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The Role of Home Economics Education in the 21st Century: The Covid-19 Pandemic as a Disruptor, Accelerator, and Future Shaper

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☞ This paper explores the role of home economics education in the 21st century. It commences with an explanation of the disruption to the five predicted future global megatrends – globalisation, urbanisation, digitisation, cybersecurity, sustainability – as a consequence of the global Covid-19 pandemic. The place of megatrends framing home economics is explored by presenting a textual analysis of a literacy publication created as an acceleration point for framing the next one hundred years of home economics and underpinned by global megatrends, published prior to the pandemic. Using the Voyant Tool, visualisations of the book *Creating Home Economics Futures: The Next 100 Years* are presented and compared to other key literary documents informing the field. The paper then turns to the ways in which education and learning have led to the repositioning of home economics as a field and home economics literacy as the key strategy for ensuring the field continues to remain relevant into the future. Priority areas for education include food literacy; individual, family and community well-being; and the reconstitution of the place of the home.

Keywords: home economics literacy, Covid-19, global megatrends, food literacy, well-being

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Vloga gospodinjskega izobraževanja v 21. stoletju: pandemija covid-19 kot motnja, pospeševalka in oblikovalka prihodnosti

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☞ Članek obravnava vlogo izobraževanja na področju gospodinjstva v 21. stoletju. Začne se s pojasnjevanjem motenj petih pričakovanih globalnih megatrendov, tj. globalizacije, urbanizacije, digitalizacije, kibernetске varnosti in trajnosti kot posledice globalne pandemije covid-19. Vloga megatrendov, ki uokvirjajo gospodinjstvo, je raziskana in predstavljena na podlagi rezultatov analize publikacije o pismenosti, ki je bila zasnovana kot pospeševalna točka za uokvirjanje področja gospodinjstva za prihodnjih sto let. Temelji na svetovnih megatrendih in je bila objavljena pred pandemijo. Umeščenost megatrendov v okviru gospodinjstva je raziskano s predstavitvijo besedilne analize publikacije o pismenosti, ki je bila ustvarjena kot pospeševalna točka za oblikovanje naslednjih sto let gospodinjstva in podprta s svetovnimi megatrendi ter objavljena pred pandemijo. Z orodjem Voyant Tool so vizualno prikazani rezultati analize knjige Ustvarjanje prihodnosti gospodinjstva: naslednjih sto let in primerjani z drugimi ključnimi dokumenti, ki oblikujejo to področje. Prispevek se nato posveti načinom, kako sta izobraževanje in učenje pripeljala do repozicioniranja gospodinjstva kot področja in gospodinjske pismenosti kot ključne strategije, ki bo zagotavljala, da bo področje ostalo relevantno tudi v prihodnosti. Prednostna področja izobraževanja vključujejo prehransko pismenost, blaginjo posameznika, družine in skupnosti ter rekonstrukcijo doma.

Ključne besede: gospodinjska pismenost, covid-19, globalni megatrendi, prehranska pismenost, blaginja

Introduction

On March 11 2020, the World Health Organization (WHO) (2020) officially declared a global pandemic. Since then, the Covid-19 pandemic has had a dramatic effect, not least of which is the clear demonstration of the fragility of human life, with more than 170 million infections and 3.5 million deaths in just over a year (Worldometer, 2021) and with no end in sight. The advent of this global pandemic is not without precedent, with many pandemics changing the course of human history over centuries, including leprosy; the Black Death, plagues, cholera, measles, the Russian, Spanish and Asian flus, HIV/AIDS and, in the 21st century, SARS (History.com, 2020). One of the key strategies for reducing the spread of the virus has been to maintain a safe distance from others to avoid transmission, and to that end, since the pandemic was declared, most people around the world have been directed to isolate at home for a period, alongside employing personal protective behaviours such as wearing masks, washing hands frequently, and avoiding crowds.

