how much work should be done before starting the activities - the official website contains a lengthy list of activities, but the teacher plays a key role as the activities should consider the assessment of what the students already know. The focus of these primary activities is to understand where food comes from and the people involved in producing it, understand the need of Fairtrade and elaborate on global trade patterns (depending on the age and school level of the students). From this premise, it can be seen how the people behind the food production are central to Fairtrade, and that is reflected in the tens of lesson plans available in the Fairtrade Schools official website: the activities always clarify the entire path the product goes through from production until the shelves of supermarkets. In addition to that, there is always a real human subject, called by name and whose life story is used to understand the context in which the product is produced.

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[42] *Image source: h[ttps://anba.com.br/criancas-mst-plantam-oliveira-na-embaixada-da-palestina/](https://anba.com.br/criancas-mst-plantam-oliveira-na-embaixada-da-palestina/) retrieved on April 19, 2019*

One example is the video about Foncho, a banana farmer from Colombia - the video shows inside his house in order to exemplify life conditions of farmers and puts that side by side with awareness of pricing and how most of the money never gets to the producers themselves. Another example is the activity "*Where does chocolate come from?*", used to introduce cocoa, cocoa beans, how and where they are produced, the process until they get to the shops and what the farmers do when they are able to get more income - in the case exemplified, they get an extra income from *Fairtrade Premium*, an additional sum of money which goes into a communal fund for workers and farmers to use – as they see fit – to improve their social, economic and environmental conditions[43]. The elements of understanding it from both perspectives of consumer and producer are present in most of the educational material, which are evidence for the use of perspective-taking skills as well as empathic concern and personal distress in order to instigate empathic responses, such as desire to consume Fairtrade, know where the food is coming from and decide to buy more local products.

(3) How the initiatives considered the social limitations and the local context and how they adapted their food literacy practices to it

Food Literacy Course in Vancouver, Canada:

The Conference Board of Canada report (2013) provided very holistic context regarding the food literacy situation in Canada at the time. Because the first food literacy course in Britannia Secondary School was realised in 2012, it can be seen that although it did not stem from the report, the content chosen to be in the course curriculum was relevant, sensitive and timely. Among some of the facts presented in the report, the most challenging factors were: lack of numeracy skills to fully understand labels, a large amount of households which could improve their planning and purchasing habits, a concerning decline of children and youth participation in meal preparation with the family and the increased consumption of processed and pre-packaged food.

Considering that Britannia Secondary school is located in a lower-income neighborhood, the teacher ensured not to utilise a discourse where a different alternative to food would be presented as superior than the one they had and could afford to have. Instead, they would use the neighborhood a lot to explore and understand food media literacy, understanding of budget, finances and where to find locally produced, wholesome food. They also embraced the perspective of diversity in food, becoming more open to and curious to try more different food, having home food preparation always as part of their discussions - an important move as certain groups of people, such as new immigrants

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[43] For further elaboration of Fairtrade premium, check http://www.fairtrade.org.uk/What-is-Fairtrade/What-Fairtrade-does/Fairtrade-Premium

and aboriginal peoples tend to face more obstacles to food literacy (The Conference Board of Canada, 2013). Considering the students' resources in terms of budget, time and taste, they decided together that the meals they would be preparing would always have the four following components: nutritious, delicious, affordable and practical.

By teaching resourcefulness in the kitchen, meals prepared on a budget, those of different social class could also feel included in the possibilities of doing the same at home.

Landless Workers Movement Itinerant Schools in Brazil:

The landless workers' movement education is especially designed for the reality in the rural context: empowering the workers and their children to solve issues and possible matters involving the camps and settlements, creating alternatives for life in the rural areas and for that population.

The itinerant school itself was created to attend the needs of the campers, primarily the children in the camps. Thus it is, by point of departure, designed to consider al the social limitations of each camp and settlement and educate the people to transform that reality.

In practice, that can be seen in the flexible nature of the curriculum and pedagogical proposal. Additionally, since it was created, the itinerant school has been meant to be run and planned by the camping community and teachers, so that the school itself is also partaking in the life in the camp. The school values, the methodology, the organisational structure and even some of the contents are agreed by the different stakeholders in the community - parents, teachers, other members of the movement - always considering the Landless Workers Movement Educational proposal in the centre. An example on how this community work takes places is when parents, young adults and children gather to reconstruct a school taken by a storm, utilising the opportunity to socialise a big diversity of knowledge from different people.

In terms of food literacy, the point of departure is always that the land and food are sacred, therefore everyone has the right to it, and a responsibility to produce and consume food which is ecological, organic, safe and which dignifies the producer - it is socially and ecologically fair and just (P. Simula, Personal Interview, March 14, 2019). They learn what the main limitations are, how people in other regions eat in according to what the weather is like across the country, learn about hunger and so forth. During practical work, they have the chance to work in the settlement or camp where they live - or the school's garden, if their camp does not produce their own food yet - which will produce the school food, the home food, generate income while working side by side with other members of the community. With this, there is no risk of receiving a kind of food education which is not suitable or relevant for the students.

