universität wien

DIPLOMARBEIT

Titel der Diplomarbeit

„Mission: Impossible?
Teaching Aspects of Sustainability through
Children's and Young Adult Literature in English"

Verfasserin

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angestrebter akademischer Grad

Magistra der Philosophie (Mag.phil.)

Wien, 2014

Studienkennzahl lt. Studienblatt:	A 190 344 456
Studienrichtung lt. Studienblatt:	UF Englisch UF Geographie und Wirtschaftskunde
Betreuerin:	Assoz. Prof. Mag. Dr. Susanne Reichl, Privatdoz.

Dank

Danke, Susi, für die vielen kürzeren und längeren Gespräche in denen du mich bestmöglich beraten und mir immer mit konstruktivem Feedback weitergeholfen hast – und das nicht immer nur inhaltlich. Außerdem möchte ich mich für deine inspirierenden Ideen bedanken, mit denen du mir stets wichtige Denkanstöße gegeben hast.

Danke Mama, danke Papa, dass ihr es mir ermöglicht habt zu studieren und dabei sogar ein Jahr ins Ausland zu gehen um dort wertvolle Erfahrungen zu sammeln. Ich sehe das nicht als selbstverständlich und werde mich immer glücklich schätzen diese Chance bekommen zu haben. Mama, danke auch für die Unterstützung während der Diplomarbeitsphase – egal, ob als Snacklieferantin oder als Motivationstrainerin: du warst immer da.

Danke Oma und Opa, danke Matz, dass ihr immer für mich da seid, auf eure jeweilige, sehr unterschiedliche Art und Weise.

Danke, Nadine und Babsi, für eure große Hilfe beim Korrekturlesen. Danke, Nadine und Lisa, dass ihr mich in der Diplomarbeitsphase immer wieder zum Weitermachen motiviert habt und mich mit unzähligen Nachrichten und Gesprächen zum Lachen gebracht habt, auch wenn mir oft nicht danach war.

Mein Dank an dieser Stelle gilt aber auch Dr. Seuss, der mir mit seinem Buch „Der Lorax“ erstmals bewusst gemacht hat, auf welche schöne Art und Weise ökologische Themen für Kinder aufbereitet werden können – und das sogar im Fremdsprachenunterricht.

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Abbreviations

AHS .....Allgemein Bildende Höhere Schule
bm:ukk .....Bundesministerium für Unterricht, Kunst und Kultur
BNC.....British National Corpus
CEFR.....Common European Framework Reference for Languages
CLIL .....Content and Language Integrated Learning
COCA .....Corpus of Contemporary American English
DESD.....Decade of Education for Sustainable Development
DeSeCo.....Defining and Selecting Competencies
EFL .....English as a Foreign Language
ELT .....English Language Teaching
ESD.....Education for Sustainable Development
GDP.....Gross Domestic Product
GWK.....Geographie und Wirtschaftskunde
IPCC .....Intergovernmental Panel on Climate Change
OECD.....Organisation for Economic Co-Operation and Development
OED .....Oxford English Dictionary
S .....individual student
SSS .....whole class
T .....teacher
UN.....United Nations
UNCED.....United Nations Conference on Environment and Development
UNESCO.....United Nations Educational, Scientific and Cultural Organization
UNICEF .....United Nations Children's Fund
WCED.....World Commission on Environment and Development
WEF .....World Education Forum

1. Introduction

The future has gone bad; we need a new one.
Gerry Canavan xi

Whenever we turn on the TV, or open a newspaper, it is highly likely we stumble upon the one or the other issue of sustainability; be it the newest report of the Intergovernmental Panel on Climate Change (IPCC), the latest news about Japanese whaling, or a life-threatening famine, (un)sustainability and its consequences can be found everywhere. However different these current events are, they do share a rather pessimistic outlook into the future and show that a countless number of people is affected by unsustainability in manifold ways. It is hardly surprising, then, that "green" issues have been raised more and more often in the last decades in reaction to these pessimistic views. What is problematic about pessimistic attitudes towards our species' and planet's future is that pessimism does not only not help solving pressing problems and improving the status quo of our environment, but it also makes us feel numb and powerless with regard to taking action because the pessimist assumes that it is too late for major changes anyhow. Therefore, I have chosen to approach the issue of sustainability and the Earth's future by addressing aspects of the problems in an action-oriented way and with children, who usually approach topics more open-mindedly and with less bias than many adults. The problem is that even if we address the problems open-mindedly, our individual possibilities to act are restricted:

> [V]irtually no one wakes up in the morning with a desire to degrade nature or impoverish other people; nevertheless, that is what we do in the processes of going to work, shopping for goods, and performing the other banal necessities of life. Despite our individual intentions, our systems of transportation, energy generation, agriculture, manufacture, trade, and sales all embroil us in things we do not want like waste, pollution, and social degradation. (Collin 2)

Therefore, what we need in order not to restrict our own and other people's future opportunities is systemic change, which can be facilitated by systematically raising problems of sustainability in the context of formal education. Formal education is not only part of an unsustainable system, in that it adheres to unsustainable standard practices of our society (e.g. it takes places in school buildings most of which consume

incredible amounts of energy), but it is also the reproducer of the same system, in that it transfers unsustainable practices to the younger generation. Therefore, education has immense potential to bring about change, as "[h]umans learn what to value and how to care for it through their cultural traditions and upbringing" (Collin 8). The engagement in what is often called a "green" philosophy nowadays is nothing new and can be considered such a "cultural tradition". There have always been people contemplating human influences on our surroundings in general, and nature in particular, and we remember especially those who recorded their thoughts – writers, such as Walt Whitman, Ralph Waldo Emerson or Raymond Williams, for instance. Furthermore, the amount of children's literature which deals with the relation between humans and nature has risen continuously during the last decades. One example of such texts is Dr. Seuss' The Lorax. When these four aspects – global problems, children, education and literature on nature – are considered in unison, it is only natural to sooner or later arrive at the research question this paper is investigating:

> *In how far can children's and young adult literature be used to teach aspects of sustainability in a secondary school EFL context?*

The first part of the paper breaks this question down into several smaller ones which are examined subsequently. This supplies the theoretical foundations for the second part of the paper, in which practical teaching suggestions on Suzanne Weyn's *Empty* and David Heatley's "Classic Combo" are discussed.

The principal stance taken in this paper is a constructivist one, which assumes that learners construct meaning and knowledge by connecting new ideas to experiences they made before. Therefore, a learning process might be initiated by external factors, such as an English lesson, but what is eventually learnt is largely dependent on the learner and his/her experiences. This makes the connection of subject matter which has to be taught with the students' lived experience highly important, as only this step will enable students to see the relevance of global problems to their own lives. Otherwise, no learning can take place.

The term sustainability itself originates in 18th century German forest management, and there it denoted the idea of only logging an amount of trees which can regrow in the same time in order to ensure that coming generations do not suffer from timber shortages (cf. Bader § 2). As chapter 1 will show, the term has been defined and re-defined, used and misused in multiple ways since that time, but the common theme of "lasting, perpetuating" can be found in nearly all uses of the expression *sustainable (cf. "sustainable").* This paper understands sustainability as both, a quality in the present, and a set of strategies for the future which can be employed in order to reach a more sustainable state as a society. One definition which struck me as specifically straightforward and true was that of a child which was cited by Charles Hopkins: "[Sustainability is] enough for all forever" (qtd. in: Mayr and Schratz 5). It is exactly this simplicity which makes work with children on controversial, difficult topics worthwhile, as their clear vision can teach adults a great deal about the world. Raising a problem like sustainability with children can help create the new future called for in the quote at the beginning of this introduction. However, in order for this mission not remain impossible, it is necessary to reduce the Brobdingnagian notion of sustainability to individual aspects of it in order to operationalize the concept for teaching. In the case of this paper, the following aspects have been chosen: our society's dependency on petroleum on the one hand, and industrial food production processes on the other hand. By raising these issues this paper hopes to contribute to the promotion of sustainable behaviour and show two ways of implementing sustainability into the teaching of English as a Foreign Language (EFL) in Austrian secondary schools.

2. What is Sustainability?

This chapter sketches out the wider context of the concept of sustainability and will then attempt to define it the way it is used throughout this paper. The Oxford English Dictionary (OED) states that the term sustainability was first mentioned as early as 1835. However, it was not used in its current meaning involving environmental connotations until 1980 (cf. "sustainability, n."). In order to investigate the term's increasing popularity during the last years, it is useful to compare its frequency in the British National Corpus (BNC) with its frequency in the Corpus of Contemporary American Studies (COCA). While the BNC contains texts from the 1980s until 1993, the COCA is made up of texts which were written between 1990 and 2012 (cf. Davies, *Corpora*). Interestingly, the term *sustainability* appears only 156 times in the BNC (cf. Davies, *BNC*), while it can be found 2680 times in the COCA (cf. Davies, *COCA*). Taking into account the different corpora sizes, this means that *sustainability* occurs 3,82 times more frequently per million words in the COCA than in the BNC. Considering the fact that the two corpora's texts differ in terms of their national background, it is difficult to draw general conclusions regarding the term's general frequency of appearance. However, the figures point towards the possibility that the occurrence of *sustainability* might have risen continuously. Disregarding for a moment the cultural differences between the corpora, a rise in the term's appearance from about 2 uses per million words between 1990 and 1994 to about 11 uses per million words between 2010 and 2012 might have occurred – with the highest frequency being in academic texts. (cf. Davies, *COCA*) This is very much in accordance with Wiegandt, who in 2009 claimed that discourse about sustainability has taken place merely in the fields of politics and academia so far – without large-scale attempts to encourage masses of population to take part in it (cf. 7). This aspect of sustainability will be discussed in more detail below. However, the term sustainability and the way it is used in this paper will be defined first, as its possibly increased appearance during the last decades has led to the coexistence of various different concepts of sustainability.

The Report of the World Commission on Environment and Development (WCED), which dates back to the 1980s and is often referred to as the Brundtland-Report, contains one of the most widely cited definitions of the term sustainability. However,

even though it has been treated by most subsequent documents on sustainability as if characterizing the concept of sustainability, it in fact defines the notion of sustainable development: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 41). As can be seen, the two terms overlap to a certain degree, but should not be used synonymously; I will briefly discuss the concept of sustainable development before going on to define sustainability.

According to the Brundtland-Report, there are three principles which enable sustainable development of the economy: conservation of the environment, social justice and political participation (cf. Littig and Griessler 15). The central point the WCED makes in its report is that there are two conditions to be met in order to achieve a long-term equilibrium between human needs and nature's capacity to fulfil these needs: Firstly, intra-generational equity has to be sought, in that industrialized countries stop overusing earth's resources and developing countries are given the chance to improve their population's living conditions, which will also enable them to pay more attention to environmental problems that primarily arise because of more urgent problems that have to be dealt with (i.e. poverty). Secondly, intergenerational equity has to be guaranteed in that currently living generations do not limit the possibilities of future generations to fulfil their needs (cf. Ritt in: Littig and Griessler, Preface). As Haan comments, a double strategy was attempted to be adopted:

> Es sollten einerseits die natürlichen Grundlagen für das menschliche Leben gesichert werden. Andererseits sollte dies aber nicht zum Verzicht auf ökonomische Prosperität führen (müssen), denn damit wären die Chancen der Entwicklungsländer dramatisch eingeschränkt worden, einen verbesserten Lebensstandard und Wohlfahrt für alle zu erreichen.
> (Haan 39)

The Brundtland-Report sees poverty and different levels of economic growth as the causes of ecological crises. Consequently, "sustainable development clearly requires economic growth in places where such needs are not being met" (WCED 42). To sum up, the WCED claims that keeping economic growth high in industrialized countries and facilitating it in developing countries will lead to less poverty, which is seen as a prerequisite of environmental preservation. Furthermore, ecological deterioration has to be avoided, as it causes a rise of inequality (cf. 45). What can be seen here is that

even though one goal of this version of sustainable development is reduced ecological exploitation, this is facilitated by the second, equally (?) important goal of still more economic growth. Economic growth and an intact environment are seen as mutually dependent, which is a problem of the double strategy encouraged by the WCED, as economic development has been associated with environmental deterioration and exploitation ever since it gained momentum in the course of industrialization (see Steffen, Crutzen, and McNeill for a striking overview of this correlation).

Before finally defining sustainable development as used in this paper, the next paragraphs deal with different further aspects the Brundtland-Report has been criticized for. The WCED calls for an increase of the productive potential (cf. 42), which has been one of the main points of criticism of their definition of sustainable development: Since the earth is a (more or less) closed system, it can only provide finite amounts of resources. Exponential economic growth of the GDP by 3-4% is needed per year to maintain living standards in industrialized countries and a 5-6% growth rate is needed in order to raise living standards in developing countries, which is claimed to be a prerequisite for sustainable development. Economic growth causes ecological costs and, considering the limited availability of resources on earth, one can only conclude that maintaining economic growth in its present form is unlikely to lead to sustainable development and will rather lead to more exploitation of resources (cf. Littig and Griessler 16). Therefore, the phrase „sustainable development“ has also been termed an oxymoron (cf. Redclift).

Another point of criticism the Brundtland-Report has to face is that it does contain general thoughts and ideas which can lead into the direction of sustainable development, but fails to initiate operationalized strategies for real action. Considering the report was a publication pointing the way ahead at the time of its publication, one might argue that these kinds of papers rarely contain operationalization strategies. Nevertheless, the WCED stays very general in terms of which institutions could assume responsibility for the various functions that have to be taken over when sustainable development is the general aim. Therefore the report’s call for action stays very much implicit.

The project „sustainable development" calls for action of various stakeholders of our society - in fact collaboration of *all* stakeholders there are. The WCED therefore proposes to adopt long-term strategies and attempted to achieve sustainable development by the year 2000 (cf. 5). A timespan of 13 years might be regarded long-term from a political point of view, but if it can be considered *long-term* from an ecological point of view should be questioned; even more so, considering the amount of stakeholders involved in the processes.

Even though the Brundtland-Report can be criticized for the reasons just mentioned, its publication marks the starting point of discourse about the need for protection of the environment. Haan explains well why the environmental discourse was started on a broader base at this specific moment in time:

> Den Anlass für die Propagierung von nachhaltiger Entwicklung bilden die seit den sechziger Jahren vielfach und verstärkt beobachteten ökologischen Krisenphänomene auf der einen Seite sowie die Kritik an der ungerechten Verteilung der Lebenschancen der Menschen in der heutigen Welt auf der anderen Seite. (Haan 39)

In that sense the WCED managed to give all those people a voice whose awareness of the finite resources of the planet had started building ever since the Second World War. Sparking off the environmental discourse was one of the key achievements of the Brundtland-Report, in that the famous 1992 UN Conference on Environment and Development (UNCED) in Rio de Janeiro, the action plan „Agenda 21" which was decided on there and most subsequent conferences on sustainable development can be seen as a direct consequence of it. Additionally, the emergence of the big transnational non-governmental organizations, such as the Worldwide Fund for Nature, or Greenpeace International is also due to this enhanced awareness of global ecological problems (cf. Jamison 225); and considering their potential to provide incentives for border-crossing solutions to ecological problems, this was an important development. It was also due to this report that people were made aware of the fact that the discourse about global effects of human influence on the environment has to entail a perspective which takes account of the interdependency of people and nature. Furthermore, the WCED finally raised awareness for the fact that the problems our society is facing are too complex for the notion of nation states: "The enforcement of

common interest often suffers because areas of political jurisdiction and areas of impact do not coincide. [...] No supranational authority exists to resolve such issues, and the common interest can only be articulated through international cooperation" (WCED 45).

In the end, a definition of sustainable development has to answer two questions: 'What has to be sustained?' on the one hand and 'What has to be developed?' on the other hand. The U.S. Board on Sustainable Development has analysed various definitions along these lines and has come to following conclusion: The definitions of what had to be sustained, were aggregated into three categories: „nature" (e.g. biodiversity), „life support systems" (e.g. resources) and „communities" (e.g. cultures). Regarding the wider notions of what had to be developed, three different categories were defined: „people" (e.g. child survival), „economy" (e.g. wealth) and „society" (e.g. social capital) (cf. U.S. Board on Sustainable Development qtd. in: Kates, Parris, and Leiserowitz 11). The Brundtland-Report with its economically oriented goal definitely belongs to early literature on sustainable development (cf. Kates, Parris, and Leiserowitz 11). Having these two questions in mind I now want to define *sustainable development* as I understand and use it in this paper before going on to discuss models and a working definition of *sustainability.*

Not as an academic, but as a human being spending her life on the one planet our species is able to inhabit, I am arguing against an understanding of the term *development* as purely economic, entailing economic growth in its current form as its primary aim. I am arguing in favour of developing society with all its members and institutions, rather than exclusively aiming at developing the economy, in order to be able to sustain not only life support systems (for humans), but primarily nature's diversity. In the long run, this is the only perspective one can take, if our species does not want to extinguish itself, as "we all depend on biodiversity" (Adams and Jeanrenaud 2). What I am asking for is therefore leaving our children a planet that not only enables *them* to fulfil their needs but also their children and grandchildren. I am using *need* in a broad sense here which not only encompasses material needs but also the need to live in an environment worth living, characterized by biodiversity and social justice. This sense of *needs* involves embracing an attitude towards nature which

leads away from the notion that our ecological environment is primarily an economic resource there to be used by us. This is also the respect in which my definition diverges distinctively from the one suggested in the Brundtland-Report: "A forest may be depleted in one part of a watershed and extended elsewhere, which is not a bad thing if the exploitation has been planned and the effects on soil erosion rates, water regimes, and genetic losses have been taken into account" (WCED 43). I argue that even if exploitation is planned and the effects “have been taken into account“, such instances should be avoided at all costs, as ecological biodiversity is interconnected in ways too manifold for science to ever fully understand it, so that the consequences of this intervention might be seen in a completely different place at a completely different time. This is not to say that human beings should completely stop using the earth’s resources, but that they should stop exploiting the resources the way this is happening at the moment. To return to the example used by the WCED: enough forests have been depleted, so why not use these areas to regrow the kinds of woods people wanted to gain by depleting other forests. This problem is also called the „Tragedy of the Commons“, and is based on the fact that the environment is treated as an unpriced common good and therefore is polluted and degraded (cf. Hardin 1245).

As described in the first part of this chapter, the Brundtland-Report embodies an economy-centred approach to sustainability. In one of the first EU documents regarding sustainability, the Treaty of Amsterdam, the European Union adopted an approach to sustainability which is based on three equally important factors (cf. European Union Article 2.2):

> Known as the 'three-pillar model of sustainability', the principle states that sustainability not only comprises the natural heritage we pass on to the next generation but also the economic achievements and social institutions of our society, such as democratic political participation or peaceful conflict resolution. (Bader § 7)

This model of sustainability has an even clearer economic focus than the Brundtland version, even though it acknowledges that ecological and social aspects are vital ones in reaching out for sustainability. If one of the three aspects is unbalanced, that means the system as a whole cannot reach sustainability (cf. Harich). The three pillars can be defined along the following lines:

- **Environmental sustainability** is the ability to maintain rates of renewable resource harvest, pollution creation, and non-renewable resource depletion that can be continued indefinitely.
- **Economic sustainability** is the ability to support a defined level of economic production indefinitely.
- **Social sustainability** is the ability of a social system, such as a country, to function at a defined level of social well being (sic!) indefinitely.
  (Harich; emphasis added)

Most recent models of sustainability split up the social domain into the two different categories of politics and culture, whereby the social aspect of sustainability becomes clearer. These representations are also called four-pillar-models and their categories are defined in various ways. However, Magee et al. have the category „politics“ include notions such as organizations, governments, and issues of accountability, whereas the category „culture“ includes ideas like identity, belief, learning and health (cf. 232–33). They argue that the two social dimensions allow for the concept to be more convertible for urban communities, as they tend to be embedded in a wider social context in their everyday life than corporations (cf. Magee et al. 233). Additionally, an inclusion of „politics“ as a fourth domain allows for topics such as political participation and human rights to be included into sustainability (cf. Seitz, “Recht auf nachhaltige Entwicklung” 2).