Global megatrends

When events like a global pandemic occur, they change the course of history, dismantling predictions by futurists and analysts (Godfrey Team, 2020). These predictions are known as global megatrends, defined as ‘a long-term process of societal, economic, and political change with a significant impact on a larger number of areas of life, including the spheres of work, consumer and leisure behavior, health, education, cultural identity, and political participation’ (Petersen & Bluth, 2020, p. 1). The Covid-19 pandemic is no exception, having a disruptive effect on the predicted megatrends, and will continue to do so until the future containment of the pandemic is better known.

The Godfrey Team (2020) points to the pandemic as a catalyst for the following megatrend shifts: a deceleration from globalisation towards anti-globalism, resulting from the need for local self-sufficiency; a change to urbanisation led by working from home and the need for better-designed living spaces; an even greater acceleration of digitisation to solve problems and remove manual processes; the need for more sophisticated cybersecurity, especially with working-from-home patterns; and a greater focus on sustainability inspired by the visibility of the benefits derived during lockdown periods and the possibility for achieving greater outcomes than expected. Much of this change has resulted from what has been coined ‘pandenomics’ (Petersen & Bluth, 2020, p. 1), which is the effect of the coronavirus pandemic on the global economy: a massive, wide-ranging global economic crisis, with economies expected to experience major collapse.

The importance of understanding global megatrends has been part of the home economics literature for more than a decade. It was a key feature of the International Federation for Home Economics (IFHE) *Position Statement – Home Economics in the 21st Century* (IFHE, 2008) launched to coincide with the centennial celebrations of the establishment of IFHE as a professional organisation, explicitly pointing to the need to future proof the profession, stating this as a clear objective for the decade ahead:

[T]he focus on the decade ahead is on future proofing, which describes the elusive process of trying to anticipate future developments, so that action can be taken to minimise possible negative consequences and to seize opportunities. Future-proofing the home economics profession and the federation is a challenging task but one which is necessary to ensure a sustainable vision both for the profession and for individual members. The International Federation of Home Economics has commenced its future-proofing strategy by focussing on questions of sustainability, advocacy and the active creation of preferred futures for Home Economics, relevant disciplinary fields, and the profession itself, while critically reflecting upon and being informed by its historical roots. (IFHE, 2008, p. 2)

In response, the book *Creating Home Economics Futures: The Next 100 Years* (hereafter referred to as the Book) (Pendergast et al., 2012a) brought together key leaders in home economic to consider how to future proof the profession. More than a decade ago, the ten global megatrends formulated by the Copenhagen Institute for Futures Study were used as the basis for the publication. The trends predicted to shape society were: ageing, globalisation, technological development, prosperity, individualisation, commercialisation, health and environment, acceleration, network organising, and urbanisation. The editors framed the Book to examine the global megatrends as contributing to probable futures and highlighted these as the impetus for *future-proofing* the profession (Pendergast et al., 2012b).

The collection of published works in the Book included a deep dive into the ‘intention’ of home economics education, arguing that while home economics curricula differ around the world, they share a common philosophical base. Furthermore, the intention of engaging in home economics education is to provide the individual with ‘the learning opportunity to develop capabilities to enhance personal empowerment to act in daily contexts’ (Pendergast, 2012, p. 13). This educational intention is reiterated in the *IFHE Position Statement*

(IFHE, 2008) that as a curriculum area, Home Economics:

[...] facilitates students to discover and further develop their own resources and capabilities to be used in their personal life, by directing their professional decisions and actions or preparing them for life. (p. 1)

A decade has passed, and we are in the midst of a global pandemic that has disrupted the global megatrends. It is an opportune time to reflect on the role of home economics, and especially home economics education, looking to the future.

Convergent moment

It could be argued that this moment constitutes a new ‘convergent moment’ for the profession. More than a decade and a half ago, in 2006, Pendergast (2006) introduced the concept of the ‘convergent moment’ to the home economics profession as a way of ‘highlighting the alignment of a range of key factors impacting on the profession which, taken together, provide a climate of opportunity for reflection and renewal, thereby ensuring the relevance and sustainability of the profession’ (Pendergast, 2013, p. 57). The potential for these convergent factors to act as a catalyst for generative action was advocated. The convergent factors in 2006 were identified as:

- (a) the past century of invention, development and changes in roles for men and women;
- (b) consumption and globalisation patterns;
- (c) generational characteristics and the emergence of the digital native as the Y generation;
- (d) features of ‘New Times’ and the need to be ‘expert novices’ (good at learning new things); and,
- (e) significant changes in individual and family structures impacting globally on demographic patterns and on the family’s ability to fulfil its main functions as a fundamental social institution.