Considering the core practices above, it can be observed that it is imperative that the Landless Workers' Movement itinerant schools adapt to the context they are inserted in order to implement the vision for democratic and a school that empowers the movement.

"One cannot survive alone in the field. 20 hectares of land for a single family is no future, but producing collectively integrates various huma aspects." (P. Simula, Personal Interview, March 14, 2019)

Fairtrade Schools in the UK:

The means the Fairtrade School certification fids to enable schools and teachers to adapt to emerging imitations in the UK is by starting their very first certification, *FairAware*, with an assessment - or audit, as they call - of the school products, teachers and students. The assessment contains questions which raise awareness of important factors to consider, such as which products the school could be purchasing which are fairtrade, what information the students should know and how the teachers can use their touch points with their students to raise awareness on fair trade.

However, neither the official website, the awards' descriptions or the lesson plan activities contained information about how they address, for example, the fact that some students may not be able to afford Fairtrade products, or maybe those who consume only kosher/ halal and they do not know whether their product is fair trade. Because the Fairtrade School activities focus more on taking action for farm workers right and making prosocial food choices concerning mainly the workers, the activities do not cover the scope on food media literacy, healthy eating or consider their neighborhood's food availability. However, it does provide a lot of space for teachers to consider so. For this case study, there was no key informant from UK's Fairtrade Schools that would exemplify how they considered the national and local limitations that affect the students when educating them about Fairtrade.

Because Fairtrade School awards are general guidelines, audits and resources for schools to use, the role of adapting their delivery of food literacy to the local context belongs to the schools themselves[44].

(4) What changes in the students were the most observable during or after food literacy - and food choices?

Food Literacy Course in Vancouver, Canada:

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[44] For further understanding on the social context around food, in special food and health, check Jamie Olliver's proposal to the United Kingdom's prime minister (2018) on a set of strategies to tackle childhood obesity on the link below. As teachers addressing food literacy, the resource is highly useful to understand the country's current policies around food marketing, consideration of working parents, professional support, among others. The link is the following: https://cdn.jamieoliver.com/home/wp-content/uploads/2018/04/Childhood-Obesity-Letter.pdf

The course had many observable changes throughout its realisation. One visible change was how curious and open students were to try different food (E. Schofield, phone interview, March 7, 2019). For the teacher, one of the main takeaways of the food literacy course was the sense of community they build together, insisting on always sitting together around one big table for lunch and partaking in different projects always together and encouraging one another, which made the visits and encounters with guests always engaging and participatory.

Furthermore, Two of the students turned vegetarian during the course, justifying a consciously made decision. Other changes cited by the teacher was how excited they were to give back to the community - for instance, when the teacher informed them about how happy the people at the Kettle Society, and they promptly offered to make extra food again and take it there themselves. Also, as one of the main objectives of the course, to think critically about food choices, such as the episode at the fine dining restaurant where they wondered about the ethics of overpricing food while there are 1 billion people hungry. The same episode intrigued them with the amount of food waste, and how there is no reason to throw away food which is in perfectly good condition to be consumed. Considering all the memories of those 5 weeks, Eric Schofield claimed, during the interview: "I would be surprised if one weren't radically changed after going through all that we learned in that course".

Landless Workers Movement Itinerant Schools in Brazil:

In the case of the itinerant schools, food literacy is not an intervention nor an additional content to the regular school work, but it is embedded in the context of the movement, the rural workers living in the camps and settlements and their schools. Therefore, the question would not be what has changed during and after food literacy education, but rather what the outcomes of an education that aims at fighting for agrarian reform, agroecology and food sovereignty are.

Simula (Personal Interview, March 14, 2019) highlights the conscience of the members of the movement, and how conscious they become around their food and land, and the importance that it is ecological, organic, safe, socially and ecologically fair and just, always considering the dignity of the producer. Furthermore, it is important to consider their involvement with ensuring the production of their own food and school food in order to survive the many months in the camp, before moving to the settlement. When I asked Simula about whether they sell their crops while in the camps, he stated that due to situation of poverty, it is really hard to overproduce, or even to produce enough food for all the families camping.

In short, the main outcome of an embedded food literacy to their educational system is the social and ecological conscience which the members of the movement have. As an example, is the recovery of 10% of the Atlantic forest of the Landless Workers' Movement occupation in the town of Antonina,

Paraná, in the South of Brazil. The recovery of the native forest was caused by 20 occupying families who also produce over a tons of tubers, vegetables, fruits and spices - from which 90% are destined to school foods as part of the national school food program (Redacão Hypeness. "Operacão do MST ganha prêmio por recuperacão da Mata Atlântica" *Hypeness* Web. August. 2018).