As the last paragraphs have shown, the question if sustainability can be defined once and for all times remains unanswered at best – at worst it has to be denied. While Ratner questions the practical meaning of „sustainability“ (cf. Ratner pp.52 for a good overview of different definitions), Bakari claims that the term contains inherent inconsistencies which prevent its definition and constrain its use (cf. 6). Just like Kates, Parris, and Leiserowitz (cf. 20), Kopfmüller is convinced that sustainability cannot be defined uncontroversially: "Nachhaltigkeit ist ein gesellschaftliches Projekt, das aufgrund der Dynamik und Komplexität seiner ökologischen, ökonomischen und sozialen Dimensionen nicht erschöpfend und nicht unumstritten für alle Zeiten abschließend definiert werden kann" (qtd. in: Haan 40). Moreover, the difficulty in measuring several of the various qualitative dimensions of the concept leads to the

fact that even if sustainability is defined, it cannot be measured easily, if at all (cf. Ratner 62).

In my working definition of sustainability, I want to go along with Bader, who claims that the concept is widely used as a principle but much less often as a practice (cf. Bader § 15). For the sake of operationalization I will define skills and competences below that children should acquire in order to be able to actively take their roles in the sustainability discourse. Therefore, my attempt of a broad definition of the term reads as follows:

> Sustainability is the ideal state of the ecological, social, economic and political dimensions of human life and nature, which allows for all domains to be maintained for an indefinite amount of time. It is an ideal condition which is aimed for by sustainable development and allows the human species to live in equilibrium with its ecological, social and political surroundings without restricting its basic human rights and needs.

This is meant to be a working definition solely for the purposes of this paper and I want to close this chapter by leaving the word to Kluger and Dorfman:

> […] [L]et's be clear about what we mean by 'saving the earth.' The globe doesn't need to be saved by us, and we couldn't kill it if we tried. What we do need to save - and what we have done a fair job of bollixing up so far - is the earth as we like it, with its climate, air, water and biomass all in that destructible balance that best supports life as we have come to know it. Muck that up, and the planet will simply shake us off, as it's shaken off countless species before us. In the end, then, it's us we're trying to save - and while the job is doable, it won't be easy. (Kluger and Dorfman 3)

2.1. Why Teach the Idea of Sustainability to Children?

The Brundtland-Report is addressed to „the young“ (cf. Foreword WCED), but the role education plays for sustainability is not made explicit in it. One of the documents which came into being as a result of WCED's report is the Agenda 21, which was decided on at the UN Conference on Environment and Development (UNCED) in Rio in 1992. It recommends more explicitly than the Brundtland-Report „[t]he involvement of today's youth in environment and development decision-making“ (UNCED ch. 25.1.). Furthermore, it recognizes the crucial part today's children will have in a continued realization of sustainable development (cf. ch. 25.1.; ch. 36.3.). The World Education Forum finally declared education the key factor of sustainable development in 2000 and simultaneously acknowledged the importance of fostering participation of the young in our societies: "Education is a fundamental human right. It is the key to sustainable development and peace and stability within and among countries, and thus an indispensable means for effective participation in the societies and economies of the twenty-first century, which are affected by rapid globalization" (WEF 8). Two years later the World Summit on Sustainable Development in Johannesburg assessed how far the world had come on its way to sustainable development since Rio 1992. „The findings were, however, disillusioning. In most countries of the world, the situation for the environment and population had even deteriorated“ (Bader § 10). As a reaction, the UN adopted a resolution only months later in which it proclaimed the decade between 2005 and 2014 the „United Nations Decade of Education for Sustainable Development“, thus recognizing the high significance of education for reaching the ultimate goal of a sustainable society (cf. United Nations General Assembly). Thus, teaching sustainability is very much in accordance with these documents. However, there are many more reasons for teaching sustainability at school than these documents, and scholars have long acknowledged that „[t]he crisis cannot be solved by the same kind of education that helped create the problems“ (Orr 83). The motives for teaching sustainability found in the Austrian school curricula will be dealt with below (cf. chapter 2.5). The next paragraphs will briefly sketch out the biggest problems encountered when teaching sustainability, but will also take a more general perspective on the teaching of difficult topics to children.

2.1.1. Why Raise Controversial Issues with Children?

As became obvious in the first chapters, sustainability and sustainable development are highly complex, interconnected notions. The news is full of horrifying reports about the Earth's condition every day and it becomes clearer with each of them that human societies will have to deal with demanding problems within the next few decades. The Intergovernmental Panel on Climate Change (IPCC) is one of the organizations publishing scientifically sound reports on the topic regularly:

> To promote sustainable development within the context of climate change, climate-resilient pathways may involve significant transformations […]. Transformations in political, economic, and socio-technical systems can contribute to enhanced climate responses, both for mitigation and adaptation. (IPCC, Working Group II 3)

Transformation of that dimension cannot be achieved by individual people, but it calls for constant systematic questioning of values, beliefs and practices. This task certainly is a very big one, but at one point, someone has to start the change. The problem involved in teaching sustainability is that of breaking it down into chunks that are easily digestible cognitively. There is significant danger that the issues dealt with either seem remote from and inaccessible to students, plain boring and unexciting, or terrifying (cf. Matthewman 9). Therefore, I suggest approaching the topic by narrowing it down to one problem area of sustainability at a time, while making students repeatedly aware that it is their world as much as that of adults. I will address the topic of operationalization in greater detail in the second part of this paper.

As Salutin summarized in a book review, "[t]he *world* our kids live in is age inappropriate, but they have to live there. So do schools, libraries and authors" § 1; emphasis in the original). The world our children grow up in is also characterized by more and more and ever earlier contact with media, which contributes to children being confronted with considerable amounts of seemingly „age inappropriate content" like war, violence or climate change going on in our world every day; and this is exactly where treatment of such difficult topics at school comes in: As teachers we can help children deal with these pressing problems. We can help them by fostering their participation in the process, by engaging them in critical thinking, by trying to raise their awareness and by encouraging them (cf. Mickenberg and Nel 467). Raising

complex problems at school becomes even more important considering children are not put into the position to make decisions about the world they live in, even though they have to live with the consequences of other people's bad choices not only in the future, but in the present already (cf. Gazsó 20). Therefore, various organizations have argued for increasing children's right of participation: "[...] Governments declared their commitment to changing the world for and with children – to build a world fit for children in the 21st century. We will achieve this only if Governments fulfil their promise that the voices of children and young people will be heard loud and clear" (UNICEF Foreword). To sum up, fostering children's participation and teaching them how to think critically is both, one of the biggest reasons, and aims of teaching sustainability at school. However, there have also been critical voices about doing so and the next paragraphs will sum up their arguments.

2.1.2. Criticism and Problems of Teaching Sustainability

Stoltenberg and Burandt argue that sustainability cannot be taught, but has to be learnt, as it asks for personal action and reflection on the world. They claim that in order to reach sustainable development, we need to foster the development of action-oriented and applied competences, such as systemic and methodological skills (cf. 578). Jickling, on the other hand, seriously questions teaching a concept which is neither defined properly nor has clear aims (cf. 5). Furthermore, he maintains that the phrase „education *for* sustainable development" is clearly opposed to the notion of education itself, as education is meant to empower people to think critically, and educating *for* sustainability "suggests a predetermined mode of thinking" which the pupil is supposed to take over (Jickling 6). However, he definitely argues in favour of teaching *about* sustainability in a critical way, which involves evaluating the concept and those aspects of it that are being criticized (cf. 6). This shows the close relation between sustainability education and civic education, as it is in accordance with two of the principles of civic education: First of all, it is in accordance with, „Treating Controversial Subjects as Controversial", which means that issues which are characterized by political and intellectual controversy should not be presented univocally, as this would inhibit students' autonomy (Wehling §5). Secondly,

„Prohibition against Overwhelming the Pupil“ refers to the fact that no teacher is allowed to try and convince students who are intellectually unprepared or unaware, „for the sake of imparting desirable opinions and to hinder them from `forming an independent judgement'“ (Wehling §4). Mayr and Schratz emphasize along the same line that Education for Sustainable Development (ESD) should by no means be treated and taught as indoctrination into sustainability, but that it has to be treated as a „learning process“ which empowers children to critically evaluate the concept of sustainability and the criticisms it is facing (cf. Mayr and Schratz 6).

McKeown, on the other hand, acknowledges education as the key aspect on the way to sustainable development, but sees the crucial problem of teaching the concept in the fact that „[u]nlike most education movements, ESD was initiated by people outside of the education community“ (McKeown 10). She argues that this implies that ministries and non-governmental organizations develop complex conceptions which are then expected to be delivered by teachers. However, she also views education as a paradox: both population growth and depletion of resources, which are key elements currently impeding sustainability, are correlated to levels of education.

> Educating females reduces fertility rates and therefore population growth. By reducing fertility rates and the threat of overpopulation a country also facilitates progress toward sustainability. The opposite is true for the relationship between education and resource use. Generally, more highly educated people, who have higher incomes, consume more resources than poorly educated people, who tend to have lower incomes. In this case, more education increases the threat to sustainability. (McKeown 10)

This implies that it is not sufficient to provide children with basic general education, but that they have to be equipped with principles, problems and practices of sustainability explicitly in order to reach sustainable development (cf. McKeown 11). The last paragraphs have discussed problems surrounding teaching the concept of sustainability. The next paragraphs will deal in more detail with „Education for Sustainable Development“, as this has been one of the major driving forces in the sustainability discourse in the recent decade.

2.1.3. Education for Sustainable Development

Since the UN declared 2005-2014 the Decade of Education for Sustainable Development, numerous projects have come into being and „Education for Sustainable Development" (ESD) has become a fixed phrase. It is based on the fundamental human right to education and has the following vision at its centre: "The basic vision of the DESD [i.e. Decade of Education for Sustainable Development] is a world where everyone has the opportunity to benefit from education and learn the values, behaviour and lifestyles required for a sustainable future and for positive societal transformation" (UNESCO 6). Consequently, the DESD facilitates education both as a vital instrument for people to claim their other rights as human beings and as a way for people to actively create a more sustainable society. Unfortunately, the DESD is not as well-known as it could, or should be, even though we are in its last year already (cf. Seitz, "Recht auf nachhaltige Entwicklung" 3); and this is actually a reason in itself for teaching sustainability to children.

ESD is often used synonymously with the term *environmental education*. This should be avoided, however, as *environmental education* reduces ESD to its ecological domain and fails to represent the social, political and economic factors of sustainable development (cf. Stoltenberg and Burandt 569–570). Additionally, the older term implies a missing acceptance of the paradigm shift that happened during the 1990s. What has changed since then was primarily a development from analyses of dangers to nature and human beings towards the more modern notion of ESD which involves participation of people in modernizing society in order to create a more sustainable future (cf. Michelsen 75).

As good as the notion of Education for Sustainable Development sounds, it has also been criticized. Similar to the criticism of the general concept of sustainability, it is argued that there is no use in teaching sustainability if the underlying objective remains economic growth (cf. Selby, "Firm and Shaky Ground of ESD" pp.355 for a concise overview about this kind of criticism). Selby states that ongoing economic growth is often treated as a prerequisite of successful action against climate change, but that the aims are, in fact, mutually exclusive (cf. Selby, "Im Angesicht globaler Erhitzung" 284). Moreover, he also disapproves of the fact that ESD hardly ever

touches upon emotions students meet while learning about problem areas of sustainability. In this context he speaks of the „inability of ESD to connect the targeted transition of values and attitudes of the learners to all aspects of their being“ (ibid. 285,<transl. K.H.>). In order to avoid the term *development*, which he sees as predominantly used in its economic sense in the sustainability discourse, he argues in favour of „Education for Sustainable Contraction“ (ibid. 287). His main argument here is that our society needs to stop employing an objectified, utilitarian approach to nature and a sustainability discourse with economic growth at its focus. "Die Sicht auf die Beziehung Mensch-Natur muss verändert werden, fort von einer Beziehung der Dominanz, Instrumentalisierung und Ausbeutung, hin zu einem Verständnis des Eingebundenseins in das Ganze und der Anerkenntnis des intrinsischen Wertes aller Lebensformen" (ibid. 290). The next paragraphs will give a short overview of reasons for teaching sustainability which have not been included yet.

2.1.4. Further Reasons for Teaching Sustainability to Children

As the last paragraphs have shown once again, teaching sustainability-related matters at school is not an easy, straight-forward task and can be intimidating at times. As Matthewman suggests, collaboration with colleagues from geography or science can help English teachers not too familiar with the concepts to show students different perspectives of the same problem (cf. 95). Interdisciplinary teaching and learning can take place this way and thus contributes to a higher degree of joined-up thinking. I argue that joined-up thinking is rarely fostered at schools, as it is easily forgotten about with the „contents“ distributed between the subjects. However, in order to become a more sustainable society, we need to think interdisciplinarily and in networks rather than separated fields of knowledge. This is what has also been called „weltbürgerliche Erziehung“ (global citizenship education; cf. Seitz, “Globales Lernen” 39) and it can, for instance, enable students to develop a sense of how local acting has global consequences (e.g. buying bananas in an Austrian supermarket) (cf. Deutscher Bundestag 3). This way, both ecological and social awareness can be raised and the development of „a sense of personal environmental responsibility“ supported (UNCED ch. 36.8.). Action-oriented skills seem to be another key factor of education for

sustainable development, as they empower students to take concrete action (cf. Wiegandt 8).

The political domain of sustainability emphasizes human rights: "Education is a fundamental human right. It is the key to sustainable development and peace and stability within and among countries, and thus an indispensable means for effective participation in the societies and economies of the twenty-first century, which are affected by rapid globalization" (WEF 8). This means that teaching about sustainability inevitably implies teaching about human rights, which can contribute to a higher degree of participation and active agency of the students. Regarding this matter a clear focus on the lived-in world of students and practical examples are even more important than usually, as failing to connect these concepts to the students' lives can lead to the subject seeming remote to them (cf. Haan 46). Thus, every chance of connecting the matter to students' lives has to be embraced. An example of this would be an activity which invites students to imagine their own everyday lives, with one of the human rights not adhered to and the consequences this would have for them; for instance, what their life would look like in a world without the Freedom of Speech. This could then be led back to global matters by discussing areas in the world in which people cannot enjoy the Freedom of Speech for real.

Teaching sustainability to children can also help them develop a sense for critically questioning authorities and power structures. This is especially important considering the context of the increasing attention ecological topics are receiving combined with the increasing media exposure of children, since this means they have to learn from a young age on which information sources they can trust (cf. Matthewman 96). This can also raise awareness of "how much power a child gets to have" (Mickenberg and Nel 447) and consequently feed back into empowering children to participate. Mickenberg and Nell regard critical thinking and questioning power relations as one of the main factors of social change: "If there is to be a future governed by social justice, equal opportunities for all, and fair distribution of resources, then that future will begin with children who are willing to question the status quo." (467). Critical thinking thus makes way for a broad change of society in that it enables the first step of change: seeing that something is wrong.

McKeown has argued that businesses can only reduce their ecological impact and increase environmental protection in surroundings with high education levels, which is another advantage of including sustainability teaching at school, as students will be more aware of their impact on earth, when making their decisions in big businesses later (cf. 11). Along the same line, Haan maintains teaching sustainability at school is the only way of systemically integrating social change by making it a central task of education (cf. 40). By creating the motivation to take action together, sustainability education can help create a group feeling and thereby also foster intercultural understanding and empathy (cf. Stoltenberg and Burandt 573).

When choosing an approach to sustainability which creates a gloomy picture of the future, it is by no means the aim to frighten students and these feelings have to be addressed carefully and sensitively. Even though frightening the students would be one possible way of waking the students up (cf. Wiegandt 12), one could also adopt a more positive stance and demonstrate to students the beauty of our planet, as it is likely that they have quite a limited view of what the wider world looks like. Both aspects – waking students up figuratively and raising their awareness about the magnificence of the earth – can contribute to the students' motivation to take action. I would furthermore argue that an increased motivation to act can lead to an increased self-esteem of the students, as experiencing themselves actively taking part in a discourse traditionally led by adults, can make them proud of themselves.

However, the aim of sustainability education should not only be a higher motivation and an increased participation of students, but individual student talents and abilities have to be promoted in all possible ways: Childhood "is also about developing individual potential suited to a future in which societies could be different in some significant ways – for instance, in the organisation of families, the distribution of resources, or the circulation of power" (Reynolds 2). And so it seems that the only way to make our society more sustainable is to explicitly teach skills and competences that can help our children see what they can contribute personally to a more sustainable world and which enable them to deal with the problems we are going to face in the future. Moreover, excluding sustainability from teaching at school would be a fatal error, as this would imply that sustainability is not important enough to be included

(cf. Orr 85). The fact that the inclusion of issues into the school curricula, or a lack thereof, does teach students about the issues' relative importance for society has also been discussed in the context of the concept of the *hidden curriculum*.

> Implicit in hidden curriculum talk, moreover, is a contrast between hidden curriculum and what for want of a better name I will call curriculum proper […]. The contrast is between what it is openly intended that students learn and what, although not openly intended, they do, in fact, learn.
>
> (Martin 136)

As it is not quite clear yet what the competences are we will need in order to achieve sustainability, various taxonomies of sustainability skills have been developed and the next chapter will sketch out those that are most relevant for teaching sustainability through children's literature.

2.2. How Can Sustainability be Operationalized for Teaching?

When I speak about teaching sustainability, this is, of course, a very simplified, shortened version of what I should say in order to be terminologically correct. Sustainability was defined by me as an „ideal state" which encompasses too many complex, and in manifold ways intertwined domains of human life to be taught as a whole. This is the bad news. However, there is good news, as well: By breaking sustainability down into various smaller topics and partial competences which can be dealt with in the school context, teachers and their students can make contributions, even if these are only small steps, to reaching this ideal state as a society. Potential topics will be outlined in this chapter and the competences will be explained in detail in the next chapters.

In the selection of topics to be treated and problems to be raised in different school subjects, it is, on the one hand, important that they exemplify the highly complex interrelations of our ecological, economic and social surroundings. On the other hand, students have to have the chance to reflect on as many examples as possible over the course of their school career and they have to be made aware as often as possible of the bigger, global connections between the separately treated issues. Topics should be chosen which cover as many aspects of the different domains of sustainability as possible. However, since various examples should be included over time, there will necessarily be topic areas which focus more on one or two of the social/ ecological/ political/ economic domain. Such exemplary topic areas can include different aspects of climate change which can be used to show how climate change affects every one of us: one could have a closer look at how warmer winters, which are believed to be one consequence of climate change, influence social and economic life in a skiing area. If texts in English can be found which deal with such aspects of life, the EFL classroom can serve as an important place of reflection on local effects of global issues. Another topic area which can be addressed in the context of sustainability education is that of resource use and depletion. Various literary texts address aspects of this kind and so it is easy to include them in EFL teaching and stimulate reflection by asking questions such as, „What is the resource used for?", „Which products I use/need contain this resource/need this resource for production?", „Where can the resource be found and

how can it be obtained?“, „Who purchases it and for what purpose?“, „What consequences does the resource have for the locals?“ or „How much of the resource is left and can we know that?“ etc. Examples of a resource that could be addressed here would be petroleum, water or copper. However, it can also be a topic area, such as going shopping: „How does my choice of tomatoes influence the climate?“, „What difference does it make to me and the workers in Israel/Spain?“ etc. Another topic area with high potential for sustainability education in EFL teaching is our use of water, since the biggest share of water each person uses every day is hidden in the production of our clothes, our food etc. In so far this topic can help students understand that there are many ways in which our every day behaviour influences global processes and that we cannot influence all of these aspects directly. For all the examples just mentioned it is important to point out again and again both the local and the global perspective to the students.

