

Article

# Educating Professionals for Sustainable Futures

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Received: 30 November 2017; Accepted: 24 February 2018; Published: 26 February 2018

**Abstract:** The recent discourse on sustainability science calls for interdisciplinary research. The home economics science approach ranges from individual actions to the involvement of communities and societies at large, and thus it can provide important perspectives on cultural sustainability. The aim of the research is to study the linkage between cultural sustainability and service sector education to support the creation of sustainable professions. In the present small-scale empirical study, the food service degree curriculum of a Finnish vocational college and teachers' group interview data were analyzed to find how cultural sustainability is presented in the curriculum and how it is understood by teachers and integrated into teaching practices. Previous cultural sustainability research identifies four perspectives of cultural sustainability: (1) vitality of cultural traditions; (2) economic starting point; (3) diversity together with maintenance of local culture; and (4) possible influence on the balance between human actions and environment. Findings indicate that sustainability, including cultural sustainability, is integrated in the curriculum and considered important by teachers. Translating these into practice remains a challenge. The balance between human and nature was mostly understood as recycling, use of public transport, sustainable consumption, and taking trips to the nature nearby. Cultural sustainability as a concept is not well known, although themes such as multicultural issues, equality, charity, and environmental responsibility were included in teachers' practical lessons daily. Feasts and celebrations in learning were opportunities to view cultural sustainability widely. This paper provides a way forward for the teachers to develop further their pedagogical practices.

**Keywords:** cultural sustainability; vocational education; home economics science

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## 1. Introduction

The globally agreed sustainable development goals challenge professional fields to critically reflect and revise current educational programs and practices from a sustainability perspective. Sustainability can be considered both as an inherent goal for any professional activity and as means to sustain the viability of professions. Cultural sustainability, as one of the pillars of sustainable development, has been given increasing emphasis in sustainability research [1]. This paper analyses the linkage between cultural sustainability and service sector education to support the creation of sustainable professions. We discuss cultural sustainability as a critical aspect of sustainable development and discuss its transformative potential for future professions. This paper analyses cultural sustainability in the context of vocational education, more precisely the food service degree provided in the hotel, restaurant, and catering program in Stadin Ammattiopisto vocational college in Finland. We focus on analyzing the curricula for the food service degree and study how teachers understand and integrate cultural sustainability in their teaching.

Sustainable development can be enhanced through human activity at levels of individuals, communities, organizations, and societies. Home economics as a scientific field [2,3] pays attention to human activity at these various levels. The home economics science approach [2–4] is used here to link the private and public spheres of life. In addition, from an organizational perspective [5], sustainability

practices can enhance economic and environmental performance, market position, competitive advantage, and a commitment to employees and the local community. While sustainable behavior requires attaining a balance between the economic, environmental, and social dimensions in the management of organization, more attention should be given to potential of individual professionals to generate change within their institutions [5]. Understanding individual-level attitudes, motives, beliefs, intentions, and values will help to inform organizational sustainability efforts [6].

According to UNESCO [7], education for sustainable development is both holistic and transformational. It pays attention to learning content and outcomes, pedagogy, and the learning environment. It empowers learners to take informed decisions and responsible actions, keeping in mind environmental integrity, economic viability, and a just society both for present and future generations, as well as respecting cultural diversity [7]. The United Nations Decade on Sustainable Development in Education (2005–2014) intended that the principles of sustainable development be included in national curricula throughout educational structures [8]. Boeve-de Pauw, Gericke, Olsson, and Berglund [9] critiqued the decisions and implementation strategies based on policy recommendations and gut feelings by practitioners and call for empirical studies to create links between the discourse and practice of education for sustainable development. As an example, Cebrian and Junyent [10] showed the disconnection between existing theoretical frameworks related to sustainability and education for sustainable development competencies in Spanish teacher education. They [10] suggested that the existing theoretical frameworks for education for sustainable development need to become more alive and integrated within the existing teacher education curriculum to promote awareness and development of education for sustainable development competencies amongst student teachers. Their study pointed out that student teachers understand education for sustainable development as an education that focuses mainly on the natural environment, instead of providing a more integrated vision, where social, environmental, economic, and cultural aspects are interrelated and essential to work in the school environment to provide students with more holistic and complex worldviews [10].