Fairtrade Schools in the UK:

When schools are ready to apply for the *FairAchiever* award, the official website offers a wide variety of engaging activities for students to participate and for the school itself to contribute with its products and projects for the community.

According to the report by Hunt (2012) regarding the impact of these school awards in the United kingdom, it has been observed that this kind of global learning most strongly supports pupils' respect for diversity, empathy and sense of fairness. Out of the research respondents, 53% reported to consume fairtrade on a regular basis after learning about it. Furthermore, in all schools, students were engaged in campaigns relating to local and global causes, environmental issues and activities related to Fairtrade with a greater understanding and respect for other cultures than it was apparent before (Sebba & Robinson, 2009).

> "*One parent interviewed who was very positive about the impact of the scheme, reported that her 4 year old had lectured her in a supermarket about the need to buy Fairtrade in order to support the farmers, attracting the attention of other shoppers.*" (Sebba & Robinson, 2009)

The Fairtrade School Awards provide a variety of suggestions and means to support the entire school environment around the pupils to not only care about the cause behind Fairtrade, but also make it available and present around them, as well as give them opportunities to take action.

The role of empathy in food literacy

This thesis aims at understanding how empathy is used in food literacy school initiatives aiming at fostering prosocial food choices. After conducting an inductive qualitative content analysis over the three cases studies, three main categories emerged from the selected data. The categories were: (1) *Expanding affiliation* (2) *Bet on the collective* and (3) *Biosphere consciousness*.

Table 3. The Research findings

	Expanding Affiliation	**Bet on the collective**	**Biosphere consciousness**
Food Literacy course	- *when they understand what it is like to live on a*	- *For the teacher, one of the main takeaways of the food*	- *Understanding poverty demanded a cross-*

in Britannia Secondary School in Canada	*budget and be creative with the food they have.* - *"Dr. Rees talked about the importance of understanding that we, people, are not in a place to be concerned with the environment, but in fact are a part of the environment."* - *but also consider how being resourcefulness is not a choice for many, but an imperative to survive.*	*literacy course was the sense of community they build together, insisting on always sitting together around one big table for lunch and partaking in different projects always together and encouraging one another, which made the visits and encounters with guests always engaging and participatory.*	*disciplinary discussion that would entail elaborating on various factors, such as social inequality, economic inequality, absolute poverty, relative poverty, systemic poverty, hunger, starvation, malnutrition, undernourishment, cost of housing, welfare, cost of living, and so forth* - *Food literacy was an opportunity to explore the multiverse of aspects that affect people not only in the British Columbia area, but globally.*
The Landless Workers' Movement Itinerant School in Brazil	- *"feeling indignant beyond situations of injustice or loss of human dignity"* - *Strive for equality combined with respect to differences of culture, race, gender, personal styles"* - *how people in other regions eat in according to what the weather is like across the country, learn about hunger and so forth.* - *the practice of international solidarity as one of the stronger in the MST children human formation, reflecting the movement's values of companionship and solidarity.*	- *Their itinerant school educational aims at educating for cooperation, hence the belief that a lot can be achieved together is recurrent in their education documents* - *the itinerant school has been meant to be run and planned by the camping community and teachers, so that the school itself is also partaking in the life in the camp* - *Another way the itinerant schools organise work as part of their schooling is by raising awareness as well as educating using both PPU and PPSD, where they would learn and act on issues in both individual and collective levels, with more awareness of what responsibilities can be taken individually and which are better done together.* - *20 hectares of land for a single family is no future, but producing collectively integrates various huma aspects.*	- *love for people's social causes, and the international sense of social causes. Defending minorities is a strategic fight of the Landless Workers Movement for radical democratisation of society - they are involved in movements that defend the LGBT community, the quilombolas, other field workers and city workers* - *the practice of international solidarity as one of the stronger in the MST children human formation, reflecting the movement's values of companionship and solidarity. The itinerant schools realise joint conferences, learn about other rural movements worldwide, communicate with children from rural workers' movement all across the country, the continent and the world.* - *how conscious they become around their food and land, and the importance that it is ecological, organic, safe, socially and ecologically fair and just, always considering the dignity of the producer.*
Fairtrade Schools in the United Kingdom	- *children should learn where food comes from, who it affects and discuss "fairness". Activities in this stage demand*	- *the official website offers a wide variety of engaging activities for students to participate and for the school itself to contribute*	- *students were engaged in campaigns relating to local and global causes, environmental issues*

	constant perspective-taking and set the ground for empathic concern - *In addition to that, there is always a real human subject, called by name and whose life story is used to understand the context in which the product is produced.* - *the video shows inside his house in order to exemplify life conditions of farmers and puts that side by side with awareness of pricing and how most of the money never gets to the producers themselves* - *the process until they get to the shops and what the farmers do when they are able to get more income*	*with its products and projects for the community.* - *students were engaged in campaigns relating to local and global causes, environmental issues and activities related to Fairtrade with a greater understanding and respect for other cultures than it was apparent before* - *Students have clear understanding how they impact the food industry and farmers behind it via the products they buy, and they are willing to make trade more fair*	*and activities related to Fairtrade with a greater understanding and respect for other cultures than it was apparent before* - *children should learn where food comes from, who it affects and discuss "fairness"*