Sustainability education is therefore a long-term process made up of different contributions in the form of problem areas, or topics addressed by as many school subjects and interdisciplinary projects as possible. Its aims are not only awareness for how global issues affect us personally and how our personal decisions affect global issues, but also the acquisition of various other competences which enable students to take part in the sustainability discourse and help make our society a more sustainable one. Students are given the opportunity of learning these competences whenever problems to do with sustainability and, more generally, global-local interrelations are raised. The subsequent chapter will address these competences in detail and point out that the mastery of these competences leads to sustainability literacy. Sustainability education can therefore be defined as measures which help students acquire awareness and competences they need in order for our society to transform into a more sustainable one. Its ultimate aim is the systematic integration of the competences so that as many students as possible develop an awareness for sustainability and the competences to act towards it.

2.3. What Competences are Needed for Developing into a Sustainable Society?

We cannot currently tell what a sustainable society looks like, which makes predicting the kind of competences we will need to successfully develop our society difficult (cf. Phillips §12). What is quite clear, however, is that it will have to be action- and application-oriented skills and competences (rather than fixed knowledge) that need to be actively constructed and learnt (as opposed to *conveyed,* which does not express the same level of active involvement on part of the learners in the process - cf. Stoltenberg and Burandt 578). Since we cannot tell exactly which competences are needed for developing into a sustainable society, many different concepts of such competences and skills have been developed and most of them consist of a selection of a number of key competences which are especially important in achieving sustainability as a society. According to Stoltenberg and Burandt most of the key competences overlap in most sustainability competence systems, with the only difference lying in the relative importance given to the each key competence (cf. 575). The OECD has adopted a concept not solely directed towards defining sustainability competences, but at a broader range of competences needed for a „well-functioning" society; they called this concept of key competences „Defining and Selecting Competencies" (DeSeCo - cf. Rychen and Salganik). Another concept was called „Sustainability Literacy" and has been defined in various ways by various people. Stibbe, for instance, has suggested as many as 28 different key competences/skills of sustainability literacy and he and Luna define this term as "the skills, attitudes, competencies, dispositions and values that are necessary for surviving and thriving in the declining conditions of the world in ways which slow down that decline as far as possible" (Stibbe and Luna §5). They further argue that

> [a]s people gain *sustainability literacy* skills, they become empowered to read society critically, discovering insights into the unsustainable trajectory that the society is on and the social structures that underpin this trajectory. But more than this, they become empowered to engage with those social structures and contribute to the re-writing of self and society along more sustainable lines. *(*Stibbe and Luna 6; emphasis in the original)

Within the German speaking discourse on key competences for sustainability the expression *Gestaltungskompetenz* (the ability to shape the future) has been used most

widely. It was coined by Haan and Harenberg in 1999 and has been developed into between eight to twelve partial competences in the meantime. I will use this system of competences when referring to the learning objectives in the second part of this paper and therefore describe *Gestaltungskompetenz* in more detail than the other concepts of sustainability competence and will condense information taken from Haan (pp.41), Michelsen (pp.83) and Stoltenberg and Burandt (pp.576) in the next paragraphs.

Generally, *Gestaltungskompetenz* has to enable active, reflected and cooperative participation in creating the future of our society and is based on openness, reflexivity and a future orientation (cf. Michelsen 82). Openness is needed in order to guarantee that people can cope with uncertainty and relativity of knowledge; reflexivity is needed, because "Subjekt und Objekt [unterliegen] einer dynamischen Wandlung […], die nur durch übergeordnete Reflexion zu erfassen ist" (Michelsen 83). Future orientation is indispensable because only those will be able to take action in the future who have learnt to treat insecurities and risks responsibly (cf. Michelsen 83). *Gestaltungskompetenz* was defined along the following lines by Haan and Harenberg: "das nach vorne weisende Vermögen […], die Zukunft von Sozietäten, in denen man lebt, in aktiver Teilhabe im Sinne nachhaltiger Entwicklung modifizieren und modellieren zu können" (Haan and Harenberg 62). The following eight components of *Gestaltungskompetenz* have been identified by Haan (cf. 41–42):

- ***the ability to deal with predictions and expectations towards predictions***

This is the ability to think beyond the present and to see the future as shapeable. It also encompasses anticipatory thinking and acting in the present.

- ***the competence to work interdisciplinarily***

The complexity of problems cannot be accounted for by any specific discipline with simple action strategies. Therefore, interdisciplinary, intercultural cooperation has to be facilitated at schools by fostering problem-oriented cross-subject teaching and joined-up thinking.

- ***the competence of „weltoffener Wahrnehmung“*** **(open-minded perception of** the world), *intercultural understanding and cooperation*

This is the ability to see the global relations and connections of phenomena and to localize these phenomena. This is in order for people to expand their horizons beyond regional and national thinking systems and to be able to take over others' perspectives.

- ***the competence to participate***

This is the desire and the ability to take part in decisions, not only as prerequisite for taking action, but also as basis for a self-determined way of life.

- ***the competence to plan and realize***

This is the ability to sustainably calculate resources and their availability, to design networks of cooperation, to anticipate potential side and surprise effects. This entails not only methodological considerations, but also long-term and delayed consequences of human actions.

- ***the ability to empathize and solidarize***

The close relation of sustainability and equity always entails mediating between the rich and the poor, the advantaged and the disadvantaged in order to abolish oppression. This can be fostered by helping students develop empathy and a feeling of belonging to the global community. This feeling of belonging is especially relevant for people to develop abilities needed to take both individual and collective action.

- ***the competence to motivate oneself and others***

Change needs motivation and motivation is needed in order to be able to lead a responsible and fulfilled life in the global community.

- ***the competence for remote reflection about individual and cultural motives for acting***

This is the ability to realize that our individual actions are culturally influenced.

The skills proposed by Haan are highly relevant for this paper and manage to cover all aspects of education for sustainability mentioned at this point. One can see the relevance of principles of civic and intercultural education to *Gestaltungskompetenz,* which is very useful, as both concepts are part of all Austrian school curricula. By combining the teaching of literature with the teaching of sustainability and including teaching ideas for other school subjects, as well, an interdisciplinary approach has

been chosen, which can help students see beyond the boundaries of their school subjects. By including creative methods of imagining the future in my teaching suggestions, I will account for the competence to anticipate and – as I will argue in one of the next chapters – the teaching of literature can be used to teach both trying out others' perspectives and empathic solidarity. What can be seen from these aspects of *Gestaltungskompetenz* is that creative methods will generally have to play a crucial role in the teaching suggestions, as they are a means of training the mind for solving problems creatively, which definitely is a vital skill in the face of major social changes (cf. Edelmann 323–28). Another general characteristic of the teaching ideas will be working in groups: Group work as an interaction format will be regarded as a vital contribution to teaching to students the ability to motivate themselves and others. From my point of view, *Gestaltungskompetenz* as a system of competences manages to cover most aspects of sustainability that can be taught in the context of school education. Therefore, I will use the partial competences that make up *Gestaltungskompetenz* in my teaching suggestions in order to show which aspects of sustainability education can be covered by the various steps in the lessons. However, action-oriented skills will be seen as crucial in the suggestions for teaching, as at the moment even people who are aware of global problems rarely act accordingly (cf. Seitz, "Globales Lernen" 3). This chapter has discussed different competences needed in order to develop into a sustainable society. The next chapter will address reasons for dealing with sustainability in the context of English Language Teaching.

2.4. Why Deal with Sustainability in the EFL Classroom?

One may wonder why a topic that was traditionally perceived as purely ecological should be taught in an EFL classroom. On the one hand, the definition of sustainability has changed in so far as it nowadays includes as many social topics and relations as purely environmental ones, so that the topic can now be said to not only belong to the realm of science but has to be addressed from various perspectives the humanities can offer, as well (cf. chapter „What is Sustainability"). On the other hand, the subject English provides some great opportunities for students to improve their language skills while dealing with sustainability issues. The next paragraphs will discuss some of these aspects.

As just indicated, ELT can offer a cultural perspective on sustainability because the way society deals with environmental and social (un)sustainability has to be seen as primarily determined by culture (cf. Matthewman 3). Other subjects discussing sustainability might offer different perspectives on the topic and so ELT can contribute to a fuller picture by discussing cultural aspects of it. Furthermore, sustainability is frequently covered on the news, in discussions, by documentaries etc., which makes it necessary for ELT to address it just as it has to do with other mainstream topical issues (cf. Matthewman 95). By raising currently relevant subject matter, English as a school subject is not only kept up-to-date, but also contributes to skills that go far beyond language skills. This can be especially important to students regarding their motivation to use the target language: If the contents dealt with are of current relevance, language use does not remain an end in itself.

Moreover, sustainability is not granted as much cultural and social importance at school as it seems to have in society at the moment, if it is only left for one or two subjects to deal with it. In order for our schools to depict society as accurately as possible, it is necessary for as many subjects as possible to discuss these topics of current relevance (cf. Matthewman 3). As a large part of the sustainability discourse is held in English, language skills become equally as important as contents, as they enable students to take part in a wider discourse than the German speaking one. This is one of the reasons why sustainability is a great topic for content and language

integrated learning (CLIL). Writing and speaking competence and the ability to interpret texts dealing with sustainability are crucial, as "[e]cocritics must enter the public arena by encouraging and facilitating writing of the most important single literary genre, the letter to a governmental agency" (Cohen 24).

Another reason for integrating sustainability in the EFL classroom is that controversial as the topic is, it can help facilitate discussions if it is made relevant to students' lives and their experiences (cf. Matthewman 95). This way, not only written language skills but also oral language skills can be trained in interactions which are not an end in itself. As a language subject, English can also contribute to a better understanding of texts and a reflection on various aspects of them. Thus, English can also raise the students' awareness that "[w]ords matter, because they direct our perception of the world and can lead to actions which can create or destroy; this can be relatively small-scale as in the reference to building on green-belt land or global as in the problems posed by carbon emissions" (Matthewman 7).

Matthewman further argues that since English teachers are used to dealing with literature at school, talking about emotions, values and convictions should be familiar to them. Even though he refers to a first language context, this might also be true for advanced stages of Austrian EFL teaching, when literature can be used in the classroom. Science teachers on the other hand "tend to privilege rational argument" (Matthewman 97). As has been argued above, it is important to deal with emotions students experience while working on difficult topics, such as poverty or climate change, for instance. The importance of dealing with emotions in sustainability education highlights once again the additional perspective ELT can offer. One section of the next chapter will deal with reasons for teaching literature in the EFL classroom. This section will also include complementing thoughts for this chapter, as it will also expand on the fact that English is one of only a few subjects in the Austrian curriculum where literature can play an important role. Consequently, why should teachers not have their students read English texts on sustainability, if appropriate literature is available? English will enable the students to read many texts in the language they were originally published in, taking into account the proportion of sustainability discourse led in the lingua franca.

2.5. Sustainability in Austrian AHS Curricula for EFL and Geography/Economics[1]

In case the reader is not convinced yet that the inclusion of sustainability-related topics in school education can be very fruitful, this chapter will give a brief general overview over those aspects of Austrian upper secondary school curricula which can be fulfilled by raising problems in the realm of sustainability. I will refer to general parts of the curriculum which have to be dealt with in all school subjects of *Allgemein Bildende Höhere Schulen* (AHS). Since my university education has focussed primarily on ELT and the teaching of the subject Geography/Economics, these subjects' specific curricula will also be addressed.

The Austrian school curricula for AHS are supplemented by twelve so-called *Unterrichtsprinzipien* (educational principles; cf. bm:ukk, *Unterrichtsprinzipien*) and an even higher amount of *Bildungsanliegen* (educational concerns; cf. bm:ukk, *Bildungsanliegen*), which have to be catered for by all school subjects. By teaching sustainability in the manner described earlier (i.e. a manner involving raising various exemplary problems with a balance between the social, ecological, and economic dimensions of sustainability, and a focus on autonomous and critical thinking by students), the following four *Unterrichtsprinzipien* can be covered: Firstly, *Politische Bildung* (civic education), which aims, among other aspects, at facilitating values regarded as especially important for democratic societies: „Politische Bildung soll den Schüler befähigen, gesellschaftliche Strukturen in ihrer Art und ihrer Bedingtheit zu erkennen (Interessen, Normen, Wertvorstellungen; Herrschaft, Macht, Machtverteilung; politische Institutionen)" (bm:ukk, *Grundsatzerlass Pol.Bild.* ch. II). Since sustainability education can help reveal structures of power (e.g. If pesticides are bad for our health, and monocultures harm the environment, why are pesticides still used to keep monocultures alive? Why are there aspects of our CO_2-footprints we cannot influence individually?), it can make valuable contributions to civic education.

[1] Geography and Economics have been incorporated into a single subject in Austrian AHS schools. The subject's primary focus is on human beings and the spatial and social dimensions of their interactions. Consequently, economics as one form of spatial interaction plays a crucial role in the subject. (cf. bm:ukk, *GWK Unterstufe* 1)

Secondly, *Interkulturelles Lernen* (intercultural learning), can also be dealt with in the context of sustainability because sustainability is a matter of concern beyond cultural borders. For instance, it is not enough for students to learn about working conditions in textile industry; students need to be given opportunities for gaining insights into the wider culture these practices are part of in order to arrive at a deeper understanding of the problems involved. Thirdly, *Entwicklungspolitische Bildungsarbeit* (educational activities which raise and help reflect on global developmental problems from the perspective of a global citizen) is an educational principal which is, by definition, part of education about sustainability. As mentioned earlier, inter- and intra-generational equity are crucial aims of sustainable development. Consequently, developmental educational activities which teach about the global interrelations serve both the *Unterrichtsprinzip „Entwicklungspolitische Bildungsarbeit"* and sustainability education. The situation is similar with the *Unterrichtsprinzip „Umweltbildung"* (environmental education): Due to the high relevance of environmental and ecological matters for both sustainability education and this principal, topics dealt with in the context of sustainability education almost certainly touch upon aims *Umwelterziehung* calls for. As the following citation shows, these aims overlap to some degree with aims of sustainability education:

> Die Auseinandersetzung mit Fragen des Natur- und Umweltschutzes im Schulunterricht […] wird daher eine gezielte Bewußtseinsbildung der Schüler/innen anstreben und deren Bereitschaft für den verantwortlichen Umgang mit den Naturgütern kontinuierlich fördern.
>
> (bm:ukk, *Grundsatzerlass Umwelterziehung* ch. 2.1)

The *Bildungsanliegen „Bildung für Nachhaltige Entwicklung*" is the Austrian operationalization of the UN campaign „Education for Sustainable Development" and, since the kind of sustainability education proposed in this paper is largely based on assumptions of this campaign, the problems raised in the lessons on sustainability included in this paper always feed into this *Bildungsanliegen*.

The general part of the upper secondary AHS curricula is the same for all subjects and contains general educational aims (bm:ukk, *Allgemeiner Teil* part 1), general didactic principles (part 2) and advice for planning lessons (part 3). The main passages which are relevant for sustainability education can be found in the first two parts of the

document. The most widely mentioned aspects which school *has to* cater for and which sustainability education *can* cater for, in my opinion, are those of teaching critical, autonomous thinking skills (part 1: 2-4; part 2: 6) on the one hand, and values and world views which help students come to terms with a rapidly changing society on the other hand (part 1: 2-4). Further aims mentioned are: increasing students' initiative and their participation in society, enabling them to take over social responsibility and act accordingly, and helping them develop basic understanding of the political, economic, legal, social, ecological and cultural interrelatedness of our society (cf. bm:ukk, *Allgemeiner Teil* part 1.5). Especially the *Bildungsbereiche „*Mensch und Gesellschaft" and „Natur und Technik" contain references to problems that can be raised in sustainability education and one of the rare instances, where sustainability is explicitly mentioned in the curriculum, can also be found in this part of it: „Die Vorbereitung auf das private und öffentliche Leben […] hat sich an wirtschaftlicher Leistungsfähigkeit, sozialem Zusammenhalt, einer für beide Geschlechter gleichen Partizipation und *ökologischer Nachhaltigkeit* zu orientieren" (bm:ukk, *Allgemeiner Teil* part 1.5/ Bildungsbereich Mensch und Gesellschaft; emphasis added). The aspects of the general curriculum just mentioned are those which sustainability issues are most relevant to.

Since the teaching ideas I will suggest in the second part of this paper can be used both in EFL teaching and in CLIL lessons in the subject Geography/Economics, I will refer to both subject curricula in the following paragraphs. Both lower and upper secondary school curricula were analysed for their references to sustainability-related topics. However, the curricula for the upper secondary *Oberstufe* were found to contain a higher amount of these references in both subjects. Since the literary texts chosen for the teaching suggestions were regarded as more suitable for students in the *Oberstufe,* whose language skills have reached a certain level*,* as well, the treatment of the curricula will be restricted to the ones for the upper secondary stages of the AHS.

Reasons for including sustainability-related topics in EFL teaching were given in a separate chapter above (see chapter 2.4). Therefore, the EFL curriculum will only be dealt with briefly at this point. It is a task of EFL teaching to contribute to students' action-oriented language skills, as well as to their intercultural competence and their

competence for lifelong autonomous language learning (cf. bm:ukk, *Lebende Fremdsprache* 1). Especially the first two of these competences can be partially acquired in sustainability-related lessons: An instance of a topic dealt with in sustainability education that can contribute to intercultural competence has been given above. By providing controversial topics, lively and authentic discussions can be facilitated in sustainability education. Since discussions require various relatively complex language skills, such as, expressing and explaining one's opinion, reacting to others' arguments, supporting one's own arguments etc., they are a valuable form of interaction for the language classroom, particularly in the eighth form, when students need to train these more complex language skills (cf. bm:ukk, *Lebende Fremdsprache* 1). The Austrian EFL curriculum also calls for a variety of topics and text types to be integrated in EFL lessons, amongst which the following ones are named which seem especially relevant here: „Sprache und ihre Anwendungsmöglichkeiten", „Einstellungen und Werte", „aktuelle soziale, wirtschaftliche und politische Entwicklungen", „Prozesse der Globalisierung" and „Umwelt" (cf. 4). These topic areas show that sustainability education definitely has a place in Austrian EFL teaching in the *AHS Oberstufe.* If, as is the case in my teaching suggestions, sustainability is dealt with by referring to literature, the competence for lifelong autonomous learning can be catered for in sustainability lessons, as well: Reading is a life skill which will help students improve their language competence long after they have graduated from school, hopefully.