Sustainable futures cannot be created without professionals who acknowledge the importance of sustainability as a transformative power. Sustainability Leadership Relational Model [11] views leaders' multiple roles not only in promoting sustainability but also in increasing the interactive processes for creating and implementing innovative and sustainable changes in organizations. Sustainability leadership practices call for taking responsibility, embracing creative tension, and being able to experiment, learn, and adjust, amongst several other practices [11]. This needs to be recognized in educating future professionals and leaders. A recent study on Ghanaian and Finnish home economics science students [4] focused on students' creative thinking concerning the future lives and homes of individuals and families living. Students were found to be able to envisage future scenarios, but they would need to be increasingly encouraged to do so. According to Janhonen-Abuquah and Edjah [4], students should be encouraged from the beginning of their studies not to take educational knowledge as a given, but to understand their roles as future developers of the field. In other words, students need to take on an active role in thinking about, critiquing, and creating useful knowledge for themselves and the future of home economics. Students also ought to be actively encouraged to envision their own future professional profiles and not wait for others to do this for them [4].

Sustainability is a key challenge for educating future professionals in home economics-related fields. Previous analyses on the perspectives of future home economics professionals on their understanding of the home economics field in general [3,12], of gender [13], and of the future [4] have motivated this present analysis of cultural sustainability in service sector education. The International Federation for Home Economics [14] states that education in home economics-related programs at different levels of education can be critical to improving food security, eradicating poverty, and making progress in quality of life, sustainable consumption, and the production of households and communities. All these are critical to achieving the global sustainable development goals. As an example, home economics-related education can support the development of sustainable tourism, which creates jobs and promotes local culture and products (SDG 8, target 8.9 [15]). An

analysis of home economics teachers' annual teaching plans in Finnish comprehensive schools by Janhonen-Abreuquah et al. [16] pointed out the potential role of home economics education in understanding various dimensions of cultural sustainability. In this present study, we use a home economics science approach to understand the interconnectedness of individual and professional practice and suggest how cultural sustainability could be taught and used in vocational education contexts.

## 2. Cultural Sustainability

The role of culture in sustainable development is gaining increasing attention, as achieving sustainability goals essentially depends on human accounts, actions, and behavior, which are, in turn, culturally embedded [17] (p. 1). The United Nations sustainable development goals recognize cultures and civilizations as crucial enablers of sustainable development and emphasize the importance of fostering intercultural understanding, tolerance, respect, and shared responsibility [15]. Culture as a broad concept needs to be defined for the purpose of the present study. Through the extensive work on cultural sustainability, Soini and Dessein [17] defined culture in three different ways. Firstly, culture can be defined as capital, where culture is seen both as a process of intellectual, spiritual, and aesthetic development and the results of intellectual and artistic works. The second definition sees culture as way of life because culture regulates and gives meaning to all spheres of life. The third definition is the widest, where culture is seen holistically in intentional and unconscious behavior and social life, and is viewed through its semiosis and significations. Home economics approaches culture as a way of life [18].

Within sustainable development, Soini and Birkeland [1] proposed three different representations for culture. Firstly, culture is seen as the fourth pillar, parallel to economic, social, and ecological sustainability. The importance lies in the conservation, maintenance, and preservation of the different forms of cultural capital. The second representation sees culture having a mediating role in sustainability. Both material and immaterial culture is seen as a resource for economic development. Cultural values need to be considered when aiming for ecological and social sustainability. The third representation sees culture as sustainability and sustainability thus becomes embedded in culture. Cultural sustainability is approached through storylines of cultural heritage, cultural vitality, economic viability, cultural diversity, locality, eco-cultural resilience, and eco-cultural civilization [1]. Soini and Dessein [17] further theorized culture and its role in development, in society, and in nature. They also focused on the value of culture and the modes of governance and policies. These dimensions of cultural sustainability are discussed in relation to inertia and dynamics as well as in relation to whether the approach is anthropocentric or eco-centric [17].