Expanding Affiliation

Rifkin (2009) uses great historical milestones to demonstrate how big group affiliations would take place: more faith-based, during the hydraulic agricultural revolution, where christians affiliate with christians and jews with jews; affiliations extending to a national borders during industrial revolution and so on, keeping all the empathic response to those in the in-group (Walker, 2013, Rifkin, 2009). What Rifkin meant to illustrate there, is that the affiliation group can change, as well can can expand - affiliating with a larger diversity of people-, as these relations are based on constructed abstractions (Peterson, 2016).

The affiliate group is the group composed by individuals which one identifies with. The criteria of this affiliation goes from relationship closeness to more abstract features such as ethnic features, age, cultural background, for example, and those are seen as subjects, acknowledged with a sense of similarity of identity (Decety & Chaminade, 2003, Håkanson, 2003).

For this thesis, it is important to elaborate cognitive empathy in the sense of affiliation. Damasio (2018) departs from the principle that we are not only living for survival, but have ambitions to flourish and project a desired future not only to the self, but a constructed group of individuals - in situations of loss, sadness and despair, empathy is deployed by stimulating creative imagination to produce remedies that alleviate the negative feelings or their cause.

In the three case studies, it was observed that there was consistent attempt to understand the context from the perspective of an individual inside their own context. For instance, Fairtrade as an organisation has the flourishing of the farmers in its core, and that is reflected in every campaign,

activity and lesson plans, such as when the pupils' got to know Foncho and then his life conditions, following discussions on fairness and how all that happens so that they can have bananas to consume. The many factors present to get the children to understand Foncho's concept had elements of perspective-taking, empathic concern and in some moments even personal distress. With these, the Fairtrade goal of connecting farmers right with the consumer is addressed by getting the pupils' to also affiliate with the farmers, workers and other people in the context of the production, and the means they have to contribute to alleviate their issues so that they can also flourish is by consuming Fairtrade products and advocate for it through the diverse set of activities they can do so.

The same pattern could be observed in the other two cases: the pupils of the Landless Workers Movement Itinerant School practicing solidarity with children of other rural movements worldwide and striving to keep the movement as means to fight for their rights. There, they were expanding affiliation across borders and fighting for agrarian reform as the means to alleviate their pains. Striving for equality is strong in the discourse of the landless rural workers' movement.

In the food literacy course in Britannia Secondary School, one example is when the pupils worked to understand poverty by taking perspective on how to manage food on very low budget. The example from the visit of Dr. Rees, in which he introduced the paradigm shift that we are part of the environment, not just in place to concern about it separately, illustrates how humans may also affiliate to other forms of life (Berenger, 2007), and making conscious and responsible food choices are also means to alleviate the environment's needs.

To conclude, expanding affiliation means identifying with more others as subjects - be it people, the environment or animals - and hence, considering their well-being and responding to their needs. The case studies demonstrated that by expanding the students affiliation with food workers, farmers and their families and working conditions, the environmental footprint, the pupils could be more prone to making food choices that concern about its effects on the human and environmental chain behind it.

Bet on the collective

Cooperation has emerged as a practice alternative to competition throughout the evolution of species (Damasio, 2018). The different means it manifests itself in humans nowadays is that, when one encounters an issue, the empathic concern instigates motivation to act upon a certain issue (Batson, 2008), and this element of feeling which participates in the process offers us the choice on how to respond. Altruism evolved from blind cooperation to both us having choice on how to respond as well as a deliberate human strategy, which can be fostered, exercised and learned (Damasio, 2018).

Betting on the collective means that the pupils trust that the more they cooperate, the more they will be able to alleviate another subject's or group's needs. An altruistic-based motivation that trusts on the collective actions, as well as a collectivist motivated altruistic behaviour.