While these convergent factors remain largely relevant today and have been instrumental in the call for future-proofing the profession made public in the IFHE Position Paper (IFHE, 2008), the disruption to global megatrends by the pandemic means it is important to recast this thinking and to ensure home economics remains relevant in what has come to be known as the ‘new normal’ (Anderson et al., 2021).

Visualising home economics

The Book

In order to inform the future role of home economics education in the 21st century, an analysis of the Book launched at the 2012 World Congress of the IFHE with global megatrends as the framing serves as an important starting point. The foreword of the *Creating Home Economics Futures: The Next 100 Years* (Pendergast et al., 2012a) describes the Book as follows:

This book offers an exciting opportunity to contribute to the thinking associated with the future of the Home Economics profession.

Home Economists around the world, and those with an interest in Home Economics, were invited to contribute a chapter to the book. A stimulus chapter, by the same name as the book, was written by the editors for authors to use as a starting point from which to develop or stimulate their ideas on any aspect related to home economics in the next 100 years. A number of abstracts were submitted for consideration, and in this book, the final selection of chapters is presented. As editors of the book, we have been deeply impressed by the range and scope of chapters, presenting diverse and challenging ideas, and by the unexpected but welcomed synergy amongst ideas from practitioners all around the world; this synergy gives us hope for a powerful and sustainable future.

This book will make an invaluable contribution to the profession of Home Economics, and will stimulate creative, deeply intellectual and philosophical thinking about possible and preferred futures. (p. iii)

The stimulus chapter explained the relevance of global megatrends and their key role in informing the predicted future. It then explained each of the global megatrends and set out the agenda for the need to future proof the profession as a way of taking an agentic role in creating a preferred future for the profession. Twenty chapters were published with 34 authors from 14 countries (Australia, Botswana, Brazil, Canada, China, Finland, Germany, Japan, Malta, Netherlands, Nigeria, South Africa, Sweden, United States of America). The Book is 258 pages and has 105,025 words.

The analysis

An innovative method to analyse the Book's contents and present the analysis's findings as visualisations of the text has been employed. Voyant Tools (available at: <https://voyant-tools.org/>) was selected because it is a free,

Table 1

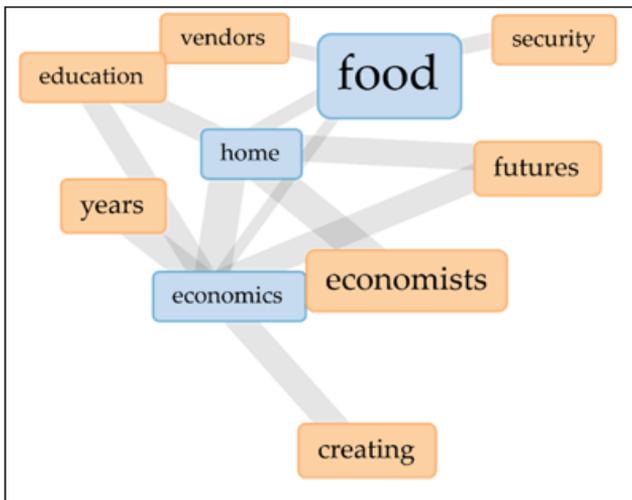
Top 100 Words, Rank and Frequency, in the Book Creating Home Economics Futures: The Next 100 Years