In our previous study [16], we analyzed the role of cultural sustainability as part of planning home economics education in comprehensive schools. Finnish society has become increasingly multicultural and one's daily life is surrounded by a mixture of cultural practices; thus, cultural sustainability is practiced in a new context. Through home economics education, there is a possibility not only to sustain and maintain local culture, but to carry out interpersonal communication and thus increase intercultural understanding. This study shows how home economics education can serve as means to transmit cultural practices [16]. Contextual understandings of gender in home economics [13] show how culture is represented and reproduced in everyday practices as well as in larger structures.

## 3. Cultural Rights

In the context of education, approaching cultural sustainability from a rights perspective highlights equity and social justice as the ultimate goals of education and professional activity in home economics. Cultural rights in sustainability discourse turn the attention to individuals, both learners and customers. Cultural rights, as a part of the United Nations declaration of human rights [19], seek to guarantee equality for everyone to freely participate in the cultural life of the community as well as cherish and nurture one's own culture [20] (pp. 9, 105). Cultural rights were defined in more detail in the 1966 International Covenant on Economic, Social, and Cultural Rights agreement [21]. Cultural

rights include objectives such as the right to the cultural heritage, the right to language and cultural interaction, the right to education, the right to choose your own culture and participate in the cultural life of the community, the right to creative work, and the right to freedom of expression and freedom in science and art. All of the above must be realized regardless of age, language, gender, sexual orientation, disability, religion, cultural heritage, or wealth [21].

UNESCO has taken a strong stance in the promotion of cultural rights and human rights article 27, 'The right to take part in cultural life.' Several plans of action to promote cultural rights, such as the Universal declaration on cultural diversity [22], Convention on safeguarding of intangible cultural heritage [23], and Convention on the protection and promotion of the diversity of cultural expressions [24] have been adopted. United Nations bodies, including the Committee on Economic, Social, and Cultural rights (CESCR) as well as the Human Rights Committee, and independent experts on cultural rights have been working to raise the important issue of cultural rights as a part of human rights [25].

Public debate on cultural rights has, however, often focused on minority groups. This has changed in recent years, as cultural rights have started to be seen more as universal rights [26]. Despite the publicity, cultural rights have been criticized by lawyers and have been claimed to be the soft point in human rights [25]. Considering the awareness of cultural rights, their operational implementation has often remained obscure. To ensure successful results, it is essential that cultural rights are taken into account at all levels in policy-making [26]. For a culturally sustainable future, cultural rights should be noticed not only in policy-making but also in all levels in society. Local communities and people should be heard, and human history and its injustices should be discussed openly [25].

As a concrete example of how cultural rights can be promoted through a successful catering business idea, we briefly introduce the Dining in the Dark concept [27], where fine dining takes place in a restaurant that eliminates any trace of light and the diners enjoy a full gastronomic menu in complete darkness. The food is prepared by sighted chefs, but waiting staff and guides are visually impaired or blind. The experience gives sighted guests an impression of how a disabling society constructs blindness-related problems and provides opportunities for conversation with blind and visually impaired guides and servers [27]. The world's first restaurant operated in complete darkness was opened in Switzerland in 1999. In the following years, restaurants called *Blindekuh*, *Blind Man's Bluff*, *Unsicht-Bar*, *Invisible Bar*, *Dans le Noir*, and several others were opened. In addition, organizers such as commercial event organizers, social entrepreneurs, and schools and organizations for the blind have begun presenting Dining in the Dark events from time to time. In a study by Edensor and Falconer [28], diners appreciated the insights provided by the experience into the realities of the blind and visually impaired. Dining in the Dark opens opportunities to promote blind culture and celebrations of blindness through the role reversal in power status, as it re-orientates the locus of the "problem" of blindness to a disabling environment [27].

The notion of cultural rights has helped us to clarify the significance of culture in education and professional life. It turns the attention to the rights of individuals to sustain and develop our culturally embedded selves. In the context of this study, individuals are viewed as learners and future professionals. In home economics-related professions, such as service sector professions, respecting the rights of the customers forms a key element of culturally sustainable practice.