At its very beginning the upper secondary curriculum for Geography and Economics calls for strengthening students appreciation of a „menschenwürdige[…] Gesellschaft, einer intakten Umwelt und nachhaltigen Wirtschaft" (bm:ukk, *GWK Oberstufe* 1). Furthermore, raising sustainability-related problems can contribute to the following competences which are among the subject specific skills Geography and Economics can enhance: *Synthese*- and *Umweltkompetenz* as defined in the curriculum can be acquired to the full extent by pursuing sustainability-related issues, while *Gesellschafts- and Wirtschaftskompetenz* can be learnt at least partly. Regarding those objectives of the curriculum which are to be treated in a specific year, the eighth form offers most opportunities for the inclusion of sustainability in Geography and

Economics (cf. bm:ukk, *GWK Oberstufe* 4–5). The reason for this could be found in the structure most subject areas dealt with in this year share with sustainability-related issues: All of them require a high degree of joined-up and problem-oriented thinking in order to arrive at a deeper level of understanding. The objectives asked for in years five to seven only contain occasional references to sustainability-related issues, but they nevertheless allow for their sporadic inclusion, because these occasional references are related to crucial aspects of sustainability: „wirtschaftliche[…] Ungleichheiten auf der Erde", „Produktionsgebiete im Wandel", „Nutzungskonflikte", „regionale Disparitäten" or „Naturräumliche Chancen und Risiken" are only some of the fields mentioned which sustainability education can contribute to (cf. bm:ukk, *GWK Oberstufe* 2–3). Thus, all in all both the EFL and the Geography/ Economics curriculum provide ample opportunity for the occasional inclusion of sustainability aspects, and especially so in the eighth form.

The last chapters have dealt with various aspects of sustainability. Having defined the concept and established the objectives sustainability education can aim at, it is now time to briefly discuss the role literature can play for teaching sustainability in the EFL classroom.

3. Why Teach Literature in the EFL Classroom?

The use of teaching literature in a foreign language classroom might seem quite straightforward, in that literature can be considered a textual source for language material to work with. However, the topic has evoked some controversies; especially so since the 1970s when communicative competence was made the primary focus of foreign language teaching. This chapter will briefly trace the most important benefits the teaching of literature can have for EFL classrooms. The arguments have been clustered into four sets of advantages: The first cluster encompasses arguments to do with the positive effects literature can have on the development of language proficiency. The second group of benefits contains all those arguments involving reading as a cultural technique which is needed in society and can help foster critical thinking and communication. The third cluster includes arguments to do with intercultural learning and the ability to take on perspectives of others. The fourth set of advantages deals with motivational and personal aspects students can experience when literary texts are used for teaching.

The next two paragraphs will deal with the positive impacts literature can have on learners' language abilities. Aebersold and Field have argued that „the main reason for using any text is to improve the students' language skills" (166). However, for a long time literature was not regarded a crucial feature of EFL teaching (cf. Nünning and Surkamp 12). During the last decades second language education has focused very much on teaching communicative skills. Communicative language teaching has become increasingly popular since the 1970s and the subsequent adoption of the Common European Framework of Reference for Languages (CEFR) not only strongly emphasised pragmatic aspects of language, but also introduced normative requirements into the foreign language classroom (cf. Burwitz-Melzer 55; Lütge 98). This caused less and less attention being paid to the teaching of literature, since everyday and business communication had to be increasingly focused in order to teach the skills asked for by the CEFR. However, as Daskalovska and Dimova have argued, there is a danger this concentration on communicative competence implies: Learners merely acquire referential functions of the language and this happens at the expense of expressive language functions (cf. 1183). If the only texts used in foreign language

teaching are expository and aim at the development of communicative and language skills, learners are deprived of experiencing creative and figurative language use, „imaginative involvement and self-expression“ (Daskalovska and Dimova 1183). Furthermore, by reducing the kinds of texts that are taught to ones providing information explicitly, students are prevented from acquiring what McRae has termed the „fifth skill, *thinking in English*“ (McRae 5; emphasis in the original). Students of foreign languages do not have as many opportunities as first or second language learners to gain contact with figurative language use, such as idioms etc., as they are not surrounded by the target language; but teaching literary texts can provide a remedy: "[G]iving foreign language learners opportunities for discussion, evaluation and understanding the meaning of words and phrases, and developing their interpretational and inferential skills will make them more reflective and effective learners and users of the language" (Daskalovska and Dimova 1183).

Another respect in which literature can help improve students' language skills is by providing „genuine samples of a wide range of styles and text types at all levels of difficulty“ (Thaler 23). This makes literature extremely valuable, especially for obtaining advanced proficiency in a foreign language (cf. Krashen, *Power* x), which is characterized amongst other aspects by a high awareness of different text types. Moreover, the inclusion of literary texts in the foreign language classroom can foster extensive reading by which students can experience more language contact with the target language (cf. Daskalovska and Dimova 1185). Krashen's research has shown that there is a high correlation between students' amount of reading and their writing skills: the more learners read in a language, the better they are at writing in it (cf. Krashen, *Power* 10). This is also where vocabulary plays an important part: Vocabulary acquisition is highly relevant for writing skills and can be fostered by reading literature. In order to write good texts, students need adequate vocabulary. Reading provides a way of meeting new words, as well as new contexts and meanings of known words (cf. Krashen, *Power* 14; Grabe pp. 272). This way words' grammatical and semantic contexts can be acquired by reading. Additionally, written language tends to contain a higher amount of infrequently used words than spoken language does, which is especially relevant for acquiring advanced proficiency in a foreign language (cf.

Krashen, *Power* 103). Krashen further argues that „[l]anguage acquisition comes from input, not output, from comprehension, not production“ (Krashen, *Power* 136). The issues touched upon in the last paragraphs show how reading literary texts in the foreign language classroom can help improve students' language proficiency. The next paragraph will deal with those reasons for teaching literature that derive from the fact that reading is a cultural technique and can stimulate communication.

In our society incredible amounts of information have to be dealt with every day, and to a considerable extent, this information is presented in the form of written words (cf. Nünning and Surkamp 15). The ability to read is regarded a cultural technique and since „[c]itizens of modern societies must be good readers to be successful“, language teaching has the important task to help students acquire and train this technique (Grabe 5). The high relevance of literacy for „life opportunities“ and success in our society implies a „societal responsibility“ language education has to bear (Grabe 6): Not all language learners have access to texts in the target language at home. Therefore, it is a task of the foreign language teacher to compensate for disadvantages induced by this lack of books by providing access to and fostering interest in literature. This can help students become more autonomous learners and support their language development (cf. Bland 3; Krashen, *Power* 70). Apart from that, literature can promote the critical examination of information gained through reading, in that it enables the reader to view a situation from an external perspective: „Da wir als Leser nicht handelnd in das Geschehen involviert sind, sondern es als emotional engagierte 'Zuschauer' von außen betrachten, können wir es losgelöst von unseren eigenen Interessen und dadurch distanzierter beurteilen“ (Nünning and Surkamp 15).

However, teaching literature in the context of EFL cannot only promote critical thinking, but also encourage communication on a more general level, as – contrary to many texts included in text books – literary texts are not read for the sole purpose of introducing new vocabulary and grammatical structures, but also for their contents (cf. Nünning and Surkamp 13). Therefore, literary texts can encourage students to share their own experiences and question aspects of the worlds encountered in texts, when they interpret the texts. In this context Nünning and Surkamp speak of literature offering „authentische Sprechanlässe, in denen Sprachkenntnisse in einem

bedeutungsvollen inhaltlichen Zusammenhang erprobt und weiterentwickelt werden können“ (Nünning and Surkamp 14). This kind of active involvement of learners has also been one of the central arguments for teaching literature raised by Daskalovska and Dimova: „In order to make sense of a text, readers have to ask questions, make predictions, form hypotheses, use their imagination, background knowledge and personal experience until they arrive at a satisfactory interpretation“ (1184). The fact that literary texts stimulate communication implies that by teaching literature social skills can be facilitated – especially by discussing controversial issues to do with cultural and intercultural concerns, which are not necessarily considered very important within the CEFR, even though they are essential parts of communication in a foreign language. Understanding the other is one of the main aims of teaching a foreign language, and literature can contribute to the achievement of this aim by providing stimuli for abilities going beyond the CEFR, such as „empathy, sensitivity or intercultural understanding“ (Burwitz-Melzer 56). Additionally, an opinion gap that originates between two different interpretations of the same text can also give rise to student discussions (cf. Thaler 24,"Interpretational Openness").

The third set of reasons for incorporating literature in the EFL classroom deals with factors that derive from the potential of literary texts to spark off intercultural learning and the adoption of others’ perspectives. Thaler points out that reading literature from other cultures and countries can broaden students’ minds, as it enables them to gain insights into the motivations, feelings and thoughts of people from cultures other than their own (cf. Thaler 24; Nünning and Surkamp 14; Aebersold and Field 157). This can also be a prompt for readers to view aspects of the world from different perspectives than their ordinary one, which goes hand in hand with abilities, such as empathy: „Lernziele[…] wie Empathie, Perspektivenübernahme und Fremdverstehen […] [können] durch die Auseinandersetzung mit Literatur in besonderem Maße erreicht werden“ (Nünning and Surkamp 13). Thus, literature provides a great way of approaching the target language culture especially for the foreign language classroom. Arnold makes the point that this works particularly well with texts that involve the learners both cognitively and affectively and further states that this can be fostered with the help of methods for visualization (cf. Arnold, “Visualization” 271).

The fourth cluster of benefits of working with literature in the EFL classroom concerns motivational and other personal impacts literary texts can have on language learners. If students are given the opportunity to participate in the selection of texts to be read, reading can be highly pleasurable and entertaining for them (cf. Aebersold and Field 157; Burwitz-Melzer 56). By finding and including texts that are of interest to learners, literature can enrich the learners' lives: „[Books] often touch on themes to which they [the learners] can bring an individual response from their own experiences. They can […] provide (positive or negative) role models, [and] sketch possible answers to personally relevant issues" (Thaler 24). This factor of personal enrichment can make working with literature a highly motivational activity, as it can raise students' awareness of the relevance of literature for their own lives. If such texts are included, it is highly likely that students are more motivated to read for pleasure, which feeds back into the notion of reading as a cultural practice that school has to equip students with.

3.1. Why Use Children's and Young Adult Literature for Teaching about Sustainability?

Considering the wide variety of texts which can be classified as Children's and Young Adult Literature, overgeneralizations should be avoided at all costs (cf. Reichl 110); consequently, this chapter will only deal with those aspects of literature for young readers which are, true for the those texts that will be used as examples in the second part of this paper (i.e. a dystopian young adult novel and a non-fictional graphic text).

As mentioned before, one of the crucial points of teaching sustainability-related issues to students is that of relating global matters to the students' lives and making these global issues relevant to them. Sustainability can be taught by raising various controversial issues and so one feature makes texts for children and/or young adults especially valuable for teaching sustainability: Particularly literature for young readers is „multilayered" in that texts belonging to this category „are readable in different ways at different levels of sophistication and maturity" (Bland 2). By being directed towards multiple audiences simultaneously (children, young adults, as well as „not-so-young" adults), various readings of the same text are encouraged. By addressing the possibility of different readings of a text, controversial issues can be examined from various perspectives (cf. Bland 2). The fact that children's and young adult literature incorporates the „cultural world" (Bland 5) of children and teenagers means that it has a certain „potential for empathic understanding that is a result of the fictional world being in one way or another reconcilable with the learner's world" (Reichl 110). Literature directed at young readers often deals with the lives of *young* people (cf. Hesse 11), which is one characteristic the protagonists of texts share with potential readers in the EFL classroom. Not only does literature for young readers offer possibilities for young learners to relate to the (world narrated by the) text, but at the same time it also manages to establish a link to the culture of the target countries, if the texts are chosen accordingly. I argue that this combination of aspects the readers have in common with the characters they read about on the one hand, and aspects of the target culture the readers obtain contact with through the books on the other hand, is exactly the kind of combination enabling empathy and subsequently contributing to intercultural understanding. During the last decades young adult

literature, and especially young adult dystopias, have become increasingly popular, which also makes young adult literature a suitable source of texts for the up-to-date EFL classroom, as it is an opportunity to include a current trend of popular culture in EFL teaching (cf. Reynolds 154).

Literature for young readers is likely to contain less complex language than literature solely written for adults, which is especially valuable in the context of foreign language learning, as easier texts promise quicker success in dealing with first authentic texts in a foreign language. Bland has called this the „affirmative and self-esteem-promoting educational potential of children's literature" (3). By creating positive reading experiences, children's and young adult literature can thus generally foster the learners' interest in reading (cf. Krashen, *Power* 82).

A noticeable share of science fiction and fantasy literature is written for young adults or children, and Matthewman comments that children are generally fascinated by books which enable them to escape to another world in their imagination. However critical this might be seen, it also offers the opportunity to critically reflect on our world by contrasting it with an imagined one. (cf. Matthewman 124) „The stories we give children are blueprints for living in culture as it exists, but they are also where *alternative* ways of living are often piloted in recognition of the fact that children will not just inherit the future, but need to participate in shaping it" (Reynolds 14; emphasis in the original). Seen this way, teaching sustainability through children's and young adult literature seems a very natural thing to do; especially so in the light of children's participation in societal processes, which has to be fostered whenever possible.

Sustainability was defined as an ideal state in the future above and this is exactly where Reynolds' statement comes in: „writing for the young has a future orientation" (3). Therefore, teaching sustainability is supported very well by the use of children's and young adult literature. Additionally, this orientation towards the future explains why, „at times of cultural change, children's literature becomes a place of visionary thinking" (Reynolds 16). Visionary thinking is exactly what our society needs in order to develop into a more sustainable direction and so the potential of children's literature

for its use in sustainability education definitely lies in enabling, fostering and offering opportunities for creative ways of envisioning the future. „[C]hildren's literature, as well as being a tool of *embourgeoisment*, has been and continues to be an important vehicle for ideas that challenge the status quo and promote social justice, environmental stewardship, and greater acceptance of differences." (Mickenberg and Nel 445; emphasis in the original).

3.2. Why Use Stories for Teaching about Sustainability?

„[S]tory telling is an omnipresent phenomenon“ (Thaler 78). Stories are met, whenever one watches TV, listens to the radio, opens a newspaper, book or magazine to read or meets with friends and family. Narratives as such are primarily a „medium of communication“ (Nünning and Surkamp 26), which makes them both an element of everyday conversations and an aesthetic form at the same time (cf. Nünning and Surkamp 194). As a medium of communication, stories can contribute to sustainability education by addressing problems such as poverty or consequences of climate change which are experienced by individuals. By telling stories about people who are, for instance, dealing with consequences of global production networks, exemplary learning about (lacking) sustainability can take place and by introducing, reflecting on and working with more stories of this kind, narratives can help putting a face on the buzz word *sustainability*. This chapter aims at describing functions of storytelling that seem especially useful for and supportive of the teaching of sustainability through literary stories.

Nünning and Surkamp speak of storytelling as an „anthropologisches Grundbedürfnis des Menschen” because narratives seem to provide explanations for the events they describe. Additionally, they also ascribe meanings to these events (194). Seen this way, stories help us structure the world. When the same event is described in two different narratives, it is highly likely that the two versions of the story will differ from each other in some respects; for instance in structure. These differences between two narratives of the same event can encourage learners to try and understand perspectives which differ from their usual ones and – depending on the text – this adoption of perspectives other than one’s own can subsequently offer opportunities for intercultural learning (cf. Nünning and Surkamp 47). Additionally, positive instances of intercultural understanding between people of different cultures can be exemplified in narratives. Intercultural understanding is one of those competences which were identified by Haan as a crucial part of education for a more sustainable future (see chapter 2.3).

Storytelling can structure experiences in various ways; it can contribute to overcoming fears and help imagine a variety of options for taking action. Additionally, communication in the form of narratives is used to ascribe meaning to one's own behaviour, as well as others' reactions to it (cf. Nünning and Surkamp 194). However, storytelling does not only structure experiences but it also constructs individual, as well as collective identity (cf. Nünning and Surkamp 26). Particularly children and young adults have to be given various possibilities for constructing their own identity and finding out who they are and what they want to achieve in life. Stories can offer insights into characters and their motivations and thus help students experiment with their identities by acting as (positive or negative) role models. Developing a sense of collective identity is especially relevant in terms of taking steps towards a more sustainable society, such as improving our ecological environment. By reading/ listening to/ watching or even creating shared stories about aspects of the world which are regarded as important collectively, narratives can give students a feeling of belonging and of collective strength for achieving aims together. However, storytelling does not only contribute to identity formation, but also links (individual and collective) identities to the stories told (cf. Nünning and Surkamp 194). Thus, groups and individuals do not only construct stories themselves; they, and all other entities playing a role in their stories, are constructed by (their own and others') narrations. An example of this circumstance is the creation and tradition of national (hi)stories, which contribute to the formation of an in-group in the form of a nation. (cf. Nünning and Surkamp 195)

Apart from the functions named so far, stories can also fulfil a didactic function which is especially apparent in genres such as the fairy tale or the fable (cf. Nünning and Surkamp 195). I argue, however, that even stories which do not seem to possess a didactic purpose at first sight, can be used accordingly if adequate tasks are set for the learners. Such tasks will obviously differ from text to text, but generally have to place the narrative in a wider context and enable the learners to reflect on it and its implications. Similarly, it is an important side effect of teaching stories that students become acquainted with techniques for rationally and critically questioning narratives, rather than just consuming them. These are especially important skills, as learners are

going to encounter stories in all spheres of their lives and, in terms of their autonomy, questioning information and knowing the possibilities to manipulate stories are indispensable (cf. Nünning and Surkamp 27).

Another feature of stories is that they are often based on culturally available plots. By analysing such stories, insights can be gained as to what a society's cultural norms are, what is valued highly, and what is considered less important (cf. Nünning and Surkamp 197). Reynolds, for instance, has observed that an ever growing amount of dystopian stories has dealt with environmental impacts on humans during the last decades (cf. Reynolds 15, 185). This might point towards a generally increasing awareness of anthropological influences on our planet. At the same time, it is important that this awareness is often represented in the form of dystopian visions of the future, as this might point towards a rather pessimistic view of the future. If teachers manage to make explicit these relations between matters in stories and their cultural meaning, sustainability education through stories can help students analyse the importance our society attaches to sustainability-related issues.

An additional benefit of teaching sustainability through narratives is that they integrate cognitive and affective aspects of learning about the world in a very good way: „stories are holistic; they appeal not only to our intellect but also to our senses and our hearts" (Hesse 6). Amongst others, many social aspects of stories offer ample opportunities for evoking emotions of the readers and this circumstance can be utilised in sustainability education. The next chapter will show in how far this holistic approach is important for teaching sustainability.

3.3. What Role Do Emotions Play when Teaching Sustainability through Literature?

Sustainability education aims for a relatively broad change in attitudes and behaviours prevalent in our society. Since attitudes and behaviour cannot only be traced back to cognitive, rational knowledge of facts, it is crucial not to restrict the problems raised in the course of sustainability education to their cognitive discussion because both affective and cognitive domains have to be catered for in unison „in order to educate the whole person“ (Arnold and Brown 5). Furthermore, „[w]hen both [i.e. the affective and cognitive sides of learning] are used together, the learning process can be constructed on a firmer foundation“ (Arnold and Brown 1). The inclusion of affective learning objectives in lessons on sustainability cannot only lead to a better understanding of sustainability matters, but has also been assumed to be the basis of ethical attitudes (cf. Arnold and Brown 3). The affective side of learning can also invite the development of empathy, which is one of Haan's eight competences regarded as essential for sustainable development of our society. Arnold and Brown see the role of empathy for society similar and also relate the concept to intercultural understanding: „Empathy is a factor, perhaps the most important one, in the harmonious coexistence of individuals in society. It is closely related to cultural relativity, which frees us from our conditioning and helps us to recognize that our way is not the only way and possibly not even the best way“ (Arnold and Brown 19). *Gestaltungskompetenz* has been defined earlier in this paper as those competences needed by students in order for our society to develop into a more sustainable one. Since empathy and intercultural understanding can be fostered by including the affective alongside the cognitive domain, there is indication that doing so might help achieving the goals of sustainability.