In order to react to a moment of global crisis and urgency, big groups of people need to think and act considering the well-being of others - across boundaries and nations, of the environment and other creatures and future generations (Rifkin, 2009). Zaki (2014) recognises, from a social neuroscience stand point, that empathy can serve as a "vital psychological prompt to improving others' well-being". In addition to that, Peterson (2016), links empathy as a civic virtue with more collective consideration towards international moral obligations. Inside the food literacy context, it is conspicuous how, in a setting where food is commodity and where one is in a position of consumer, in big groups they can set how the industry functions, such as the rise of ethical consumption in Europe (Zander & Hamm, 2010). However, Block et. al. (2011) presents a series of factors that remind us that there are several elements that affect people's role and ability as consumers, such as food availability, policies, marketing, and others. Food literacy then becomes a means to raise awareness and ability to navigate, engage, and participate within a complex food system (Cullen et. al, 2015), but taking into account that a bigger difference can be achieved when done collectively (P. Simula to personal interview, March 14, 2019).

The concept of betting on the collective is in the core of the landless rural workers' movement. In their educational proposal to educate for cooperation, it can be seen from the formation of the schools, where the entire community contributes to building it up, to the practical work and problem-solving approach aiming at supporting the community. The discourse on an education that empowers the movement and prepare the children to keep fighting for agrarian reform and food sovereignty, is heavily rooted on the belief in cooperation.

The Fairtrade School awards functions in a similar fashion and with very clear action steps: consuming Fairtrade, raising awareness of where the food comes from and taking action for fair and dignified working condition for food producers - in ways as simple as choosing to buy Fairtrade products. The increase in Fairtrade consumption has demonstrated that in spite of the relatively elevated price, consumers have been more and more committed to upholding their environmental and social values via their food consumptions (Ladhari & Tchetgna, 2015). The activities of community awareness raising campaigns, assemblies, events and creating groups demonstrate the focus on cooperation towards more responsible consumption, betting on the principle that empathy can not only be learned, but learned by many, causing mass chain reactions (Peterson, 2016). The ripple effect could be observed in the students of the food literacy course as well, once they were constantly and collectively engaged to donate for the food bank and cook extra for the Kettle Society and bring the food themselves:

> *"they knew who they were feeding, without judgement, and not at all like charity"* (Schofield, E. phone interview, March 6, 2019).

In Summary, collective empathy plays a strong role in food literacy when one realises their food choices made collectively, in large scale, can provoke considerable prosocial and proenvironmental impact.

Biosphere Consciousness

Rifkin (2009) estates that our civilisation is on the brink of extinction, threatened by climate change and the proliferation of weapons of mass destruction, and that the only means to counteract that - if we are not too late already - is by mass transformation of consciousness towards what he calls *Biosphere Consciousness*, or *Global Empathy*, which stand for minding how our actions and consumption of resources affect the lives of other humans and creatures on the planet. Such level of conscience, prompted by the duty to uphold one's moral principles and seek for justice, carries strong notion of consequential thinking, paired with genuine care for an other-centred outcome (Batson, 2008).

The food literacy course in Britannia Secondary School implemented biosphere consciousness by dedicating an entire week for "globalisation, localisation and sustainability", supported by a series of activities, guest speakers and discussions that not only sparked the students' interest in learning further, but intrigued them with their responsibility in the global outcomes. For example, when they prepared a meal that would cost 50 cents per person followed up by a cross-disciplinary discussion on social inequality, economic inequality, absolute poverty, relative poverty, systemic poverty, hunger, starvation, malnutrition, undernourishment, costs of living and etc., opening a series of opportunities to learn how their food choices can also contribute to other people's living conditions. In addition to that, how their attitudes towards the environment also have long lasting consequences for everyone.

The Landless Workers' Movement has as its premise the development of a conscience that consider a production and consumption which is socially and ecologically fair and just, considering always the dignity of the producer and the environment, which is the definition of biosphere consciousness itself. Biosphere consciousness can also be observed in the centre of the Fairtrade School award activities. The permanent structure of learning about where the food comes from, the context around it and then take action for the rights of the workers illustrate clearly how biosphere consciousness can induce empathic motivation to act towards prosocial matters using food choice as means. The effectiveness of the engagement can be observed in how 52% of the pupils continue consuming Fairtrade products, the growth in the number of Fairactive and Fairachiever Schools and engagement of students in campaigns pro global causes (Hunt, 2012, Sebba & Robinson, 2009).

To conclude, biosphere consciousness - minding how actions and consumption of resources affect the lives of other humans and creatures on the planet (Rifkin, 2009) - illustrate a solid outcome of developed cognitive empathy (Kaplan & Lacoboni, 2006, Batson, 2008, Berenger, 2007) and plays an

important role in food literacy, as contributing to a sustainable food system is a key component of its scope (Cullen et al., 2015).

4. ETHICS AND RELIABILITY

The ethics and reliability of this thesis can be discussed under a variety of perspectives. For instance, I ought to recognise my limitations as not a specialist in the fields of neuroscience, evolutionary biologist or social psychology. However, in order to compose an interdisciplinary work which could be reliable and concise this thesis focused on the main interdisciplinary converging elements, this thesis took into account vast and recent research body on empathy and food literacy, including the main con arguments.