#### **4. Empirical Study of a Food Service Degree**

The empirical section of this article is based on a small-scale empirical study carried out in a vocational hotel, restaurant, and catering program, referred to hereafter as a food service degree, at Stadin Ammattiopisto vocational college in Finland. The aim of the study was to explore how cultural sustainability is portrayed in the new vocational education curriculum, which was introduced in 2015. Besides analyzing the new curriculum from a cultural sustainability perspective, the purpose was to study teachers' views of cultural sustainability in order to find practical approaches to teach cultural sustainability and use it as an approach for pedagogical renewal. Research questions for the

empirical study are as follows: How is cultural sustainability presented in the vocational education curriculum? How are the curriculum contents and aims of cultural sustainability interpreted and translated into teaching practices? What kind of teaching content, methods, and practices are used in teaching cultural sustainability?

The structure of vocational basic education programs in different fields is uniform in Finland, and its extent has been defined as 180 ECTS (European Credit Transfer and Accumulation System) credits [29]. Studies consist of compulsory and optional professional studies as well as common studies, such as communication and interaction skills; social and working life skills; and mathematics. This study focuses on a food service degree, of which the average duration of study is three years. Stadin Ammattiopisto, a vocational college in Helsinki, Finland, educates both young (16 to 20 years) and mature students. Sustainable development themes are stated as the core values of Stadin Ammattiopisto. They are a visible part of practical work, but focus mainly on areas of ecological sustainability. The hotel, restaurant, and catering sector's values are described in the national curriculum as responsible, tolerant, equal, and respectful of different cultures and human dignity. The values underline social responsibility, cultural heritage, and respect for diversity [29].

The research data collection started with gathering all available food service degree curriculum documents. Choosing to study the curriculum and educational documents directs the methodological path of the study. Curricula are always written at a certain time and reflect the society for which they were planned. Therefore, study of curricula always includes a political dimension [30]. Atkinson and Coffey [31] (p. 47) referred to documents as 'social facts which are produced, shared, and used in socially organized ways'. Through document analyses, a systematic procedure for reviewing documents [32], existing curriculum documents were scrutinized to detect elements of cultural sustainability. As curricula are written to guide teaching and learning, they do not reveal what takes place in classrooms after the teacher has closed the door. Thus, the documents cannot be treated as accurate recordings of events that have occurred [33]. Documents are prepared without researchers' intervention and are stable and suitable for repeated analyses. The unquestionable advantages of using documents as data are rather pragmatic. As they are public domain, they are obtainable without authorial permission, and it is a less costly and time-consuming way of collecting data compared to many other techniques. In this study, the entire curriculum for the hotel, restaurant, and catering field is 203 pages long. To keep the data manageable in size but credible enough to give an overall picture of a chef's studies, six sections were chosen for document analyses. Three compulsory professional study modules that are key competence areas in a chef's studies were chosen: (1) providing accommodation and catering services; (2) preparation of lunch services; and (3) preparation of portion dishes. Three general study modules—(1) cultural knowledge; (2) arts and culture; and (3) environmental knowledge—were also chosen, as they were the ones expectedly linked with cultural sustainability. The selected parts cover 29 pages of the curriculum and over half of the study credits required for the chef's professional degree.

The previous cultural sustainability research [1,17,34] identifies four perspectives of cultural sustainability: (1) vitality of cultural traditions; (2) economic starting point; (3) diversity together with maintenance of local culture; and (4) possible influence on the balance between human actions and environment. These perspectives structured data selection and guided qualitative deductive content analyses. The perspectives were first identified from the curriculum. The same perspectives were used in creating discussion themes for the teachers' interviews. The curriculum texts and interview transcripts were coded according to these four perspectives. Units of analyses were sentences or a full idea expressed in a couple of sentences. While analyzing the curriculum data, it was found that the coding was at times interpretative. Perspectives were harder to identify in the professional study modules and were more prevalent in the curricula for general study modules focusing on societal issues.

As document analysis can rarely provide sufficient detail to fully answer a research question, the documentary evidence is often combined with other forms of data to minimize bias and establish

credibility [30]. In this research, document analyses were complemented with teachers' interviews and researchers' practitioner knowledge of the research context. Seven teachers with different professional backgrounds were invited for a group interview. A group interview was chosen to accommodate teachers' tight schedules and to allow the group to generate ideas around a less familiar, emerging notion of cultural sustainability. Due to teachers' heavy workloads and time constraints, three vocational teachers—one Finnish as a second language teacher, one environmental studies teacher, and one food studies teacher—took part in the interview, which had a duration of 53 min. The four interview themes followed the cultural sustainability perspectives used in analyzing the documents. First, the vitality of traditions was brought into the discussion. Topics such as ways of using cultural heritage in teaching, participating in cultural events nearby, and recognizing cultural celebrations in teaching were discussed. Second, the financial aspect was brought up. Teachers talked about tourism and the role of money in developing cultural heritage. Third, the diversity of local culture was discussed. The final discussion theme covered the balance between human actions and the environment. Teachers shared ideas of ways to use the local environment in teaching and how to educate students to become active and responsible citizens who engage with the environment.