A concept which relates the affective domain with universal features of narratives is that of „narrative empathy“. It has been defined by Keen as „the sharing of feeling and perspective-taking induced by reading, viewing, hearing, or imagining narratives of another's situation and condition“ (Keen, "Narrative Empathy" §1). Most research in the field has focused on fictional stories in novels and films. Consequently, its relation to non-fiction remains unknown for the time being and the concept will only be used in

the context of the fictional novel *Empty* in the second part of this paper (cf. Keen, "Narrative Empathy" §3). What is especially important for applying the concept „narrative empathy" in sustainability education is that „[t]he projected feeling of empathy involves responses not only to sentient beings, but also to inanimate objects and landscape features" (Keen, "Narrative Empathy" §10). In sustainability education an enormous variety of social and ecological relations has to be dealt with and the fact that inanimate objects can evoke empathy, can help students develop empathic competence. However, not all texts elicit narrative empathy in all readers, as, on the one hand, there is no clear empirical relation between particular narrative techniques and a reader experiencing narrative empathy. Even though some techniques, such as vibrant descriptions of settings, have indeed been associated with readers experiencing empathy, their relation to narrative empathy should not be oversimplified. (cf. Keen, "Narrative Empathy" §8-9) On the other hand, individual readers bring different dispositions towards reading a text and consequently, they „respond variously to narrative texts, depending on their identities, situations, experiences, and temperaments" (Keen, "Narrative Empathy" §7).

Another respect in which narrative empathy seems useful for sustainability education is that several people have argued that narrative empathy is the starting point for moral development and altruistic behaviour (cf. Keen, "Narrative Empathy" §12). Harrison, for instance, claims that „the act of reading frequently prompts an emotional response which in turn shapes readers' beliefs and, according to Batson's empathy-attitude-action model, their subsequent ethical behaviors" (Harrison 265). However, this has been criticized by Keen, who maintains that narrative empathy does not automatically initiate more ethical, selfless behaviour in a linear way (cf. §12). Furthermore, she holds that no moral consequence is inherent in and the inevitable result of one particular narrative technique (cf. Keen, "Theory" 225). Identification of the reader with character(s) of a book/film can invite narrative empathy, but it remains unclear if character identification originates in narrative empathy, or if indeed narrative empathy is based on character identification (cf. Keen, "Theory" 214).

I argue that narrative empathy is a good starting point for students to develop empathy in general, but just as no one can say which texts initiate narrative empathy,

one cannot tell which students' behaviours undergo moral development after developing narrative empathy in the course of reading literature for a topic in the realm of sustainability. I honestly hold the opinion that this non-linearity of the relationship between narrative empathy and moral development is very positive, as a linear relation between these two notions would open the way for all kinds of moral manipulation. The aim of sustainability education, however, has to remain fostering students' autonomous, critical reflection and thinking, as well as honest questioning. From my point of view, moral development might also be experienced as a result of a combination between narrative empathy and external factors not residing within books: e.g. the reader's self-esteem, his/ her background knowledge on the book's topic or even aspects like his/ her social background. All in all, I think, narrative empathy which is evoked by texts analysed in the context of sustainability education might be able to spark off a change in attitudes of readers. However, I do not believe that narrative empathy alone can cause a major moral change of the reader. What becomes very clear in this context is that the activation of prior knowledge is an extremely important task of teaching if narrative empathy is aimed for, since „empathy itself clearly involves both feeling and thinking" (Keen, "Theory" 213). This chapter has shown that literature can facilitate opportunities for experiencing narrative empathy and for developing intercultural understanding. Both aspects have been regarded as crucial elements of *Gestaltungskompetenz* by Haan and consequently, teaching for sustainability has to take both of them into account, which it can do by incorporating literature.

4. Teaching Suggestions

My suggestions for teaching have been created around two works of literature each of which was used as the main part of a sequence of lessons. Before describing the teaching units in detail, I would like to briefly discuss general matters which are relevant to both of them. The complete versions of the teaching plans are to be found in the appendix, just as all other materials for teaching (i.e. handouts, pictures etc.). However, for practical reasons short versions of the lesson plans are included in the chapters, as well. Another matter which applies to all activity suggestions is that their time frame is likely to be underrated, as the actual duration of each activity will, naturally, depend on the group and the circumstances. However, I will still include the amount of time I estimated for the individual activities, as this somewhat indicates the importance attributed to them. Furthermore, as many creative methods as possible have been included, because creativity is an important underlying concept of various partial competences of *Gestaltungskompetenz*.

I am first going to discuss the question of the school subject(s) which the teaching ideas are useful for. From the chapters up to now it has become obvious that the lesson plans have been created with Austrian EFL classes in mind. However, I personally do not see any reason for not using them in CLIL lessons for English and Geography/ Economics. Alternatively, the English and Geography/ Economics teachers of a group could cooperate, so that students see different perspectives of the subject matter and are enabled to expand their comprehension of the problems raised. Therefore, I will indicate particularly suitable opportunities for including activities in other subjects whenever possible.

The teaching suggestions have been drafted in a tripartite structure involving pre-, while- and post-reading phases, as this procedure increases student interaction with the texts. This structure generally helps students to make sense of literature (cf. Hedge 209; Nünning and Surkamp 71): Pre-reading activities ensure that students approach texts preparedly and a while-reading phase provides readers with a frame of reference which prevents them from being left alone with challenging (passages of) texts; post-

reading tasks can help students reflect on the wider meanings of texts, while also embedding them in their wider contexts.

As mentioned above, the activation of background knowledge is extremely important if students are to acquire a deeper, i.e. both cognitive and emotional understanding of the texts. Activating background knowledge does not only provide connecting points which enable students to construct new information from the texts around existing knowledge, but might also raise their interest in the subject matter. Additionally, important vocabulary can be addressed in pre-reading activities aiming at the activation of prior knowledge. (cf. Aebersold and Field 67–68) For these reasons more pre-reading activities focusing on activating students' prior knowledge will be included than when working with less complex topics.

4.1. *Empty* by Suzanne Weyn: Dependency on Petroleum

This teaching unit is centred on the dystopian young adult novel *Empty* and takes about nine 50-minute sessions to be realized in the classroom. The book was written by Suzanne Weyn in 2010 and is set in an American town in a future 10 years from now. As the cover suggests (see appendix), it deals with problems the characters are facing because firstly, all fossil fuel supplies are drawing to an end, and secondly, climate change manifests itself in some major weather events. The protagonists are the teenagers Gwen Jones, Tom Harris and Niki Barton, who take turns in telling the course of events from their perspectives. The novel is interspersed with short articles from a local newspaper, which display a more official version of the events and which also manage to embed the story in an international context.

4.1.1. Teaching Rationale & Text Choice

The dependency on petroleum in industrialized countries has been chosen as a topic because it is controversial subject matter comprised of various stakeholders holding numerous perspectives. The unequal distribution of oil deposits in the world renders the issue useful for indicating global economic and ecological processes. At the same time we feel the consequences of these global structures in our everyday lives. Conversely, our use of petroleum and its related products feeds back into the global processes. This connection of global processes to our local everyday lives constitutes a great opportunity for making the topic of oil dependency relevant to students' lives. Additionally, the topic provides differently scaled perspectives on the problems involved (i.e. local, regional and global ones). The economic, ecological, social and political realms of sustainability can be demonstrated by examining claims raised by various interest groups who aim for conflicting developments. To sum up, the problem of our society's dependence on petroleum fulfils all criteria for being raised in the context of sustainability education (see chapter 2.2).

If used for EFL teaching, the target group of the teaching activities can be every group whose language competence seems high enough (about B2 according to the CEFR). In the Austrian AHS context it is likely that students have acquired this level in the eighth

form, even though very strong groups might be able to work on the activities successfully in the seventh form already. I suggest a relatively high level of language competence as a starting point because this enables students to use the foreign language in discussions which are especially valuable for controversial topics like our society's dependency on petroleum. If used in a CLIL context for the subject Geography/ Economics, the target group would be the same age group, as their language skills in English would have to be high enough. However, if the tasks were adapted accordingly, the topic would also fit the Geography/ Economics curriculum for the fifth and sixth form AHS.

The set of lessons surrounding *Empty* can help students towards accomplishing objectives of various natures: Regarding language skills, students can firstly expand their vocabulary by important expressions in the word field of "energy". Secondly, they can acquire knowledge of the various text types newspapers contain and thirdly, students are given the opportunity to train their text editing strategies. On the content level learners can develop awareness about the amount of products we use every day whose production is dependent on petroleum, which is a finite resource on our planet. By reading the book they are also enabled to talk about the problems a petroleum shortage could involve for everyday life. In terms of their social awareness, students can gain insights into how differences between poorer and richer people increase as the price for petroleum rises. Additionally, learners can become acquainted with action-oriented individual strategies for reducing the amount of petroleum their lifestyle consumes. Another development aimed for in the lessons is that students come to realize that they as individuals cannot reduce the scope of all instances in which petroleum is used. This way, students can be enabled to see through social structures of power, and might even develop motivation to take awareness-raising actions. Aspects of *Gestaltungskompetenz* can also be developed in the lessons proposed, and a detailed account of the specific parts of *Gestaltungskompetenz* which can be acquired in the course of individual activities will be given in the context of the teaching procedure below.

Before describing the teaching procedure, however, I would like to explain my motivation for using the text *Empty* in order to teach about our society's dependency

on petroleum. The criteria used for making this decision were inspired by both Nünning and Surkamp (cf. 44–50) and Thaler (cf. 19–21) and have been complemented by criteria which seem especially relevant to sustainability-related texts. Apart from the topic of the book, its characters are one of the main advantages: Firstly, they are teenagers, which is likely to offer to young readers opportunities for identification with them and their cultural world. Secondly, *Empty* offers character diversity. With only three teenagers and some rather two-dimensionally presented friends and/or family members of theirs, Weyn manages to incorporate views of lower class to lower middle class (Gwen), middle class (Tom) and upper social class (Niki). What I found especially convincing is that the problems each of these groups have to cope with in the face of oil shortages are depicted distinctively: Gwen and Tom can hardly afford fuel from the beginning on. In the course of the story fewer and fewer petrol stations are open and those which are still open sell their petrol at unbelievably prices. At the point when all middle class towns have lost access to oil, Niki's much wealthier town can still retain (illegal) oil deliveries. However, this does not imply that upper social class members do not have difficulties in the fictional world presented in *Empty*; they are just facing different problems than people from other social backgrounds. Another respect, in which the characters of the novel are diverse, is their gender roles. The novel is rather heteronormative in terms of the romantic relationships displayed, which can serve as an opportunity to discuss gender roles and stereotypes in literary texts. It features both female and male main protagonists, which might be relevant for students because this way most students might find points of identification with one of the characters (cf. Hesse 15). Heteronormative or not, the book depicts a love story as well, which might also be a motivation for students to actually read the book. One problem the book's characters entail is that they appear flat in various situations because they are largely characterized by stereotypes and clichés. Nevertheless, the book offers some great opportunities for reflecting on our society's dependency of oil, and stereotypical characters can always be used for raising the issue of stereotypes in literature..

The language used in the book contains an appropriate amount of difficult vocabulary and complex syntax for students in an eighth form of an AHS, especially considering

the rather complex issues that will be discussed. I hold the opinion that such texts, which might otherwise be regarded as too simple for the age group, can contribute to a clearer understanding of the highly complex problems in the petrol dependency discourse, if reflection on the matters takes place in the activities accompanying the reading. The book can be easily divided into sequences because of its manageable chapter lengths and,with around 180 pages, there is no danger of scaring students away with its mere length (cf. Collie and Slater 11). The short chapter length also entails the additional benefit that the „segment approach" can be adopted for reading the text (cf. Thaler 105). This approach involves reading the novel section by section with various pre-, while- and post-reading tasks being employed in order to foster students' understanding of the book.

Due to the newspaper articles between some of the chapters, the reader is not only presented with the local consequences of petrol shortages and a natural catastrophe in the form of a double-hurricane, but also with a more global perspective: that of countries declaring war against each other for economic reasons. Additionally, the novel features both, the usual individual hero (Tom, who sets out to obtain medication for the neighbourhood in the turmoil after the double-hurricane), and a group of people who cooperate and act as role models for a lifestyle less dependent on oil. This group even aims at initiating wider social change by offering educational workshops, which is a move into the direction of what Seitz perceives as necessary in order to develop into a society characterized by justice: „[…] [D]ie erstrebte Gerechtigkeit der Weltgesellschaft ist zunächst einmal eine Frage der institutionellen Ordnung, nicht in erster Linie des ‚gerechten Handelns' der Milliarden von Individuen" („Globales Lernen" 45). Therefore, the book offers positive role models for social change, which I regard as specifically helpful because this way the story ends on a very positive note. A positive outlook into the future is essential for taking action towards the development into a more sustainability society, but it cannot be found very often, unfortunately.

This leads me to my next argument for using *Empty* in the teaching of sustainability. Even though the main problem the protagonists face is that of our dependency on oil, Weyn also includes the double-hurricane mentioned above to create an apocalyptic picture of the world. From my point of view, this serves two purposes: On the one

hand, it helps build awareness that in emergency situations we rely even more on petroleum than usually; and the point being made here is that there will always be emergencies, but there will not always be petroleum. (How can a city be evacuated without fossil fuels, when all evacuation plans are based on the use of private and fossil fuel-driven vehicles?). On the other hand, this apocalyptic imagery serves as a catalyst which shows impressively how urgently changes are needed: "Environmental apocalypticism […] is not about anticipating the end of the world, but about attempting to avert it by persuasive means" (Garrard 107–08). Thus, dramatic apocalyptic imagery is used as a thought experiment which can raise students' awareness that changes are needed in order to avoid such a scenario. However, reflection on the scenario displayed in the book is needed in order to move on to a more positive and more action-oriented approach to the topic of oil-dependency. The next chapter will elaborate on the individual steps and activities of the teaching sequence on Suzanne Weyn's *Empty*.

4.1.2. Teaching Procedure

Table 1 – Teaching Procedure of Teaching Unit on Petroleum Dependency

Lesson No.	Time Frame	Procedure	Aims	Materials
1	15'- 20'	**Which everyday products contain/ are made with the help of petroleum?** 50-60 pictures are distributed on the floor 2 tasks; whole class	introduction to the topic raising awareness for the amount of everyday products that need petroleum in their production process	50-60 Pictures containing by-products of petroleum and products made without using petroleum
	15'- 20'	**Pre-Reading Task 1:** Task 1a: term *empty*: brainstorming – whole class Task 1b: Picture 1 – pair work	introduction to topic activation of prior knowledge	Picture 1: fuel gauge, not pointing towards "empty" but towards "war"
	10'	**Pre-Reading Task 2:** whole class • Picture 2 (book cover) • Pictures 3 & 4 (signs with text taken from the book)	activation of prior knowledge trying to anticipate the plot of the book	Picture 2: Book Cover *Empty* Pictures 3 & 4: Text from Weyn, 123 turned into signs
	time left	**Starting to Read:** individual work Read up to p. 11	finding into the plot	Copies of p.1-11 of *Empty*
Homework: Read up to p.11 **- Task**: Anticipating the first newspaper article in the book (individual work)				
2	30'	**Reading Time:** individual work Read up to p.32	in-class reading time	Books
	20'	**While-Reading Task:** whole class first; individual or pair work later Creating a newspaper as a class - preparations	knowing main text types a newspaper contains creating a bigger picture of the aspects of life which change if the world is running out of petroleum	Handout 1

Lesson No.	Time Frame	Procedure	Aims	Materials
Homework: Finish While-Reading Task (pair work)				
3	15’	**Peer Correction** (groups of 4)	strategies of text editing	homework texts
	35’	**Reading Time** (individual work) *Beginning of open learning*	reading at their own speed, researching additional information, completing various while-reading tasks	Handout 2 : Open Learning *(3 pages)*
Open Learning: largely individual work 4 lessons. While Reading-Activities, results collected in the form of a portfolio.				
8	50’	**Post-Reading Task:** groups of 2-3 Pictogram-Summary OR Book-Trailer	summing up the most important aspects of the book	
9	20’	**Reflection on book** whole class	reflecting on the book’s meaning and possible implications	
	30’	**Reflection on topic & action-oriented task: „Standpunkt – Weg – Zukunft“** groups of 4 Posters: status quo – future visions: ideas for reducing the amount of petroleum they consume with the products they buy	reflecting on the status quo of petroleum dependency in our world imagining an ideal future finding individual strategies for reducing the amount of petroleum used seeing that petroleum cannot be wholly removed from our lives	1 poster/ group Internet access

4.1.2.1. Lesson 1 – Activity 1: Which Products Depend on Petroleum?

This activity was inspired by an idea presented by Dr. Ingrid Schwarz in the context of the course „Globales Lernen“ at the University of Vienna which was held during the summer term 2012. The task needs some preparation, as about 50 to 60 pictures need to be found. The pictures should contain both products that are produced without the use of petroleum and products we use every day which are made with the help of petroleum and its by-products. I suggest that they should have a size of about DIN-A5 at least, and DIN-A4 at best, with each picture containing one product only. (A fractional list of products which contain oil in one or another form can be found here: “*A Partial List of Products Made from Petroleum*” and here: “*Things Made From Oil That We Use Daily*”; possible sources for pictures could be magazines or newspapers). All pictures are distributed on the classroom floor, and the first task the students have to approach is that of guessing the topic of the teaching unit with the help of the pictures. As this stage is about creativity and gathering ideas, I regard a guessing round with the whole class as the perfect interaction format. However, I would not devote more than five minutes to this first task, as students might feel bored if the guessing lasts too long and this would be the exact opposite of what this task actually aims at: arousing their curiosity by helping them see that the topic is relevant for products they use every day.

As a next step the students should try and allocate all pictures to the categories “needs petroleum for production” and “produced without petroleum”. Afterwards students take a look at the oil-based products individually and in a last step the class reflects on aspects which they found especially surprising. The aim of this relatively important step is that the students become aware that an enormous amount of products we use naturally in our daily lives is reliant on petroleum. This consciousness is crucial for making the subject matter relevant to students’ lives; consequently, the 15 minutes suggested in the lesson plan above are to be understood as minimum time and the teacher should definitely expand the time spent on the task if s/he sees potential for discussion. Again, approaching the task as a whole class seems to offer the best conditions for this activity because, on the one hand, this ensures that students have to discuss in case their opinions differ; on the other hand, the bigger group allows for

more pictures to be allocated in less time and therefore for more everyday life products to be included in the task. The short reflection afterwards guarantees that students see that most of the products are manufactured with the help of oil and that they have to use the target language to describe both the pictures and their emotions. I regard this stage as vitally important for the whole teaching unit, as it establishes the purpose for raising the topic of oil dependency at school by showing students that the topic is relevant in society and not just addressed because the teacher likes talking about it or the book deals with it.