Rank	Word	Frequency	Rank	Word	Frequency
1	Home	1405	51	water	89
2	Economics	1064	52	Energy	88
3	Food	448	53	Needs	85
4	Education	339	54	Resources	85
5	Future	318	55	Figure	83
6	Life	305	56	Individuals	83
7	family	269	57	Skills	83
8	Development	256	58	Economic	82
9	New	248	59	Retrieved	82
10	World	236	60	IFHE	81
11	Sustainable	229	61	Order	81
12	Profession	214	62	school	81
13	Social	208	63	Experience	80
14	Futures	207	64	International	79
15	years	206	65	Policy	79
16	economists	201	66	Daily	78
17	research	186	67	Environment	78
18	global	185	68	Journal	78
19	families	177	69	make	78
20	Human	171	70	Develop	77
21	People	169	71	Role	77
22	Everyday	151	72	Example	74
23	Society	151	73	process	74
24	Work	150	74	culture	73
25	Creating	144	75	National	73
26	learning	143	76	Public	72
27	living	125	77	Used	72
28	Need	121	78	Clothing	71
29	Knowledge	120	79	Production	71
30	Consumption	118	80	Professionals	71
31	Consumer	112	81	Activity	69
32	Technology	112	82	approach	69
33	Health	109	83	potential	69
34	Change	108	84	Related	69
35	Time	107	85	Training	69
36	Chapter	103	86	Environmental	68
37	Important	101	87	Professional	68
38	Curriculum	100	88	Way	68
39	household	100	89	Impact	67
40	Practice	100	90	Children	66
41	Megatrends	99	91	Economy	66
42	Different	95	92	Focus	66
43	Women	95	93	Issues	66
44	Use	93	94	African	65
45	Way	93	95	Community	65
46	Countries	91	96	Communities	64
47	Century	90	97	Context	64
48	China	90	98	Study	63
49	Cultural	90	99	Challenges	63
50	University	90	100	Members	62

In addition to frequency counts, the Voyant Tool used for this analysis enables a range of text-driven visualisations, including the visualisation of links between major terms. Figure 2 presents the most frequent links of terms appearing in the Book. These are: home economics and food; home economics and creating; home economics and futures; home economics and education; home economics and years; home economics and economists; food and security; food and vendors.

Figure 2

Links between Major Terms Used in Creating Home Economics Futures: The Next 100 Years



Discussion

These findings provide a means of quantifying the qualitative data in the form of the text in the Book. This research builds on previous work, which utilised the same analytic base, and presents similar data. However, the previous analyses were conducted manually, using Excel databases. The ten most frequently published words in these documents are presented in Table 2.

Table 2

Previous Studies Using Aligned Methods to Determine the Most Frequently Used Terms, Top 10 Presented

Reference	Text analyses using word frequency and Tag Cloud visualisations	Top 10 words
Pendergast, 2010	<i>IFHE Position Statement</i>	<ol style="list-style-type: none"> 1. Home economics 2. Profession 3. Family 4. Develop 5. Individual 6. Social 7. Life 8. Future 9. Communities 10. Discipline
	<i>IFHE Congress Proceedings</i>	<ol style="list-style-type: none"> 1. Profession 2. Home economics 3. Social 4. Food 5. Life 6. IFHE 7. Generation 8. Educate 9. Future 10. World
Pendergast, 2013	<i>IJHE Vol 1 to Vol 6</i>	<ol style="list-style-type: none"> 1. Home economics 2. Food 3. Health 4. Education 5. Study 6. Profession 7. Students 8. Respondents 9. Human 10. Research
Pendergast, 2021	<i>Creating Home Economics Futures: The Next 100 Years</i>	<ol style="list-style-type: none"> 1. Home economics 2. Food 3. Education 4. Future 5. Life 6. Family 7. Development 8. New 9. World 10. Sustainable

The first study conducted by Pendergast (2010) produced word clouds from two key artefacts related to the profession at that time: the *IFHE Position Statement* and the *IFHE Congress Proceedings, 2008*. A high degree of alignment of the five most frequently used words was reported in this study, these being: home economics (1st and 2nd, respectively), profession (2nd and 1st), social (6th and 3rd), life (7th and 5th), and future (8th and 9th). In a further study by Pendergast (2013) using the same methodology to analyse the *International Journal of*

Home Economics (IJHE), exploring all 11 issues of the journal published to that time, the word ‘home economics’ again emerges as the most frequently used word, with ‘profession’ (6th) also appearing in the top ten words used frequently throughout the journal. ‘Food’ is used frequently in the Congress Proceedings (4th) and the IJHE analysis (2nd). In this analysis of the Book, ‘home economics’ is again first and ‘food’ second. The words ‘education’ (3rd) and ‘future’ (4th) also reappear. When the ten most frequently occurring words from all four sources are entered into the Voyant Tool, the word map displayed in Figure 3 results.