Some preliminary analyses of the transcribed interview data indicated that it complements the document data sufficiently, and no further interviews were carried out. It should be pointed out that data collection was carried out by a researcher who is herself a professional vocational teacher and thus is familiar with the vocational education context, the new curriculum, and teachers' perspectives. This of course could have brought in some bias, but instead provided a deeper understanding of the context and teachers' views.

## 5. Findings

The findings of this study are presented in the following two sections. Firstly, the vitality of cultural traditions, economic starting points, and diversity together with maintenance of local culture is viewed. Secondly, the possibility of influencing the balance between human actions and environment is discussed.

### 5.1. *Cherishing Cultural Heritage but Seeing Culture as Vital*

Diversity of local culture and its maintenance could be seen in the curriculum as learning teamwork and interaction skills, and participating in multicultural events and art exhibitions. Working and studying in different environments increases students' understanding of cultural diversity. Finnish food and drink culture was widely considered in the curriculum and local companies such as restaurants, museums, and producers were encouraged to be involved in teaching. Traditional Finnish food and drink knowledge, preparation methods, and gastronomical terms, as well as feasts, celebrations, and tradition-related etiquette were mentioned as an essential part of professional growth. Therefore, a vital cultural tradition was strongly represented in the curriculum.

The following extracts from the curricula [35] and the interviews (translation of the used quotations from Finnish to English was done by one of the authors) provide examples of how cultural sustainability is verbalized:

“The student can identify the basic characteristics of different cultures and cultural diversity in their field. They can take into account the key traditions of different cultural groups and their effects in the professional field.”

(Curricula for general studies, Stadin Ammattiopisto [35])

“Students are able to pass on the history, traditions, and changed practices of their own field and compare them to the features of other cultures.”

(Curricula for general studies, Stadin Ammattiopisto [35])

“Should we change our teaching and start to train for example vegetarian cooks? We don’t have such training yet but I think other countries already have these options.”

(Group interview, participant 2)

“Yes, we must definitely be able to specialize, and the curricula must be made and planned more personal for each student.”

(Group interview, participant 1)

As in the curriculum analysis, the teachers also raised the issue of the vitality of cultural traditions and its manifestations in practical work. Teachers considered it important to teach Finnish traditions, but also to incorporate multicultural issues into teaching.

“Yes, I believe that we, teachers in our work, are always trying to encourage each student to bring out their own culture. But we also teach [students] to take into account the country’s own culture.”

(Group interview, Participant 3)

This reflection can also be considered as a signal of recognizing the individual cultural rights of the students. In the quote regarding the training of vegetarian chefs presented earlier, the rights approach can be seen at a programmatic level and oriented towards changing food culture and the need of the professional field to respond to the diversifying needs of customers.

Diversity of local culture and its maintenance was addressed in the teachers’ answers in a manner very similar to the first subject, the vitality of cultural tradition. The importance of family, friends, and eating together were the most discussed issues in this theme.

“Just today we were talking about the experiential aspect of food and eating. The appearance of food also increases mental wellbeing.”

(Group interview, Participant 1)

“They are chefs, so it would be nice if they would cook for their families every once in a while.”

(Group interview, Participant 2)

“Yes, Finnish people should also be inspired by other cultures and eat more together. It is positive that dining does not have to be over in two minutes, but you can take time and eat in peace and spend time discussing with your family.”

(Group interview, Participant 3)

Maintaining cultural heritage also has to be economically viable. The economic perspective was presented very narrowly in the curricula. The cultural dimension of economic issues seems to become sidelined in the curriculum and the focus is more on business than on sustainability.

“Students learn to work economically and minimize material loss.”