Regarding the relevance of these first steps for *Gestaltungskompetenz,* I think that they can contribute to the competence of *„weltoffener Wahrnehmung"* in that interrelations between a global resource and its importance for our daily lives can be revealed. The activities might also be a starting point for students to develop the competence to participate, if they perceive the circumstance that their lives unwillingly depend on a finite resource as unfair and consequently, want to start changing this fact.

This first activity can be supplemented by a task that could be carried out in another subject after finishing the task above in an EFL lesson: Inspired by the activity "Mein Klimavormittag" (cf. "Aktionsideen: Klima"), students can first make a list of products/ objects etc. they have used in the time between waking up and sitting in the lesson the activity is carried out in. In small groups they can research those objects and products which need oil for their production as a next step. This activity would feed into the same objective as the one suggested above, but it would take longer. However, I would strongly recommend doing this activity with the students, as this would extend the relevance of our dependency on oil to the students' personal lives. They would be able to see that, even if they are not planning to use petroleum and its related products, their lives still depend on this resource.

4.1.2.2. Lesson 1 – Activity 2: Pre-Reading Tasks 1a and 1b

The second stage of the teaching unit on *Empty* leads the students slowly towards the book itself and consists of two steps. Both tasks are meant to activate students' prior

knowledge and to further introduce the topic of the book. All in all, this stage of the teaching unit can be realized in about 15 to 20 minutes.

As a first step I suggest writing down the word *empty* on the board and then carrying out a very short brainstorming phase of about a minute. Students are meant to tell the class the associations they have with the word empty and afterwards the teacher can ask them questions such as "what can be empty?" for instance. I would be curious to know the outcomes of this step, as I find the tension interesting which exists between the relatively broad meaning of the term *empty* on the one hand and the effect of the knowledge activated in the first activity on this step on the other hand. Would the students think of associations other than those to do with petroleum or has activity one already focused their minds on oil-related thoughts? I think that for this first part of the first pre-reading task, the best interaction format is that of the whole class, because more people are likely to supply a higher amount, if (creative?!) associations which might encourage students' curiosity about the book's contents in the end.

For the next step I suggest that the students go together in pairs and discuss the meaning of picture 1 (see appendix). This picture shows a fuel gauge pointing to the left, where the term *war* can be read, rather than the word *empty*, which we would probably expect to find in this place. I recommend helping the students by providing the following instructions which guide their interpretation of the image: "*Take a look at picture 1. With your partner, describe what you can see, first. What does the picture allude to? What does it criticize? Discuss these questions and also guess what the picture could have to do with the book we are going read."* The reasons for carrying out this task in groups of 2 students are that this does not only increase student talking time in general, but also ensures that such students train their speaking abilities who might not feel confident enough to speak in front of the whole class. This is facilitated even further by the use of visual material which encourages creative language use (cf. Reinfried 278). The next step would then be to have the students briefly report on the outcomes of their interpretations, which is meant to give the learners an opportunity to hear the ideas of other pairs and share their own thoughts. However, as soon as all students have made their contribution to the discussion, I would not spend too much

additional time on this step, as it is likely that most interpretations go into a similar direction.

4.1.2.3. Lesson 1 – Activity 3: Pre-Reading Task 2

The second pre-reading task was inspired by Collie and Slater and aims at motivating students to try and verbally anticipate the plot of the book (cf. 17). Firstly, this might foster their curiosity towards what the story of the book will be like and secondly, this helps students become aware of their own expectations towards the book. I would recommend starting this activity by showing the class the book cover of *Empty* (picture 2; see appendix) which helps them speculate about the plot of the book. I would gather all ideas that are named and cluster them on the board and, as a next step, I would present to them pictures 3 and 4 (see appendix), which are signs created from text passages of the novel (cf. Weyn 123). Together the class should then, on the one hand, discard those theories about the plot, which do not seem appropriate anymore, and on the other hand, add new speculations they did not come to think of before. The teacher should try and widen the scope of the students' speculations by asking questions such as *"How many protagonists could there be? What could they be like? What could their surroundings look like? How could the general atmosphere in the book be? What could happen to the characters?".* Additionally, the teacher could supply important key words from the book, if s/he wishes to guide the students into one direction (cf. Collie and Slater 19). This would help students by introducing vocabulary from the book, but I believe that it would also restrict the creativity of the task, and students might interpret this as spoilers, which could decrease their reading motivation. Therefore, I would keep the focus broad here and concentrate on creative student ideas. Whichever version the teacher chooses, the different theories on the plot of the book should be recorded for future reference in the end. The reason I would do this activity with the whole class rather than with smaller groups is that one student's ideas and speculations can always spark off others' ideas and these dynamics of sharing ideas can lead to a wider variety of theories on the plot. However, it is my opinion that whenever students are given the chance to express their own creative ideas, they will be much more motivated to speak in the foreign language. Therefore,

the activity can alternatively be used as a speaking activity in pairs. 10 minutes are suggested as an appropriate amount of time for dealing with this task.

4.1.2.4. Lesson 1 – Activity 4: Starting to Read

If there is any time left at the end of the lesson, I would have the students start reading the novel individually, since they are hopefully curious about the novel by now, and their prior knowledge about the topic is activated and this is a good point for giving them time for finding into the plot. However, I would refrain from handing out complete copies of the book because this would corrupt the next task planned, which is based on the students anticipating the next steps of the story. I suggest handing out the first eleven pages of the story as separate copies in order to avoid that students continue reading. If there is no time left at the end of the lesson, students would have to start reading the text as their homework.

4.1.2.5. Homework 1

Even though it is risky to stop the students' reading flow only eleven pages into the book, I would still ask them to do this activity because the plot offers a great opportunity for a writing task at this point: chapter 2 ends in a cliff-hanger on page 11. One of the protagonists comes to hear that the USA has declared war on Venezuela, but he does not know why, and consequently, he is directed to a newspaper article on the issue. As a first task the students should write the article the protagonist is given. The students' articles are meant to include reasons for the declaration of war on Venezuela, and to describe the circumstances that have led to this development. The information given in the book serves as a basis for their articles, but they will have to include their own ideas, as well because not all pieces of information needed for an article are included in the text. Additionally, the students are allowed to research information on the Internet, in case they want to investigate on the relations between the US and Venezuela. The aim of this task is threefold: Firstly, students should generate a creative but realistic vision of the global problems which are about to change the protagonists' lives. Secondly, students should be encouraged to take the incidents in the novel as points of reflection on our world: *To what extent is the scenario described in the book realistic?* This can be facilitated by briefly researching the international affairs between the USA and Venezuela because these are

characterized by arguments about petroleum; and thirdly, this is a great opportunity for students to train their newspaper article writing skills, which they will need again in one of the next steps. I would restrict the maximum length of the article to about 250 words, as this seems long enough to fulfil the task and, at the same time, not too long to frustrate the students who will have to write another newspaper article as their next homework. In order to receive feedback, students have to hand in the text electronically, so that the teacher can ideally correct their work until the next lesson.

Since this activity feeds into students' competence to take on a perspective other than their own (i.e. that of a reporter within the fictional but realistic world of *Empty*) it can also be seen as practice for *Gestaltungskompetenz* in terms of the "ability to empathize and solidarize". By connecting the novel's world to our own world, students can also acquire a feeling of belonging to the global community, which is very much needed for sustainability education.

4.1.2.6. Lesson 2 – Activity 1: In-class Reading Time

The next step provides students with in-class time for reading. On the one hand, this is a prerequisite for the next step which cannot be done as homework, as it would definitely be too much on top of the writing task described above. On the other hand, in-class reading time has been assumed to foster students' reading motivation and to help increase reading for pleasure (cf. Krashen, *Power* 85–86; Krashen, "Free Reading" 16). Additionally, shared reading experience can also inspire informal student discussions about the book and mutual support in case of problems with understanding. Consequently, granting the students time to read in class seems a reasonable option in this context. However, I suggest spending only about half of the lesson on reading and then going on to preparing the next while-reading task. The aim of this phase is that students read up to page 32, which is another point in the plot where a newspaper article is inserted.

4.1.2.7. Lesson 2 – Activity 2: While-Reading Task

The targeted outcome of this second while-reading task is for the whole class to create the complete issue of the local newspaper "North Country News", one article of which is included in the book (cf. Weyn 32). The aim of this activity is to provide students

with a frame for immersing themselves into a world with major oil shortages. In order to do so, students are meant to use their knowledge about which daily used products need oil in their production and then supply their most creative ideas to complete the picture of a world without oil. A newspaper lends itself well for this activity because many different facets of daily life are enclosed in it: not only in the different news sections, but also in advertisements, the TV-programme and letters to the editor. I would recommend discussing potential contents of the different possible sections of a newspaper with the students (see handout 1, appendix). Examples of such ideas include a sports news section missing any kind of motor race and any sports using balls made of plastic, or a celebrity news section missing outfits made from synthetically produced fabrics but instead featuring celebrities that are neither wearing hairspray, nor nail polish, nor lipstick. The next step would then be to have each of the students decide on three favourite sections they would like to create, so that in the end each important section of the newspaper can be covered by at least one student. The students themselves decide if they want to write their part individually or with a partner. Some students might have enough ideas for writing the text on their own, while others might want to include a wider variety of aspects with the help of a partner. Apart from thinking themselves into a world without oil, students also learn about different text types included in a newspaper. Students could start writing their texts in the lesson in case any time is left after discussing the task in detail. All students should finish their texts at home and bring their first drafts with them for the next lesson.

Many aspects of *Gestaltungskompetenz* can be acquired with the help of this task. Since the newspaper narrates stories about everyday life practices without oil, students are likely to see the possible relevance of oil shortages for their own lives. This also implies the recognition that the future can still be changed (cf. ability to deal with predictions). Once again, the competence of "*weltoffener Wahrnehmung"* can be gained here, as the task requires students to connect an oil shortage on the global scale to daily life on the local scale. Both these competences can feed into students developing a desire to participate in creating a future different from the one in *Empty*. Narrative empathy is also likely to be evoked when students themselves create the

part of the world depicted in their texts (cf. ability to empathize). Moreover, this activity can make students aware that our dependency on oil is not something that is naturally given, but that it is primarily a question of culture (cf. competence of remote reflection about motives for acting).

4.1.2.8. Lesson 3 – Activity 1: Peer Correction

At the beginning of the next lesson I recommend giving the students about 15 minutes time for mutually correcting their texts. As they are in the eighth form already, they should know how to edit texts, but this is a great opportunity to practise strategies for doing so. Depending on whether students chose to write their texts individually or in pairs, the group sizes for this activity will vary between two and four students who correct and edit each other's texts. Assessing one's own work and that of colleagues in the same situation can help students practise their ability to evaluate performances according to criteria which have to be agreed upon beforehand (cf. Stern 63). Estimating one's own performance is a highly useful skill in our society and has to be practised at school correspondingly. As a next step the students are asked to hand in the final versions of their texts by the next lesson. The teacher then puts the newspaper together, in case no student wants to do so. It is important to print the whole paper in the end and have students see and read the paper as a whole, as this enables them to arrive at a holistic impression of a world in which the resource petroleum is about to disappear.

4.1.2.9. Lessons 3 – 7: Open Learning

Since the students should, by this time, have a wider impression of the world *Empty* is set in, the second half of this and the next four lessons are devoted to reading at their own speed. Their reading experience is complemented by a number of while-reading tasks that can be found on handout 2, which consists of 3 pages and contains information as to the exact point in the text at which the various tasks are to be completed. As mentioned above, in-class reading time has a number of benefits. Apart from that, open learning allows for students to read at their own speed with the additional advantage that the while-reading tasks can be accomplished at exactly those points of the plot which they are relevant for. Additionally, open learning phases are especially suitable for reading projects, as they leave students enough space to

immerse themselves into reading, but still offer support in the form of the while-reading tasks. In case of major understanding problems the students have regular opportunities to ask the teacher for help in their usual lessons. The while-reading tasks chosen for the open learning phase differ from the first ones in that they do not need to be discussed in detail with the whole class, as many of them only require students to research small pieces of information which can foster their understanding of the book. This helps students enhance their competence in dealing with information sources and connects notions from the book to the real world.

The learners are meant to collect the most useful products of the open learning phase in a portfolio which can be used for both assessment purposes, and collections of information on oil dependency. As an additional offer, the classroom can be equipped with a poster which can be used by students to note down general thoughts on text passages they want to share or quotes from the text they regard as especially noteworthy. These aspects can then be addressed in the reflection phase when everyone has finished reading.

4.1.2.10. Lesson 8: Post-Reading Task

This activity is meant to make students review the most important events of the novel. For this sake they can choose between two options, both of which can be fulfilled by groups of two to three students. The groups will be given 50 minutes for the task and the results will be made available to the whole class. The reason for working in groups of two or three is that this allows discussion regarding the most important aspects of the book, as well as different creative ideas for their realization. Fewer people per group would mean that no debate could be initiated, while more people per group would probably not lead to agreements in consensus within the given amount of time. Additionally, the workload would probably be too big for an individual student to manage it within the given amount of time. Both tasks require creativity to some extent, as well, and so a group size of two or three seems suitable.

Alternative number one was inspired by a teaching idea presented by Mag. Christian Holzmann in the context of the course “Literature and Culture in the EFL Classroom” taught at the University of Vienna in the summer term 2013. The activity is called

"Pictogram Summary" and as this name suggests, students should re-tell the story using a sequence of comic-like pictograms. The second option students can choose involves summarizing to a certain extent, as well, but for a different purpose: Students can create a book trailer in which they attempt to persuade the audience to read the novel (idea inspired by Collie and Slater 77). This can either be done in the form of a film script, or as a short video which can be uploaded to a platform, such as YouTube afterwards, in order to make it available to the wider public, as well. Both alternatives are creative and manage to make students reflect on what parts of the book are relevant for re-telling the story. Furthermore, summarizing is a highly esteemed skill in our society and should be taught at school accordingly.

Regarding *Gestaltungskompetenz,* each of these activities can contribute to the competence to plan and realize, as all tasks require some kind of planning before any step towards realization can be taken. Since the tasks are to be accomplished in groups, the students can also acquire the competence to motivate themselves and others.

4.1.2.11. Lesson 9 – Activity 1: Reflective Task

The last lesson of this teaching unit on *Empty* aims at returning to the class plenum for an overall reflection on the book's plot and its implications. It is necessary to do this activity with the whole class, in order for the students to have the opportunity to share their experiences with and opinions on the book. If a poster has been put up in the classroom during the open learning phase, and the students have indeed made use of it, it can now be used as the starting point for reflection. However, reflection can also be triggered without the help of a poster by going through a set of questions with the learners. These questions should be aimed at making the text relevant to the students and should also invite them to view the novel in its context. At best, the questions are only needed at the beginning to spark off a discussion about the text. Questions that could be used include: "*What did you (not) like about the book and why? What did you find especially interesting/ astonishing/ disturbing? What is the main point the book wants to make? Which passage did you like best/least? From your point of view, is the plot of the book realistic and why (not)? In how far is the book related to our world?"* I

would recommend for the teacher to take notes of the students' comments on the board, and in the end, cluster the ideas mentioned, so that students can acquire an overview over different important implications of the book. This activity is an important step, as it provides a chance for the students to express their opinion about the issues raised by the book. As a time frame I would suggest about 20 minutes.

The partial competences of *Gestaltungskompetenz* which can be accounted for by this activity also heavily depend on student contributions but it is likely that the "competence of *weltoffener Wahrnehmung*", the "ability to empathize and solidarize" and the "competence for remote reflection" will be touched upon in the reflection.

4.1.2.12. Lesson 9 – Activity 2: Reflection and Action-orientation

For the concluding step of the teaching unit, I suggest an activity which aims at fostering students' participation in the process of making our society more sustainable. The activity was adapted from Haberl, Niederbichler, and Wieser (43-44) to fit the purposes of the teaching unit and can initiate projects leading beyond this teaching unit. Other aims of this activity include the development of ideas for concrete actions which can help diminish the amount of petroleum our lifestyle consumes, as much as the realization that we as individuals cannot influence all instances in which our life depends on petroleum but that we need to cooperate as a community to change these aspects. For this sake, I suggest that the students work in groups of four and choose one of the following two areas to focus on in their considerations: either their families, or our school. The tasks remain the same for both areas and should be completed in the order suggested. Each group is given a poster which is subdivided into three horizontal areas. The area on top is filled with statements about the status quo of the oil dependency of the school/the students' families. During this step the students are allowed to use the Internet in order to research specific aspects of their daily lives which are dependent on petroleum. In the next step the students attempt to envision a realistic target state for each of the statements regarding the school's/the families' dependency on petroleum in the bottom third of the poster. For this step, it would also be possible to have the groups swap their posters temporarily, so that each group sets realistic target states for another group's statements. Each step is discussed within the group and especially in the third step the group members have to closely

cooperate. This stage of the activity is used for developing specific measures different people can take, in order to develop from the status quo to the desired state. These measures have to be agreed upon by at least three group members and are written/ drawn into the third, central part of the poster. This would then be concluded by a quick round of each student briefly stating if they want to realize any of the measures suggested and if so, which idea they want to carry out. The ideas mentioned are then highlighted on the posters which are put up in the classroom.

This activity could also be supplemented by watching and discussing Eric Valli's film "Das Ende des Erdöls" from the series "Die Erde von Oben" in the context of another subject. Depending on the ideas the students supply during the third stage of the activity, projects could be initiated which go beyond the teaching unit. One such possibility would be the development of a catalogue of possible measures for making the school more sustainable in terms of its consumption of oil. These ideas could be presented to the headmaster, who might consider realising some of them (e.g. advertising the use of re-usable water bottles rather than disposable ones; showing other students which products are produced with the help of oil and problems this involves etc.). It would also be interesting to conduct a survey among the students whether they have changed some of their daily practices. A good time to do that would be about two to three months after finishing the teaching unit and if the posters are still there, they can be used to compare the students' resolutions with their actual practices. By including this long-term perspective, students might realize that the topic of petroleum dependency goes far beyond lesson contents that have been chosen because the teacher appreciates them. The possibility of also including other people and sharing with them the knowledge gained in this teaching unit can be a valuable contribution to the "competence to motivate oneself and others", as well as the "competence to plan and realize" and the "competence to participate". Additionally, this activity presents the future as shapeable, which directly feeds into the students' "ability to deal with predictions".

4.2. "Classic Combo" by David Heatley: Industrial Food Production

This teaching unit is based on "Classic Combo", which is a graphic text, including only very little written text. The teaching unit consists of about four 50-minute lessons. The central text was created by David Heatley in 2008, and illustrates the processes of industrial food production which play a role in the production of a burger, chips and a soft drink (i.e. the "classic combo" often found at fast food restaurants). Even though the text was published under the heading "Graphic Fiction" (cf. Heatley 97), I would rather categorize it as graphic narrative non-fiction, since it depicts processes of the real world without fictionalizing them.

4.2.1. Teaching Rationale & Text Choice

Food is a topic everybody can easily relate to because there is hardly any aspect in life which is more commonplace than food. Globalization has dramatically changed all aspects of our food supply system: Not only do we now find all kinds of food available in our supermarkets that our great-grandmothers would not have known, but we can also purchase food throughout the year that used to be seasonally available only. Furthermore, we do not have to start cooking our meals from scratch, as countless ingredients are available in variously processed forms: We buy our onions diced and frozen, our tomatoes in cans and our water in bottles; and sometimes we do not have to cook at all, but still find an array of food on our plates which do not grow that way on the trees and in the fields. The steps that lie between the fields and our plates have multiplied since we do not grow our own food anymore, and while children growing up nowadays might be able to recognize that food does not grow in supermarkets, they might find it difficult to establish connections between what they eat and where their food originates. Since our daily food consumption patterns have global consequences, and the global processes have consequences for our food, this topic seems eminently suitable for sustainability education.