Another important factor to mention were the many pieces of data collected in a different language (Brazilian Portuguese in this case) and translated personally by me, who have advanced fluency level in both language - Portuguese and English - but am not a translator, hence there were language structural influences and terms who were difficult to correspond in English. In order to avoid ambiguity the text was peer-reviewed multiple times.

In terms of the methodology chosen, the main risks with case studies stem from reporting findings that do not accurately represent the phenomenon (Lakatos & Marconi, 2003, Hsieh & Shannon, 2005). Therefore, choosing a diverse and robust set of data and transparently presenting the selected data was essential to avoid these risks.

Under the scope of the topic and the cases, the first challenge acknowledged was that, due to limited resources of time and funds, the data for this thesis was entirely collected on second or third hand accounts, as visiting the schools was not a viable option. Additionally, the scope of stakeholders who partake in the food literacy school initiatives contributing to this thesis was considerably limited - for instance, the students, their families, teachers from the itinerant schools or the Fairtrade Schools, and certainly meaningful data could have emerged provided there were an opportunity to conduct the research as such. However, with the reports, practical resources and key-informant interviews, it was possible to address the necessary aspects (represented in Table 1) needed to conclude the interpretation of the data.

The problematic surrounding the choice of cases was also acknowledged in this thesis. For instance, for Griffiths (2014)[45], the Fairtrade Schools initiative is a practice of indoctrination, where Fairtrade manipulates students and schools for commercial reasons: to promote the brand and sell their products. Griffiths even presents evidence of misleading use of information by suppressing fact and providing false information in order to preach Fairtrade and sell, which he iterates is a criminal offence of Unfair Trading[46]. However, when looking into the practicality of the Fairtrade School Awards, one can see

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[45] Dr. Peter Griffiths is a well known marketing economist and international consultant who has produces several articles in objection to Fair trade. Among them is *Ethical Objections to Fairtrade* (2013) and *Marketing by Controlling Social Discourse: The Fairtrade Case* (2015).

[46] Griffiths (2014) elaborates in one of his notes: "It is the criminal offence of 'Unfair Trading' when the misrepresentation or withholding of information 'causes or is likely to cause the average consumer to take a transactional decision he would

the relevance in the main idea is learning where products come from, understanding the concept of "fairness" and providing the pupils with a chance to act collectively. This is not where the criticism is directed, and perhaps Griffiths also did consider the autonomy that schools have to implement certain strategies to earn each Fairtrade School certificate, but he raises questions which are pertinent to consider: (1) Should school be telling schoolchildren to buy certain products? (2) Indoctrination or education? (3) Is Marketing to pupils acceptable?

This thesis does not take stand for or against the Fairtrade School initiative. This research focused on describing its objectives and observing how the key phenomenon is put to practice in order to address the research question.

The Landless Workers' Movement also receive numerous accusations of indoctrination and manipulation of their children and are even referred to as a terrorist organisation. However, the means which make such statements be spread in the media are mostly via private YouTube channels, local newspapers, private publications and right-wing politicians' public statements - such were not referenced in this thesis with the intention not to spread the non-trustworthy information channels. When trying to encounter academic articles on what kind of criticism were studies in regards to the Landless Workers Movement itinerant schooling method, nothing was found that would confirm the statements made by the other communication channels. In fact, not only are there several academic publications that provide evidence on the demonisation of the Landless Workers Movement by the mass-media as a counter-hegemonic movement[47], but also most of the work published about the Landless Workers Movement's educational initiatives actually present high regards on their practices. One thing the movement is explicitly open about is its political stand, and that its education is openly designed to empower the rural workers to fight for agrarian reform and food sovereignty (MST Education Booklet, 2005) which is, in itself, a politically biased action.

The overall use of empathy in education also undergoes severe criticism that take into consideration the dangers of the use of empathy in the shades of ignorance - actions being taken without information, using empathy as only reference for moral functioning (Bloom, 2015). This could propose a dialogue which could defend that most of the initiatives brought by the case studies were accompanied with information and first-hand informants, and counter argument that the use of information can also be manipulated and motivated by interests that go beyond the students' learning, like inducing them to

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not have taken otherwise'. Similarly, in the Fraud Act, 'Fraud by false representation' is where someone '(a) dishonestly makes a false representation, and (b) intends, by making the representation— (i) to make a gain for himself or another, or (ii) to cause loss to another or to expose another to a risk of loss' (Great Britain. 2006. Fraud Act 2006. London: The Stationery Office.). Again, in the Theft Act, '(2) It is immaterial whether the appropriation is made with a view to gain, or is made for the thief's own benefit' (Great Britain. 1968. Theft Act 1968. London: The Stationery Office.)."