Figure 3

World Cloud Visualising the Frequency of Terms in Four Sources



All four analyses have ‘home economics’ as the most common term, with three of the sources having ‘food’, ‘future’, ‘profession’ and ‘life’ in the top ten, with ‘food’ appearing at the highest rank following ‘home economics’. ‘Education’, ‘family’, ‘social’ and ‘world’ also appear in two of the top ten lists.

The consistency of frequently used terms across these analyses creates a powerful visual representation of the formal discourse in the published literature in the field of home economics. There is a valid and reliable evidence base that the home economics literature is strongly focused on the profession, the future, food and life, along with education, family, social and the world. This finding also aligns with the global megatrends, especially the Book, which was framed around these trends. Food is very visible as a context for home

economics work and is clearly established as the most common context, according to this literature analysis.

The unique connection to food education is dominant not only in these analysed artefacts but is also in the way home economics is popularly viewed and understood. In the prestigious *Journal of the American Medical Association*, Lichtenstein & Ludwig (2010) called for the community to 'bring back home economics' in response to escalating rates of obesity. They argue that education about food is essential to address the knowledge gap leading to the obesity health crisis costing billions annually. Indeed, by 2016 Smith had located and analysed 40 articles that had the phrase 'bring back home economics' in the title. This call is part of a burgeoning focus on the need for better understanding education for food literacy, with a systematic literature review inclusive of 44 studies confirming adolescents with greater nutritional knowledge and food skills showed healthier dietary practices (Bailey et al., 2019). Of these, seven of the 44 papers were specifically reporting research about home economics and food literacy in schools (Dewhurst & Pendergast, 2008, 2011; Pendergast & Dewhurst, 2012; Ronto et al., 2016a; Ronto et al., 2016b; Ronto et al., 2016c; Ronto et al., 2017), indicative of the contribution of home economics to this field by building a firm evidentiary base.

Reconstituting the field

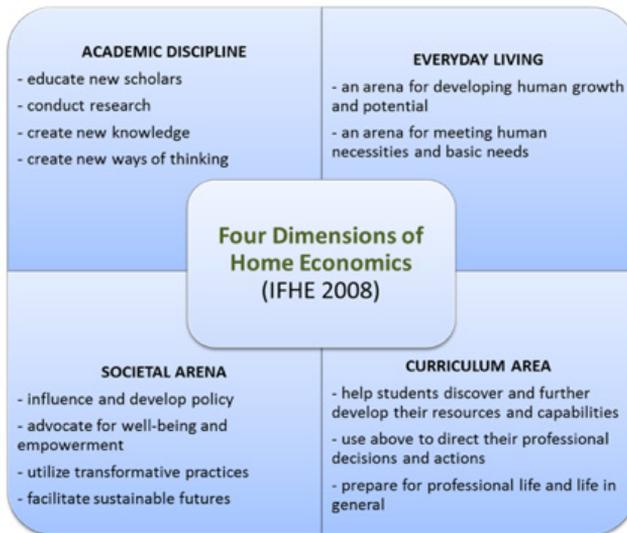
The IFHE Position Paper (2008) defines home economics as a '[...] field of study and a profession, situated in the human sciences that draws from a range of disciplines to achieve optimal and sustainable living for individuals, families and communities' (p. 1). The paper stipulates that the essential components that all home economics courses of study and professionals identifying as home economists must exhibit the following three essential dimensions:

- a focus on fundamental needs and practical concerns of individuals and family in everyday life and their importance both at the individual and near community levels, and also at societal and global levels so that well-being can be enhanced in an ever-changing and ever-challenging environment;
- the integration of knowledge, processes and practical skills from multiple disciplines synthesised through interdisciplinary and transdisciplinary inquiry and pertinent paradigms; and
- demonstrated capacity to take critical/ transformative/ emancipatory action to enhance well-being and to advocate for individuals, families and communities at all levels and sectors of society (IFHE, 2008, p. 2).