(Curricula for professional studies, Stadin Ammattiopisto [35])

Identifying the economical perspective was the most challenging part in the teachers’ interview, both in terms of linking culture and economy and in bringing the economic aspects to the practice of teaching. Teachers thought that the subject was the most difficult to understand and teach. Due to the young age of students and the lack of work experience, it is difficult to attach financial issues to teaching, especially in a culturally sustainable context.

“Teachers are always talking about this economy, frugality, and the use of raw materials, but the subject is hard to understand for our 16- to 19-year-olds. Mainly because there’s always ingredients in the kitchen and you can just get more from the stock if something is out. But really, what it all costs, students will not be able to understand before they actually earn their own money and pay the bills.”

(Group interview, participant 1)

“Economical thinking is learned a lot at home and there is a great deal of influence on home habits. But yes, in the field of environmental competence I try to teach that you can actually save money by recycling.”

(Group interview, participant 2)

The findings indicate a strong understanding of the connections between food and culture in food service programs. However, viewing and combining the elements of culture and sustainability through food is an opportunity that could be explored further (see Atkins and Bowler [36] for an extended discussion).

### 5.2. Finding the Balance between Natural Environment and Human Actions

The curriculum also underlines the importance of sustainable development goals, but the only thing referring to the balance between human beings and the natural environment in the professional studies is recycling skills. On the other hand, this topic is the core competence of environmental knowledge studies. The balance between human and nature was mostly understood as recycling, use of public transport, sustainable consumption, and taking trips to nature nearby.

“Students learn to sort waste and act according to the principles of sustainable development.”

(Curricula for professional studies, Stadin Ammattiopisto, 2015)

“Am I right, that some of our teachers go to the nearby forest with students to pick mushrooms and berries? We should organize such forest trip for the whole school!”

(Group interview, participant 2)

The findings show that cultural sustainability as a term is not well-known, even it appears in daily discussions, but themes like multicultural issues, equality, charity, and environmental responsibility were included in teachers’ practical lessons. Feasts and celebrations as teaching themes gave rich opportunities to view cultural sustainability from many sides, addressing localities, traditions, religions, and spiritual and international dimensions.

However, the curricula state the following objective: “Students learn to follow the principles of cultural sustainability and understand the cultural impacts of their choices.” (Curricula for general studies, Stadin Ammattiopisto, 2015). In order to fulfill the curricula objectives, cultural sustainability has to be discussed and operationalized throughout the practice of vocational education. The findings of the study show that culture is a broad term and includes many meanings and interpretations. The crucial role of culture in the context of sustainable development cannot be denied. It is extremely important to educate responsible young people who understand the importance of cultural sustainability.

The limitations of the study come with its size. This is a small-scale local study. It has the features of a case study, as it focuses on education in one specific professional field and views it through selected parts of curriculum documents in conjunction with a focus group interview. Although the relatively small dataset is carefully analyzed, it does not bring out results that can be generalized to vocational education; rather, it demonstrates larger implications for thinking and practice.

## 6. Discussion

The study aimed to make the cultural elements of sustainable development visible in the context of Finnish vocational education. The findings suggest that the key dimensions of cultural sustainability are present in the current food service degree curricula, and thus create the basis for a sustainability focus in vocational education. However, the interviews with vocational home economics teachers show how challenging it is to identify and operationalize cultural sustainability in the daily practice of vocational education. To further develop teaching methods and practice, as outlined in the third research question, we introduce two sets of supporting questions.

Based on a previous study of Finnish comprehensive home economics teachers' annual teaching plans from a cultural sustainability perspective, Janhonen-Abbruquah et al. [16] suggested a set of questions to help home economics teachers to reflect on their own teaching and planning, to find and recognize culturally sustainable elements, and to renew teaching.

- How is the local way of practices seen in teaching?
- How is the multifaceted feature of the learning content seen?
- How do the surrounding society and the world affect teaching?
- How are the habits and celebrations of the multicultural society seen in teaching?
- How does one teach the aesthetics of everyday life?
- How does one extend the learning environment outside of the classroom?
- How do knowledge and skills from the past help in understanding the present day and preparing for the future?