Similar to the first teaching unit, this sequence of lessons is aimed at the oldest age group of students still attending AHS schools. What makes this teaching unit especially suitable for this age group is that the procedures involved in industrial food production are highly complex, which requires a relatively high level of foreign language skills in

order to be able to describe these processes (I suggest a B2-level according to the CEFR). Describing the processes cannot be done without in the case of "Classic Combo", as the text does not provide written words and so the practices depicted have to be verbalized by the students. However, if enough scaffolding was provided in terms of vocabulary, the teaching unit could also be adapted to fit the purposes of 6th or 7th form AHS classes. If used in the context of a CLIL programme, the lesson plans could not only be used in Geography/Economics, but also in the subject Domestic and Nutritional Science.

In terms of language abilities, students should have acquired the most important items of vocabulary from the word field of industrial food production by the end of this teaching unit. They should also be aware of and be able to describe the most important global processes of industrial food production. Another objective of the teaching unit is to make students try out one way of creating a graphic representation of the steps described in "Classic Combo", in order to arrive at an overview over the global processes which are involved in the production of our food. Additionally, learners will be given opportunities to begin building awareness of how the food they consume influences people in other parts of the world, and they will find out which country/countries their favourite food originates in. In terms of action-oriented strategies, students should also have acquired knowledge of measures with which each individual can contribute to a reduction of food transports. Just as the teaching unit on *Empty*, "Classic Combo" can help enable pupils to see through power structures of society and might subsequently also generate their motivation to take action toward raising others' awareness. Those aspects of *Gestaltungskompetenz* which can be acquired within this sequence of lessons will be discussed in the context of the individual stages of the teaching procedure below.

Before going on to describe the exact teaching procedure, I will briefly explain my reasons for choosing "Classic Combo" for teaching about global processes in industrial food production. A graphic narrative which is "restricted to the graphic mode" provides ample opportunities for being used in foreign language teaching, since the absence of written words requires the learner to supply the language for telling the story (Burwitz-Melzer 62). This way, various kinds of language skills can be practised

with the help of “Classic Combo”. In the case of “Classic Combo” the activities of the learner also involve discussions about the text’s implications and its relation to our own lives. Thus, the combination of a graphic text with a topic that can easily be related to our own everyday lives makes „Classic Combo“ enormously suitable for using it in the context of sustainability education, despite the fact that “[c]omic books for a long time were regarded as ‘trash’ and therefore harmful to young people” (Burwitz-Melzer 57).

An additional benefit of using a graphic text in foreign language teaching is that many students like reading comics, which can result in a higher reading motivation especially at the initial stages of reading: Recent studies have shown that graphic texts are approached without inhibition by reluctant readers and can help good readers improve their reading skills, as well (cf. Burwitz-Melzer 57). Furthermore, our society can be characterized as being increasingly focused on visual modes of representation. Consequently, visual literacy has to be acquired at school, which is definitely supported by dealing with the decoding of graphic texts. (cf. Burwitz-Melzer 63) The absence of written text evokes the impression of an unemotional, neutral depiction of the processes involved. Here, the teacher has to raise the students’ awareness that even seemingly objective graphic texts employ techniques and strategies for manipulating the reader (e.g. image size, arrangement of contents etc.). When it comes to depicting the procedures included in the production of meat (i.e. the butchering of a cow), this apparent lack of emotion and the images’ simplicity can make the reader much more concerned by the matter than a more passionate account could. Therefore, this text is a good example of non-fiction being able to evoke narrative empathy, which makes it even more suitable for using it in a teaching unit which aims at promoting sustainability (cf. chapter 3.3).

4.2.2. Teaching Procedure

Table 2 – Teaching Procedure of Teaching Unit on Industrial Food Production

Lesson No.	Time Frame	Procedure	Aims	Materials
1	10'	**Introduction to the topic** whole class T shows 2 pictures, takes notes on board	activation of prior knowledge connecting the topic to students' lives showing the topic's global relevance	picture 1: burger, chips and a soft drink picture 2: planet earth being held by two hands
	20'	**Film Sequence of "Home"** – each student individually, if possible sequence relevant for industrial food production: 15'30" – 31'00"	establishing the context of industrial food production listening to relevant vocabulary raising awareness for important aspects of food production by taking notes	Film "Home" by Yann Arthus-Bertrand
	20'	**Reflection on the Film Sequence:** whole class discussing issues raised by the students	collecting a list of vocabulary from the word field "processes in the food production industries"	
2	5'	**Revision of issues raised in Lesson 1:** whole class T shows pictures 1 and 2 again → raise awareness for differences to the first time!	activation of prior knowledge detecting differences to the first time this exercise was carried out	pictures 1 & 2
	30'	**Reading "Classic Combo":** groups of 2-3 **While-Reading Tasks:** 1. verbalization 2. flowchart	using the graphic text to create a verbal story seeing the steps behind industrial food production overview over the most important processes in industrial food production	copies of "Classic Combo"
	15'	**Student presentations** of flow charts; groups of 2-3	seeing how other groups structured their flow chart	flow charts created earlier
3	20'	**Negotiating** the best version of the processes; whole class	negotiating democratically the best way of representing the processes of industrial food production	flow charts created earlier
	30'	**Telling your favourite food's story:** individual work **Post-Reading Task**: *Tell the story your favourite food lives through until it ends up on your plate/in your cup* (cf. Matthewman 93)	developing an awareness of where one's favourite food comes from	Internet access

Lesson No.	Time Frame	Procedure	Aims	Materials
Homework: Finish your research and tell your story.				
4	30’	**Tracing the group’s favourite foods** on a map of the world/of Europe; whole class	seeing the (global?) network of industrial food production for the favourite items of food	Internet access map of Europe/ the World threads of wool
	20’	Discussing **problems of food that comes a long way & possibilities to shorten these long ways;** whole class	developing an awareness of some of the problems long transport of food involves developing action strategies to reduce these long ways	posters

4.2.2.1. Lesson 1 – Activity 1: Introduction

The first step of this teaching unit aims at the activation of prior knowledge on the topic of industrial food production. It is carried out with the complete class and was inspired by Collie and Slater (cf. 18). As a first step, picture 1 which shows a burger, chips and a softdrink is shown to the students (see appendix). The teacher then asks the students the following questions: “*How often do you eat junk food? How often do you eat healthy food which you/your family members have not prepared yourself? How often does your Mum/Dad use fresh ingredients for cooking?”* For each question, the students have to raise their hands for one of the following options: *once/twice a year, once/twice a month, once/twice a week, 3-5 times a week, everyday*. The teacher writes down the number of students for each answer in this brief survey. Alternatively, the questions and answers could be prepared in the form of a table on the board and the students answer the questions by putting down one mark in the form of a cross, dot etc. This way, their answers would stay anonymous, which might help sensitive students in answering the questions honestly. Additionally, one could immediately see the result of the small survey, as the graphic marks in the table enable immediate visualization. The questions can contribute to showing students that the topic of ready-made food is relevant to their daily lives. After showing picture 2 (depicting planet earth being held by two hands; see appendix), students are asked if they can

think of any links between the two images, and their ideas are recorded on the board. If they do not establish the connections of possibly harmful consequences of industrial food production to the environment, the teacher could directly ask if the students can think of any ways in which food can be harmful to the environment. This step introduces the global perspective to the lesson and closes this first activity, which is meant to last about ten minutes

4.2.2.2. Lesson 1 – Activity 2: Watching a Sequence of Bertrand's "Home"

In the next step of the lesson, the students watch a sequence of Yann-Arthus Bertrand's film "Home". The sequence chosen (15'30" to 31'00") manages to show both the beauty of our planet and summarize major food production processes and their consequences for the Earth. Additionally, the film's highly aesthetic imagery is complemented by a clearly comprehensible, enunciated voiceover. What makes the film further on useful for school purposes is that it is available in full length on YouTube. Apart from the film itself, which is extremely suitable for this activity because of the way it presents circumstances, the medium film in general can help students comprehend complex issues, as it is a medium they are confronted with regularly. Therefore, they generally have considerable experience in interpreting films (cf. Nünning and Surkamp 246). The activity is meant to last 20 minutes at least. The aim of this rather long pre-reading phase is to have students see some major interrelations of food production processes and hear them described. For this reason, the students are meant to watch the film sequence individually with headphones, if possible, as this enables them to briefly pause the film and take notes regarding two aspects of the film: firstly, about particularly astonishing, disturbing, or remarkable scenes, and secondly, about expressions they find especially important and useful for describing food supply processes. The reasons for having them gather these items of vocabulary from a film is firstly that the visual context provides support in terms of the words' meaning, and secondly that the students experience these words as purposeful, as they are met in context.

In terms of contributions to *Gestaltungskompetenz*, the activity is particularly suited for fostering the students' competence of "weltoffener Wahrnehmung", since it has

the potential to evoke a feeling of estrangement from food. This can cause the students to take a step back from their usual perspective, and view food from a more global point of view. The ability to empathize and solidarize might be provoked by the activity for the same reason.

4.2.2.3. Lesson 1 – Activity 3: Reflection

Since the film sequence is likely to give rise to questions, this phase of reflection is a very important part of the teaching unit (cf. Nünning and Surkamp 269). Not only can students bring forward those aspects they have taken notes of before, but they can also share their perceptions with the rest of the class. Another aim of this step is to collect a list of vocabulary from the word field of industrial food production, which the students will need later on. The teacher should record the contributions regarding vocabulary and then provide them for the whole class. In case the students cannot contribute an appropriate amount of expressions, the teacher is recommended to supply phrases he/she finds important and useful. A time frame of about 20 minutes seems suitable for the tasks just described.

4.2.2.4. Lesson 2 – Activity 1: Activating Prior Knowledge

The aim of this step is to briefly revise the issues raised in the previous lesson. This can easily be done by using the same pictures as in the very first activity of the teaching unit. The pictures can be accompanied by the same questions, but it is highly likely that the students will draw more informed and therefore different connections than in the first round. By making the students aware of this fact, they can also be made aware of the fact that their knowledge about the topic has extended, even though they only spent one lesson reflecting on it.

4.2.2.5. Lesson 2 – Activity 2: Reading "Classic Combo" & While-Reading Task

It seems useful to read "Classic Combo" in full length during the lesson, since the text is only about ten pages long, but the students might require help from classmates or the teacher. There are two while-reading tasks to be accomplished by the students. First of all, they have to try and verbalize the story in pairs or groups of three with the

help of the vocabulary collected in the previous lesson. This group size is seen as suitable, because it enables students to help each other and discuss the text's content, and also allows for peer correction to take place without group dynamics playing too big a role. The other while-reading task's aim is to help students enhance and structure their understanding of the food production processes. This can be achieved by having the students create one kind of graphic representation per group about the processes (e.g. a flow-chart; cf. Collie and Slater 52–53). As, a whole, this activity is meant to last at least 30 minutes.

4.2.2.6. Lesson 2 – Activity 3: Student Presentations

As a next step, the student groups each briefly present and explain their graphic representation. This stage merely serves the next one and helps students practise their presentation skills. This phase is not meant to last longer than 15 or 20 minutes, as the main purpose should remain that of the class seeing the other groups' results.

4.2.2.7. Lesson 3 – Activity 1: The Best Graphic Representation

In order to practise what was preached before, this stage gives students the possibility to participate and practise their negotiating skills. The aim is to find, or create the one graphic representation most students regard as a good visualization of the processes depicted in "Classic Combo". For this purpose, students can either come to the conclusion that one of the already existing diagrams is the best, or they can create the best version by merging ideas from various diagrams. The resulting diagram is then put up in the classroom in order to refer to it at a later stage. This negotiation process can contribute not only to the competence to participate, but also to the competence to plan and realize, the ability to empathize and solidarize, and the competence to motivate oneself and others. The teacher's role during this phase will resemble that of a moderator.

4.2.2.8. Lesson 3 – Activity 2: Post-Reading Task

This stage was inspired by an idea by Matthewman (cf. 93) and adapted in order to fit the purposes of this teaching unit. Taking "Classic Combo" as a starting point, students are meant to individually trace the (geographic and economic) ways their favourite food goes until it arrives on their plates/ in their cups. The aim of this is that students

become aware of where their favourite foods come from. It might be useful to restrict the activity to the favourite breakfast meal, for instance, as this would limit the number of possible ingredients (I recommend doing so especially if the teaching plan has to be adapted for a younger audience). Even though the main idea is for students to do their own research, the teacher has to provide sufficient help, as tracing these facts is not an easy task. Various issues can be raised during this activity: e.g. country-of-origin labels on products which are likely to contain products from different countries and the power relations behind these; the fact that this kind of information is very difficult to find etc. Another way of reducing the work load of this step is to have each student pick two to three ingredients of their favourite food and then research those areas in the world where these ingredients are most likely to be produced. A very helpful webpage for this research is nationmaster.com, which lists the products each country exports (see list of works cited). One (easy) example could for instance be orange juice. The oranges might be grown in Spain from where they could, for instance, be transported to another country, where orange juice concentrate is produced. This might then be taken to another place, where the concentrate is used to bottle the juice, which is then transported to a super market chain. During the research phase the poster with the graphic representation of "Classic Combo" can help students in structuring their favourite food's story. The outcome of this stage should be a short text which summarizes the research findings, or a graphic narrative inspired by "Classic Combo". The students decide which of the two options they want to choose. In case the students cannot finish the research on the three ingredients at school, they should finish their research and texts as homework.

Regarding *Gestaltungskompetenz,* this activity can help students develop the competence of "*weltoffener Wahrnehmung*" by initiating reflection on the ways their favourite foods arrive on. Additionally, the "competence to participate" and the "competence to plan and realize" can be driven by that same reflective process. The insight that not all of these ingredients have always been available to us can also help students see once more the interrelations between global developments of the last decades and their own local lives (cf. "competence for remote reflection").

4.2.2.9. Lesson 4 – Activity 1: Tracing Favourite Foods

With the help of the students' research findings, the global perspective of economic food networks is shown on a map. The aim of this step is for each student to trace their own favourite food's way from its production to the plate. This can be visualized with the help of threads which are pinned onto one common map of the world. This way, this 30-minute activity is able to show students that even if we trace back only the favourite foods of the class, this already includes a global network of interrelations between various places in the world.

4.2.2.10. Lesson 4 – Activity 2: Discussion of Problems & Action-Orientation

In this concluding activity, the students are given the opportunity to discuss the most pressing problems of food that arrives over long distances. This includes not only environmental pollution by transport systems, but also aspects like the use of chemicals to prolong vegetables' shelf lives and the working conditions under which human beings at the other end of the world have to apply these chemicals. The exact issues raised will highly depend on student input and so will the time frame of the activity. In the end, strategies and measures are discussed how each and every individual can make their contribution to reducing the large amount of "food miles". This last reflective step is highly important, as it offers measures for taking action, which involves several parts of *Gestaltungskompetenz:* the competence to work interdisciplinarily and problem-oriented, the competence to participate, to plan and realize, and the abilities to empathize and to motivate.

5. Conclusion

What's important is not what's gone, but what remains.
Yann-Arthus Bertrand 1h 27'27"

This paper has discussed ways in which literature for young readers can contribute to a promotion of skills which can help make our society more sustainable. After defining sustainability as an ideal state our society should aim for, I went on to discuss benefits of raising controversial issues with children. Various reasons were given for engaging young learners in creating a sustainable society, not although, but because they are young. As a next step, principles for teaching sustainability were established, and the role of EFL teaching for sustainability education was addressed. This step was followed by a brief account of how literature is particularly well-suited for teaching aspects of sustainability. The second part of this paper has tried to use this theoretical foundation in order to develop suggestions for teaching about our dependency on petroleum and industrial food production processes.

What can be inferred from these suggestions is that if one manages to break sustainability down into various facets of our world, and still show the high degree of interrelatedness our world is characterized by, teaching sustainability becomes a "mission: possible?!" rather than remaining a "mission: impossible?!". However, in order to investigate the possibilities of sustainability education to become a "mission: accomplished?!" further research is needed. I hold the opinion that sustainability education will probably never reach the status of a "mission: accomplished!" because sustainability education very much aims at learner's attitudes and values, which resist absolute evaluation for once and all times.

Human beings have exerted considerable influence on each other and their natural environment. However, as the quotation at the beginning of this conclusion suggests, we have to change our practices and attitudes in order to save resources, species and spaces that are still left. "It's too late to be a pessimist" (Bertrand 1h 21'16"). Consequently, we have to positively encourage our students to embrace change, and we can do so by addressing sustainability-related problems with their manifold

interconnections whenever there is the chance to. This way, school can claim its authority in promoting engagement in issues which are regarded relevant for society; and what could be more relevant than creating the future we are all facing together?

I hope this paper has shown that, while no big steps can be made in sustainability education, it might be possible to contribute to an array of small steps by raising learners' awareness and encouraging them to critically question the status-quo. Especially education has the potential of improving current practices and especially young people have to be made concerned by the issues, since the future of our planet belongs to them. Nevertheless, the steps this paper suggests can only be considered small in comparison with what still has to be achieved in order for our society to be called *sustainable*. In the face of knowing this, we have to keep on encouraging our children to take action into the right direction, however small the actions might be:

> Unless someone like you
> cares a whole awful lot,
> nothing is going to get better.
> It's not.
>
> (Dr. Seuss)

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7. Appendix

7.1. Teaching Procedure 1 – Petroleum Dependency

Topic	**Dependency on Petroleum – *Empty* by Suzanne Weyn**
Form/ CEFR-Level	7-8 (AHS), B2
Objectives	By the end of the lessons the students should…

… have expanded their vocabulary by important expressions in the world field of oil and petroleum
…know some of the text types a newspaper contains
…have trained their text editing strategies
…have developed awareness about the amount of products we use every day whose production is dependent on petroleum
…be able to name some problems petroleum shortages involve
…be able to see how differences between poorer and richer people increase as the price for petroleum rises.
…know some individual strategies for reducing the amount of petroleum their lifestyle needs.
…see that they as individuals cannot reduce/ influence all uses of petroleum.