Further, it defined four dimensions of practice, as presented in Figure 4.

Figure 4

Four Dimensions of Home Economics Practice



Note. Adapted from Pendergast et al., 2012b, p. 13.

Drawing upon the literature analysis and connecting these four dimensions with the global megatrends that have now experienced disruption due to the pandemic, the role of home economics education in the 21st century can be considered. As explained at the outset of this in this paper, the pandemic has catalysed the following megatrend shifts:

- slowing down globalisation;
- changes to urbanisation;
- greater acceleration of digitisation;
- more sophisticated cybersecurity; and
- greater focus on sustainability (Godfrey Team, 2020).

The role of home economics, as defined by the four dimensions (IFHE, 2008), remains as pertinent as when they were conceived. In addition, the recognition of home economics as a key player in the food literacy agenda globally connects to a major aspect of the disruption to normal practices and the rapid response to the global pandemic. The need for greater food security (heightened by the memory of the empty grocery shelves and fights in aisles

over disappearing stacks of pasta and rice); for food preparation skills (when restaurants and fast food outlets were closed and individuals and families had to prepare food at home more often than ever before with limited resources); for food safety and hygiene practices (when personal protection and practices became a key part of preventing the spread of the virus); for food production as a creative outlet (when people sought engaging activities with newfound time and re-discovered their joy of cooking), are just some of the aspects that have been reconstituted as a response to the crisis. Ironically, the pandemic is likely to have intensified interest in food literacy, creating the legacies of appreciating, activating and strengthening food safety and hygiene practices, food as a creative practice, and other aspects of food literacy (Pendergast, 2021).

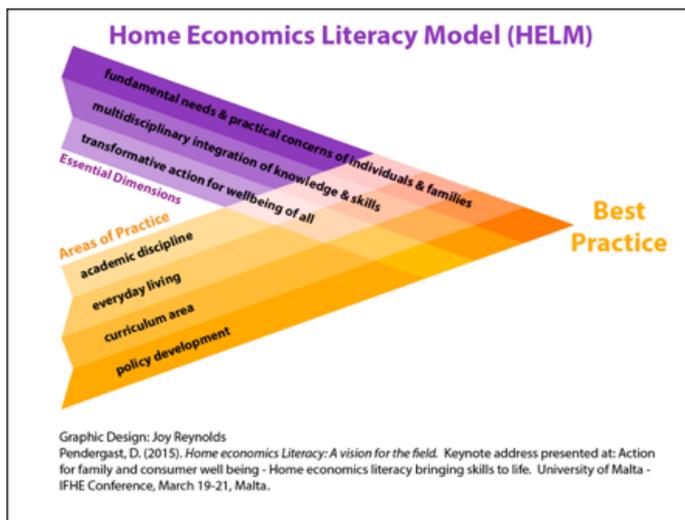
Alongside this, the increasing importance of home economics to contribute to the emerging challenges associated with mental health and diminished individual, and family and societal well-being are predictable. Data are increasingly becoming available of the effect of the pandemic and the resulting economic recession and changed ways of living, school and workplace closures, the demands of home-schooling and working from home, isolation and deprivation, poor health outcomes and deaths of friends and relatives; negatively impacting mental health and well-being on a global scale. One study reveals that 4 in 10 adults report symptoms of anxiety or depressive disorder compared to 1 in 10 prior to the pandemic. Well-being is impacted with difficulty sleeping (36%) and eating (32%) and with substance abuse increase (12%) (Panchal et al., 2021). This picture is the tip of the iceberg, with evidence of the impact only just now emerging as the research is gathered. There is no question that home economics education has a crucial role in this space.