[47] For example, *"O que era simples imprensa virou mídia": como o MST divulgou os meios de comunicação de massa* (Perli, 2017), *O MST e a mídia: o fato e a notícia* (Ribeiro de Souza, 2011) and *Mídia e movimentos sociais: a satanização do MST na Folha de S. Paulo* (Ayoub, 2007).

purchase Fairtrade (Griffiths, 2014). This is why in the context of food literacy, it was essential to consider the factors that influence food choice presented by Block et al. (2011) - food socialization, food literacy, food marketing, food availability, and food policy. With this, the process of writing this thesis took into primary account the context and possibilities of the studied cases when addressing what they did in their food literacy interventions (Check Table 1 for the investigation aspects).

Finally, in order to avoid accounting results that do not represent the phenomenon under study (Ventura, 2007, Hsieh & Shannon, 2005), this thesis opted for methodological choices that could bring together more robust findings, like diversifying the case studies and collecting different sets of data (Freitas & Jabbour, 2011, Yin, 2006), as justified in the second chapter. Having proposed a hypothesis on the role of empathy in food literacy in schools aiming at fostering prosocial food choices, the natural next step would be to test it *in locus* and elaborate it further.

5. FINAL CONSIDERATIONS

This thesis pointed three elements that emerged by the case studies to the role empathy takes in their food literacy school initiatives. The three elements were: (1) *Expanding Affiliation*, which stands for being able to identify with more others (other groups of people, other living beings, such as animals and the environment). This means one would also respond to those subjects by also considering their well-being and responding to their needs (Batson, 2008, Damasio, 2018, Håkanson, 2003). In food literacy, the students demonstrated to expand their affiliation to food workers, farmers, their families, the environmental footprint and that manifested through more conscious food choices and curiosity regarding the origin of their food.

(2) *Betting on the Collective* consists of realising that the other-centred concern may have more effect when acted upon collectively (Damasio, 2018, Peterson, 2016, Rifkin, 2009). Many examples were presented in the case study, such as the school campaigns realised by the Fairtrade Schools, the conspicuous change on food habits and culture observed in the food literacy course in Britannia Secondary School and the education for cooperation approach of the Landless Workers' Movement.

(3) *Biosphere consciousness*, which consists of taking into account the consequence of one's actions and consumption to other people, other creatures and the planet (Rifkin, 2009).

One may argue that not only was it pointed that these three elements represent effective means to encourage food choices towards a more prosocial fashion, but they also provide evidence for a possible causal relationship between empathy and prosocial food choices. Further research is pertinent to test and observe and test these three elements presented in the results of this thesis.

Furthermore, a variety of transversal themes partially addressed in this thesis can also be studied further. For example, in spite of the decrease in time spent cooking and passing on cooking traditions forward (Canada Conference Board, 2013), what are initiatives that decided to counter that? What have been other alternatives that emerged in different places and how have they affected the community economically, socially and nutrition-wise? With the current boom of cooking shows and celebrity chefs (such as *MasterChef*, *Chef's Table* netflix series, *Hell's Kitchen*, etc.), how have they been affecting the cooking culture of watchers? What is the food culture of places where food literacy has been applied for some years already? And, finally, how can the social aspects and norms around meals and food be explored as means of sustainable food consumption?

The three categories of actions applied by the case studies - expanding affiliation, bet on the collective and biosphere consciousness - represent not only strong means to foster a variety of prosocial behavior, but also effective elements to genuinely engage students in learning. Research has also shown that by contributing to a cause one cares about, they also benefit from feeling psychologically empowered (Oliveira Neto, 2018, Wagaman, 2011), especially when it comes to involving something as part of their lives as food.

Moreover, the case studies approached food literacy in an interdisciplinary approach - the food literacy course in Britannia Secondary School was created as means to bridge human geography and human economics and ended up going way further. The Landless Workers Movement addresses interdisciplinarity in its concepts of *Thematic Axis* (MST Education Booklet, 2005) and the Fairtrade Schools propose a variety of themes that are not tied to a single subject. All those with clear means to contribute through their food choices.

Food choices are made every day and they cannot escape from being political: where one decides to invest their money, what one feeds to their bodies and the people around them, how one decides to spend their eating time, every food choice affects the entire human chain behind it, and it goes across borders.

Canada having increased the number of scholarship and funds for research on food education has enabled more informed decision-making towards better food policies and the beginning of a number of food literacy initiatives (Truman et al., 2017). Although the food literacy case studies focused on the school environment, the findings hope to inspire strategies that can be applied not only to school-related initiatives, but also to NGOs, startups, activism linked to micropolitics, among others.