These questions can be used by not only by home economics teachers, but other teachers working at different levels of education and in various contexts to operationalize cultural sustainability and to analyze their practice from a sustainability perspective. Cebrian and Junyent [10] emphasized the importance of incorporating education for sustainable education into all levels of education as well as in teacher education, to ensure the integration of education for sustainable development in educational practice. In addition, we propose that cultural rights be viewed as a rationale and an approach to integrate culture in education and professional practice. Cultural rights have to be recognized in the education of future home economics professionals, as all professionals have their individual cultural rights but are also responsible for culturally responsive practice within their profession.

Pendergast [2] (p. 521) argued for the importance of a committed effort 'to adapt the incentives, the motivators, the leadership models, and the overall culture of the profession' to connect with the generations of young home economics professionals. When educating future professionals, it is critical to understand how youth conceptualize culture and sustainability. As an outcome of this study, we suggest the following questions for teachers to help renew their teaching.

- What is important in one's home culture and in the youth culture?
- How can these be brought into the learning process?
- How does the thinking on culture within education systems link with the thinking in professional sectors?
- Which stakeholders outside the formal education systems could be included in planning culturally sustainable education?
- How are home economics-related professions, including the teaching profession, changing in the future?

These questions could also help to develop steps towards sustainable leadership roles [11] that build from understanding social change dynamics and look for holistic interconnections. A sustainability leader is anyone who chooses to engage in the process of creating transformative change with others [11].

The two suggested sets of questions aim to inspire teachers to work towards the curricula objectives through using their pedagogical expertise creatively. As practical examples, we refer to two cases and show how teaching can be responsive to the cultural sustainability approach. The first case [37] describes a process where intercultural activity evenings focusing on food were planned and implemented as an immediate response to a Finnish school receiving a group of minor asylum seekers. The school community engaged in collaboration with parents to create a culturally responsive learning space. The project is an example of how events in the surrounding society affected and renewed learning. The second example, from Ghana [38], draws from the cultural heritage and use of local highly nutritious ingredients, developing these resources into a successful business idea that brings profit. The project focused on the use of cowpea (*vigna unguiculata*) as a substitute for wheat flour in the preparation of snack foods. It is a local, nutritious, and environmentally sustainable alternative to imported staple foods. The carefully studied economic aspects gave direction to small community-level enterprises to commercialize cowpea-based products in order to generate sustainable livelihoods.

The findings of this study can be further discussed in relation to Soini and Dessein's [17] theorization of cultural sustainability. They view cultural sustainability first in relation to inertia and dynamism, and second in terms of how anthropocentric or eccentric it is. The dynamism and inertia of cultural sustainability can be understood in terms of, for example, how cultural heritage is cherished but change is also seen as vital, or in the attempt to find balance between diversity and locality. Cultural practices are valued and cherished in a nostalgic manner, but there is also a strong drive to renew the practices without losing the core, original elements. Focusing either on human or nature seeks balance between the natural environment and human actions. It seeks ecological resilience within the values and behavior of people and communities. The complexity of cultural sustainability increases as it becomes more dynamic and focuses more on nature.

In this paper, cultural sustainability is presented as an approach to develop home economics practices, profession, and pedagogy, and potentially also the scientific approach within home economics science in various contexts. A recent review of sustainability science in a global landscape [34] calls for collaborative, interdisciplinary sustainability research. The home economics science approach to cultural sustainability is achieved through the relation of action and activity within cultural sustainability. Understanding the interconnectedness of individual actions and global sustainable development is critical to bringing about change. Home economics thinking is holistic and ranges from individual actions to communities and societies at large. Through culturally sustainable actions, both home economics professions and home economics education preparing future professionals can renew its practices to be more viable and to contribute to sustainable futures.

**Acknowledgments:** We are grateful for the Elli Suninen and Rachel Troberg foundation for funding the Home Economics Education for Diversities (HEED) research project (2016–2019) that has made the publication of this article possible.

**Author Contributions:** Jenni Topp collected the data. Hille Janhonen-Abuquah, Jenni Topp, and Hanna Posti-Ahokas jointly analyzed the data and wrote the paper. Hille Janhonen-Abuquah carried the overall responsibility of compiling the paper.

**Conflicts of Interest:** The authors declare no conflict of interest.

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