The home has become the new epicentre of survival for individuals and families as the world closed its doors in March 2020 and directed people to find shelter in their own homes as a public health imperative (Barnes & Sax, 2020). The home has been reconstituted as a safe space for the place of work, of schooling, of exercise and recreation, of creativity and entertainment. Homes are regarded as safe, secure and familiar, and hence having safe space status where social and personal experience and belongingness have evolved beyond viewing home as merely a domestic space to include this range of functions (Gezici Yalcin & Duzen, 2021). This has been a positive experience for many, so much so that anxiety and resistance to returning to workplaces have become an issue for some employers keen to repopulate office spaces safely (Barnes & Sax, 2020). The rapid response to the provision of digital solutions has seen the ascendancy of online learning and industry tools at a pace never before experienced or expected, paving the way to genuinely effective working from home possibilities.

The mechanism for ensuring 21st-century home economics continues to make a worthwhile contribution is underpinned by a commitment to what has been described elsewhere as the Home Economics Literacy Model (HELM) presented in Figure 5 (Pendergast, 2015). This highlights the need to intersect the areas of practice and the essential dimensions to ensure home economics practice meets the intention of home economic literacy, meaning to move beyond the ‘what’ and ‘how’ to achieve its transformative potential.

Figure 5

Home Economics Literacy Model (HELM)



Examples of how this model operates are presented by Pendergast and Deagon (2021). Table 3 is a further elaborated example demonstrating how this model can be operationalised, in this instance with a focus on promoting resilience in the context of unpredictable change, as is relevant to the pandemic situation. It is important to highlight the four dimensions of practice and the three essential elements forming the underpinning framework structuring this comprehensive home economics approach.

Table 3

Example of the Essential Dimensions and the Areas of Practice of Home Economics in the context of the COVID-19 Global Pandemic – A focus on Building Resilience

Goal – Building resilience during pandemic social isolation	Needs of individuals & families	Multidisciplinary integration	Transformative action
Academic Discipline	Incorporate an understanding of resilience and coping with unexpected change as a core of home economics academic learning	Identify a range of home economics disciplinary fields that contribute to building resilience and managing change – for example, food and nutrition, individual and family relationships, creativity	Provide virtual workshops to engage individuals and families in ways that enhance their resilience
Everyday Living	Utilise knowledge and skills to ensure there is a safe and comfortable home/work/school environment with adequate resources, including social networks, links to schooling, workplaces and other core activities in place	Utilise the range of multidisciplinary understandings to remain well informed and empowered to make changes as required to meet everyday living demands	Empower individuals to make decisions about their own and others resilience and ability to cope with change and to seek support and assistance when required
Curriculum Area	Develop curriculum that examines and develops an understanding of and strategies to enhance resilience and change management	Incorporate content from a range of knowledge bases (e.g., psychology, medical health experts) to ensure the development of a multifaceted understanding of resilience	Empower students to practice the implementation of resilience mechanisms
Society & Policy	Access information and policies relevant to resilience for individuals and families to inform practices	Consider the breadth of policies related to individual and family resilience and coping with change that are impacted by the pandemic	Advocate for and provide strategic advice to shape policy on relevant influential committees

Summary and Conclusion

As the ‘new normal’ continues to evolve in the coming years, the role of home economics education has never been more significant. The study shared in this paper utilised the Voyant Tool to quantitatively explore qualitative data in the book *Creating Home Economics Futures: The Next 100 Years* (Pendergast et al., 2012a). The tool enables analysis with confidence and replicability and produces visualisation outputs that are easy to analyse and interpret. The findings reveal a strong connection to the agenda of the Book – to shape the future informed by the global megatrends. The disruptive force of the Covid-19 pandemic on these predicted futures reveals a series of pivots and, in many cases, an acceleration combined with a redirection of future trends. In this space, the potential for home economics education to play a key role in reconstituting the future is abundantly clear. Spaces for intentional education focus include:

- the utilisation of the HELM model, which activates the areas of practice and the essential dimensions to ensure home economics education is inclusive of the knowledges, processes, and contexts for transformative action;
- food literacy action to mobilise the potential of education to achieve positive outcomes in increasingly challenging food-related health crises, especially those associated with obesity;
- enhancing the well-being of individuals, families and communities as a greater understanding of the effects of the pandemic emerge and point to a crisis of massive proportions globally;
- a reinvention of the place of the home with new functions likely to be embedded as cultural norms.

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