Finally, with this thesis, I intend to raise awareness on causes that go beyond the research question: the importance of learning about food in the greater scope of food literacy as described in the theoretical framework of this thesis, the relevance of developing more research that suggest food as intervention for better human dignity and that considers the relationship of dependency we have with environment, as well as the urgency in utilising school food policies for the best interest of the human chain around it - the children, the cooks, the farmers, the kind of agribusinesses they support, and so forth. Schools play an essential role in how a society treats this human chain behind food: not only because it educates children about it, but also because it feeds children on a daily basis.

At the time when this research was done, there were still strong bottlenecks in terms of vision and scope (Krznaric, 2008). Little literature that suggests empathy as a large-scale social change factor and little said on global-basis change. By choosing food literacy inside schools as a channel, I hope that this can instigate new doors willing to explore this wide interconnected chain towards a more sustainable and responsible coexistence, given the urgency of it (Rifkin, 2009).

In conclusion, the realisation that a daily, trivial activity such as eating affects a large and complex human chain behind it inspired a research that explored the role of empathy in different food literacy initiatives in schools located in different parts of the world. Food choice is a term that ought to consider a number of elements around it: what are the policies around food where one lives? What is the availability of food and how is it affordable to them? How were they educated about nutrition and what were they led to believe by their local media? Because of the multitude of elements which affect food choices, food literacy scope includes an interdisciplinary array of elements, including both critical

knowledge and functional knowledge. The study of the phenomenon was realised through three case studies which demonstrated that empathy plays a role in food literacy which is manifested in three different elements in order to elicit prosocial food choices: *Expanding Affiliation* in order for their students to identify with a larger diversity of groups of people and hence care about their well-being, being able to understand the relationship between that and their food choices, *Betting on the Collective* and that by cooperating they can not only achieve greater impact toward the other-centred well-being they believe in, but they will also be more engaged in the process and *Biosphere Consciousness*, so they understand that the decisions that they make have consequences that echo across their borders. Together, the three elements demonstrated that empathy can be an effective tool to encourage students to make more sustainable and prosocial food choices that benefit both the people behind the production process of food and the environment. Although the study seems to have found a causal relationship between empathy applied to food literacy and prosocial food choices, it did not attempt to confirm that hypothesis. Further research is needed not only in order to test the relationship between the categories suggested in this thesis and prosocial food choices, but also to inform, inspire and suggest alternatives which can be used to develop means of addressing food consumption towards dignifying those behind its production, protect the planet and educate consumers.

Due to genuine concern on the topic, this thesis was made with an intention to gather a subject matter that could be unfolded as a future doctoral research and implemented as a community development strategy as well as effective tool to maintain the planet.

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APPENDIX 1: VIDEOS REFERENCE LIST

In this appendix one may find a reference list and links to all the videos referenced in the thesis.

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APPENDIX 2: INTERVIEW QUESTIONS

Apprendix B contains the specific questions asked during the interviews.

Interview Questions

1. Schofield, E. (2019, March, 6th). Phone interview.

    1. what were the clear objectives of the program? (Things that by achieving you know it worked as you expected)
    2. How did you elicit empathic skills (such as personal distress, perspective-taking or even fantasy perspective-taking) during your lessons?
    3. How did you consider the social limitations around the students in practice?
    4. What changes could be observed during and after the course? How did you see their perspective change towards food choices?
    5. In your opinion, what was the biggest impact of the course to their lives?

2. Simula, P. (2019, March 14th). Personal interview.

    1. What are the things taught in the itinerant school related to food? (Especially in terms of: nutrition, policies, access, food choices, food marketing)?
    2. How do you see empathic skills (such as indignation, affiliation to other groups of people, belief on the collective, perspective-taking or even fantasy perspective-taking) being elicited in the itinerant schools when they are learning about food?
    3. How are the social limitations considered in practice when teaching about food or talking about food?
    4. What are characteristics of the food choices of the itinerant schools' students?
    5. How is the awareness on global issues and consequence of food consumption addressed in the itinerant school?

APPENDIX 3: CONTENT ANALYSIS REFERENCE LIST

Appendix C is the reference list of all the references used to compose the content analysis. The references are divided in *Report Archives* and *Other Documents*, as according to this thesis' methodological approach.

Report Archives

1. Food Literacy course at the Britannia Secondary School, Canada

Appetite4change. (n.d.). Retrieved March 1, 2019, from https://appetite4change.wordpress.com/

2. The Landless Workers Movement itinerant schools

MST. (n.d.). Retrieved February 15th, 2019, from http://www.mst.org.br/

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3. Fairtrade schools, UK

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Teaching resources, lesson plans, videos & more. (n.d.). Retrieved March 1, 2019 from https://schools.fairtrade.org.uk/

Other documents

1. Food Literacy course at the Britannia Secondary School, Canada

A Study of Food Literacy. (n.d.). Retrieved March 1, 2019, from

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