Gestaltungskompetenz:
ability to deal with predictions, competence to work interdisciplinarily, competence of "*weltoffener Wahrnehmung"*, competence to participate, competence to plan, ability to empathize, competence to motivate oneself an others, competence for reflection about motives for acting

Duration	about 9x 50'

Lesson No.	Time Frame	Procedure	Aims	Interaction Format	Language Skills	Materials
1	15' – 20'	**Which everyday products contain/ are made with the help of petroleum?** 50-60 Pictures are distributed on the floor Task 1: *Find out the topic of the next lessons*.(2-5') Task 2: *Sort the pictures according to the following 2 categories: "petroleum needed for production" and "production without petroleum possible"* (10-13')	Introduction to the topic Raising awareness for the amount of everyday products that need petroleum in their production process	T ↔ SSS; SSS sort pictures	Listening Speaking	50-60 Pictures containing by-products of petroleum and products made without using petroleum *(List of suggestions: http://www-tc.pbs.org/independentlens/classroom/wwo/petroleum.pdf)*
	15' – 20'	**Pre-Reading Task 1:** Task 1a: *Think about the word "empty"* - Brainstorming Task 1b: *Look at Picture 1. What does it allude to? What does it criticize? Discuss with your partner what it could have to do with the book we are going to read.*	Introduction to topic Activation of prior knowledge	SSS pairs	Speaking	Picture 1
	10'	**Pre-Reading Task 2:** *Picture 2 is the book cover of the next book we are going to read. Guess what the book is about and with the help of Pictures 3 & 4, make suggestions on what the book's plot and characters could be like.*	Activation of prior knowledge Trying to anticipate the plot of the book	T ↔ SSS	Speaking Listening	Picture 2: Book Cover *Empty* Pictures 3 & 4: Text from Weyn p. 123 turned into signs
	time left	**Starting to Read** *Start Reading. Read up to p. 11*	Prior knowledge is activated → finding into the plot.	S	Reading	Copies of p.1-11 of *Empty*
Homework: Read up to p. 11 - **Task:** *Write the article Tom gets to read. You may use all information you got up to p.11 and you are allowed to look up information on the Internet (as long as it's not taken from the book!). Make sure you look up where Venezuela is and to mention reasons for the war. You are allowed to make up information, but stay realistic – it's a newspaper article, after all. What does the war have to do with oil? Is this a realistic scenario? (Mind: reported speech and neutral tone typical of newspaper articles!)*						

Lesson No.	Time Frame	Procedure	Aims	Interaction Format	Language Skills	Materials
2	30’	**Reading Time** *Read up to p.32*	Devoting time to reading in class	S	Reading	*Empty*
	20’	**While-Reading Task:** **Creating a newspaper as a class** (incl. advertisements etc.) Brainstorm ideas as a class first, then decide who takes over which part Students start writing	Knowing some of the main text types a newspaper contains Using their imagination to create a bigger picture of the aspects of life which change if the world is running out of petroleum	T ↔ SSS S or pairs	Speaking, Writing	Handout 1: Possible Items of the Next Issue of the North Country News
Homework: *Write your text at home.*						
3	15’	**Peer Correction** Afterwards: S hand in texts, T creates newspaper and puts it up in the classroom	Training strategies of text editing	pairs, or groups of 4	Speaking, Listening	Texts from homework
	35’	**Reading Time –** Beginning of open learning	Reading at their own speed, researching additional information, completing various while-reading tasks	S	Reading, Writing, Research	Handout 2 : Open Learning (3 Pages)
Open Learning 4 lessons. While Reading-Activities, results collected in the form of a portfolio.						
8	50’	**Post-Reading Task:** *Create a Pictogram-Summary OR a Book-Trailer* (Students choose)	Summing up the most important aspects of the book	T ↔ SSS, S	Speaking, Writing, Drawing	

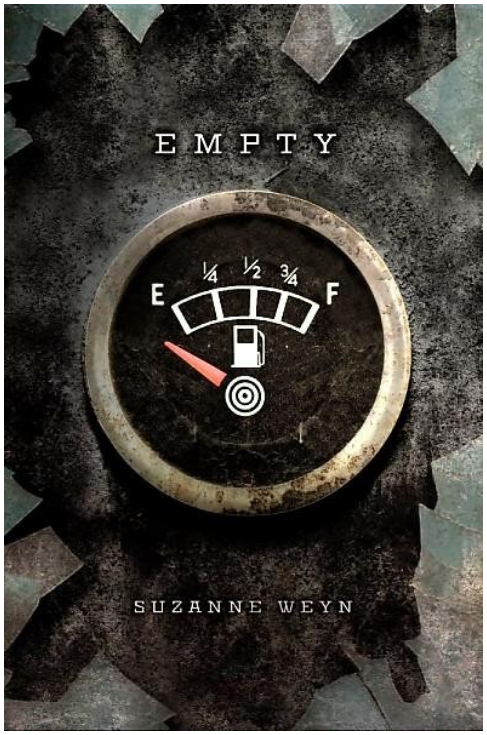
Lesson No.	Time Frame	Procedure	Aims	Interaction Format	Language Skills	Materials
9	20’	**Reflection on book** *How did you like the book?* *What did you (not) like?* *What did you find especially interesting/ astonishing/ disturbing?* *What is the main point the book wants to make?* *Which passage did you like best/least?* *Which character did you like best/least?*	Reflecting on the plot and characters and the book’s meaning	T↔ SSS	Speaking, Listening	
	30’	**Reflection & action-oriented task: Standpunkt – Weg – Zukunft** (cf. Haberl, Niederbichler et al. 43) Students create one poster per group. They think about the status quo of our petroleum dependency, create an ideal, but realistic future and try and find ways of getting there and measures which can support this development They gather ideas for reducing the amount of petroleum they use with the products they buy	Thinking about the status quo of petroleum dependency in our world Imagining an ideal future Finding individual strategies for reducing the amount of petroleum used Seeing that petroleum cannot be completely removed from their lives	groups of 4	Speaking, Writing	1 poster/ group Internet access (Useful: Watching Eric Valli’s “Das Ende das Erdöls” in the context of another subject before creating the posters)

7.2.Teaching Materials – Dependency on Petroleum

7.2.1. Pre-Reading Task 1b – Picture 1

Source: https://fbcdn-sphotos-h-a.akamaihd.net/hphotos-ak-frc1/t1.0-9/10155818_10151946416766213_4604990411013730882_n.jpg

7.2.2. Pre-Reading Task 2 – Picture 2

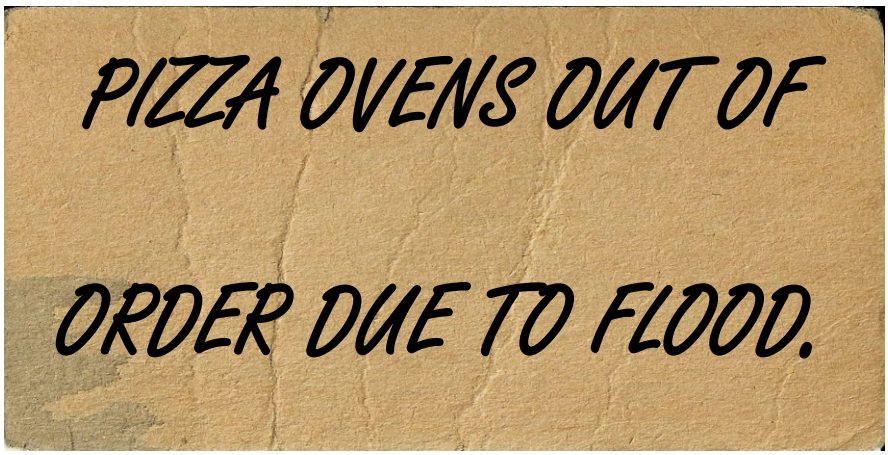


Source: http://luxuryreading.com/wp-content/uploads/2011/04/empty.jpg

7.2.3. Pre-Reading Task 2 – Picture 3

Text Source: Weyn 123. **Image Source**: http://2.bp.blogspot.com/-VjVUoMQ98XY/UsMeBM-H6MI/AAAAAAAATCw/5UN0fHMyq1o/s1600/1955+Bowman+%23202+Mantle.jpg

7.2.4. Pre-Reading Task 2 – Picture 4



Text Source: Weyn 123. **Image Source**: http://2.bp.blogspot.com/-VjVUoMQ98XY/UsMeBM-H6MI/AAAAAAAATCw/5UN0fHMyq1o/s1600/1955+Bowman+%23202+Mantle.jpg

7.2.5. Handout 1 – Possible Items of the Next Issue of the North Country News

Take notes about the contents of those items you do not know. Try to decide on 2 or 3 items you would like to write.

First Page

Local News

International News

Business News

Science News

Technology News

Sports News

Entertainment News

Celebrity News

Travel Article

Letters to the Editor

Local Weather

Comics

Restaurant Reviews

Book Reviews

Television & Radio Programme

Obituaries

Lonely Hearts Advertisements

Advertisements

7.2.6. Handout 2 – Open Learning

During the next 4 lessons you will be expected to finish reading *Empty* by Suzanne Weyn. Remember to do some reading at home. As you go along, there will be several tasks to do. Sometimes you will get the chance of choosing between two alternatives. Mind that you do not have to do the tasks exactly on the pages described, but you should not wait too long with doing them either, because they are meant to help you improve your understanding of the book.

Collect all the work you do and provide a list of sources whenever you use material that is not your own. You may answer the questions directly on the handouts where possible.

p. 41-47 (before or after reading)

Mr. Curtin describes the USA's dependency on foreign oil. What does foreign oil dependency mean?

Look up some statistics and facts on foreign oil dependency in the US and Austria and insert them here.

What is problematic about foreign oil dependency?

Find out if electricity is produced in the same way around the world. How is most of it produced in Austria and how in the USA? What consequences does that have?

What do differences in income and wealth mean in the world of *Empty*? How do the worlds of rich and poor people differ? To what extent is the world of *Empty* the same as/ different from our world in this respect?

before reading p. 57

Mini-Research: How much oil is left on our planet? How can we tell? Can you find figures and facts which seem very certain? How long do people expect the oil resources to last? What's the problem in predicting this time span?

after reading p. 80-81

Stephy says "Everything's going to go back to normal now." on p.80. Do you agree with her opinion? What makes you think so and why? What do you think will happen next?

How does hurricane evacuation usually work in the USA? Watch some videos on YouTube or read up on that matter and take notes here. What does emergency evacuation look like in European countries? Are there any differences and if so, which ones? Can you imagine reasons for any differences in emergency evacuation between the US and Europe?

Choose either p. 111 or p. 113 and do not read on.

a) p.111: What does Gwen stare at? Where is she? What does she find? Continue the story and write the next 250 words at least.
b) p. 113 (STOP READING after "But what was this place?"): Where is Gwen? What has she found? What does she do now? Continue the story and write the next 250 words at least.

Complete this task on a separate sheet of paper, please.

p. 182 (before or after reading)

What measures does Sage Valley take in order to become a green town?

Do you know a town which has attempted taking similar measures in reality? If you do not know a town, try finding one on the Internet. Do not forget to name all your sources.

Explain the term *self-sufficient energy.*

Explain what these quotes from the novel mean:

"This is how we're going to be living now. If we can't eat it, we're going to burn it." (p. 52)

"But is it the end of the world, or only the end of the world as we've always known it?" Tom considered. (p. 141)

7.3.Teaching Procedure 2 – Industrial Food Production

Topic	Industrial Food Production – "Classic Combo" by David Heatley
Form/ CEFR-Level	7-8 (AHS), B2
Objectives	By the end of the lessons the students should…

…know the most important items of vocabulary needed to describe industrial food production
…be able to describe the most important global processes of industrial food production
…have begun building awareness of how the food they consume influences people in other places
…have acquired strategies how each individual can contribute to a reduction of food transports
…know which country their favourite food comes from
…have tried one way of creating a graphic representation of the processes described in a narrative

Gestaltungskompetenz: competence of "*weltoffener Wahrnehmung"*, competence to participate, competence to plan, competence to empathize, competence to motivate oneself and others

Duration	4x 50'

Lesson No.	Time Frame	Procedure	Aims	Interaction Format	Language Skills	Materials
1	10’	**Introduction to the Topic** T shows 2 pictures, takes notes on board *“How often do you eat junk food?” “What links these two pictures?” “In how far could (junk) food be harmful to the environment?”*	Activation of Prior Knowledge Connecting the topic to students’ lives Showing the topic’s global relevance	T ↔ SSS	Speaking Listening	picture 1: burger, chips and a soft drink picture 2: planet earth being held by two hands
	20’	**Watching Film Sequence of “Home”** – each student on their own, if possible (computer, headsets, with subtitles) Sequence Relevant: 15’30” – 31’00” Task: *Write down expressions you think are especially important. Take notes regarding anything you find especially astonishing, disturbing remarkable.*	Establishing the Context of Industrial Food Production Hearing relevant vocabulary Raising awareness for important aspects of food production by taking notes	S	Listening	Film “Home” by Yann Arthus-Bertrand available in full length on YouTube
	20’	**Reflection on the Film Sequence** Comparison of Words, other Notes, discussion of important aspects of the film sequence	Discussing the issues raised by the students regarding what they found astonishing/ disturbing/ remarkable Collecting a list of vocabulary useful for describing processes in the food production industries	T ↔ SSS	Listening Speaking	

Lesson No.	Time Frame	Procedure	Aims	Interaction Format	Language Skills	Materials
2	5’	**Revision of issues raised in Lesson 1** Same questions as above Make them aware of any differences to the first time this exercise was carried out.	Activation of prior knowledge Detecting differences to the first time this exercise was carried out	T ↔ SSS	Speaking Listening	2 Pictures
	30’	**Reading “Classic Combo”** **While-Reading Task:** *Try to formulate the story together, first. Then create a flow-chart or similar graphic representation of the processes described.*	Using the graphic text to create a verbal story Seeing the steps behind industrial food production Getting an overview over the most important processes in industrial food production by creating a graphic representation	Groups of 2-3	Reading Speaking Listening	Copies of “Classic Combo”
	15’	**Student Presentations** of flow charts	Seeing how other groups structured their flow chart	Groups ↔ SSS	Speaking Listening	flow charts created earlier
3	20’	**Negotiating** the best version of the processes – can involve merging various ideas from different graphics	Negotiating democratically the best way of representing the processes of industrial food production	T ↔ SSS	Speaking Listening	flow charts created earlier
	30’	**Telling your favourite food’s story** **Post-Reading Task**: *Inspired by ‘Classic Combo’, tell (write/draw etc.) the story your favourite food lives through until it ends up on your plate/in your cup.*(cf. Matthewman 93) Research aspects you do not know on the internet.	Developing an awareness of where one’s favourite food comes from Dealing with the subject creatively	S	Reading Writing	Internet access
Homework: *Finish your research and tell your story.*						

Lesson No.	Time Frame	Procedure	Aims	Interaction Format	Language Skills	Materials
4	30’	**Tracing the group’s favourite foods** on a map of the world/of Europe	Seeing the (global?) network of industrial food production for the favourite items of food	SSS	Reading Listening Speaking	Internet Access Map of Europe/ the World Threads of Wool
	20’	Discussing **problems of food that comes a long way & possibilities to shorten these long ways** Task: *Create a poster to be put up in school: Ways of reducing the long ways food comes and reasons why we should do so.*	Developing an awareness of some of the problems long transport of food involves Developing action strategies of how to reduce these long ways	T ↔ SSS	Speaking Listening	Poster

7.4.Teaching Materials – Industrial Food Production

7.4.1. Introduction – Picture 1

Source: http://www.burgerbusiness.com/?p=11226

7.4.2. Introduction – Picture 2

Source: http://friko-diamonddesigns.blogspot.co.at/2012/02/planet-earth.html

Summary (English)

The term *sustainability* has come to be used and misused increasingly often in the last decades and more, and more people acknowledge the crucial role education plays in making our society more sustainable. ELT offers great opportunities for implementing ideas of sustainability education, which is likely to also include aspects of global education and civic education.

The paper gives an overview about what sustainability is and thus shows that the concept goes beyond "green" environmental issues, such as recycling. It then goes on to discuss the benefits gained from addressing controversial problems with children. This is followed by a discussion of some of the most pressing problems involved in the teaching of sustainability. In an attempt to establish principles for making sustainability accessible for teaching it to children and teenagers, the following aspects have been found crucial: Topic areas chosen should not only invite students to reflect on the world and their relation to it, but also exemplify global and local interrelations of ecology, economy, society and politics. Additionally, these interrelations have to be made relevant to the students' daily lives, so that they may inspire the students to actively take their parts in establishing sustainable practices. Raising problems which take account of these principles can help students develop what Gerhard de Haan has named *Gestaltungskompetenz,* which consists of a set of competences that are needed for the development into a more sustainable society. Consequently, the acquisition of these competences should be enabled by sustainability education. In the next step, reasons are given why the inclusion of sustainability-related problems in EFL teaching is worthwhile. After explaining why narrative children's and young adult literature is particularly suited for teaching about sustainability, the concept of narrative empathy is described briefly. In the more practically oriented second part of the paper, two texts are used to exemplify the application of the principles established in the first part. The first set of teaching suggestions was developed around Suzanne Weyn's *Empty* and raises the problem of our society's oil dependency. The second teaching unit is based on David Heatley's "Classic Combo" and addresses global food production processes.

Zusammenfassung (German Summary)

Der Begriff “Nachhaltigkeit” hat sich in den letzten Jahrzehnten immer mehr zu einem Modewort entwickelt. Bildung wird immer wieder eine zentrale Rolle dabei zugesprochen, unsere Gesellschaft nachhaltiger zu gestalten. Der Englischunterricht bietet hervorragende Möglichkeiten Aspekte und Ideen des Nachhaltigkeitsunterrichts zu integrieren, der sich auch durch eine große Nähe zu Politischer Bildung und Globalem Lernen auszeichnet.

Die Arbeit gibt zunächst einen Überblick darüber was Nachhaltigkeit ist und zeigt dabei auch, dass das Konzept weit über „grüne“ Umweltthemen, wie z.B. Recycling hinausgeht. Nach der Herausarbeitung von Vorteilen, die die Behandlung von kontroversen Sachverhalten mit Kindern und Jugendlichen mit sich bringt, werden die größten Probleme besprochen, die im Unterricht von Nachhaltigkeit involviert sind. In einem Versuch Nachhaltigkeit für den Unterricht zu operationalisieren, haben sich die folgenden Punkte als zentral herausgestellt: Themenbereiche, die im Unterricht bearbeitet werden, sollen SchülerInnen nicht nur die Möglichkeit zur Reflexion über die Welt geben, sondern auch beispielhaft globale und lokale Wechselbeziehungen zwischen Umwelt, Wirtschaft, Gesellschaft und Politik aufzeigen. Weiters sollen die Themen in hohem Maße SchülerInnen- und Handlungsorientierung aufweisen, da SchülerInnen nur so Nachhaltigkeit als für ihr Leben relevant erfahren können, was eine Grundvoraussetzung für die Fähigkeit zum nachhaltigen Handeln darstellt. Werden Themen mit diesen Eigenschaften im Unterricht immer wieder angesprochen, so ermöglicht das den Erwerb von einer Reihe Kompetenzen, die Gerhard de Haan zum Begriff *Gestaltungskompetenz* zusammengefasst hat, und die eine nachhaltigere Entwicklung der Gesellschaft ermöglichen sollen.

Der nächste Schritt begründet warum sich insbesondere der Englischunterricht eignet um nachhaltigkeitsrelevante Themen anzusprechen. Nachdem erklärt wird, warum sich narrative Kinder- und Jugendliteratur im Speziellen anbietet um Nachhaltigkeit zu unterrichten, wird das Konzept der narrativen Empathie kurz beschrieben. Im praxisorientierten letzten Teil der Arbeit, werden jene Prinzipien beispielhaft umgesetzt, die zuvor besprochen wurden. Die dabei entstandenen Unterrichtsideen

greifen einerseits auf Suzanne Weyns Jugendroman *Empty* zurück, der Anlass bietet um die gesellschaftliche Abhängigkeit von Erdöl zu thematisieren. Andererseits wurde der graphische Text „Classic Combo“ von David Heatley als Ausgangspunkt für die Beschäftigung mit globalen Prozessen der industriellen Nahrungsmittelproduktion gewählt.

Wissenschaftlicher Lebenslauf

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- englischsprachige Kinder- und Jugendliteratur
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- Fachdidaktik von Englisch als Fremd- und Zweitsprache
- innovative fächerübergreifende Ansätze der Fachdidaktik – z.B. CLIL