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Home Economics as a food education intervention: lessons from the Irish secondary education context

In this article, we start with a history of Home Economics followed by a discussion of Home Economics in the Irish curriculum, the development of the profession and its pedagogical base; finally, we make a case drawing on the existing literature for home economists as key catalysts in any 'whole of school' programme around food and health.

The Irish Context

In Ireland, similar to many other countries, levels of overweight, obesity and diet-related non-communicable diseases (DRNCDs) are on the increase among low-income groups (Safefood, 2016). However, for Ireland the picture is starker: the country is on course to top European league tables for the prevalence of overweight and obesity by 2020 (WHO, 2015). Currently, six in ten adults and one in four children are either overweight or obese in Ireland with only 40% of the population having a healthy weight (Department of Health, 2016; 2013; Layte and McCroy, 2011). It is widely recognised that obesity is a risk factor for chronic non-communicable diseases, including heart disease, type 2 diabetes, and cancer, and may have a negative impact on mental health. However, the distribution of the levels of obesity and DRNCDs are skewed and not distributed equally in society. Statistics show that the levels of overweight and obesity are higher in lower socio-economic groups and the more disadvantaged groups of society including certain ethnic minorities and people with disabilities (Department of Health, 2015). In schools in the most disadvantaged areas of Ireland, the prevalence of overweight and obesity in children is 6-7% higher than in other schools (Department of Health, 2016). Safefood (2012) have estimated that the financial burden (direct and indirect costs) of adult obesity to be in the region of €1.13 billion annually, accounting for 2.3% of the total health expenditure.

Consequently, childhood obesity and diabetes, are widely regarded as a serious public health challenge requiring cross-sectoral attention. On the 22nd September 2016 the Department of Health (2016) in Ireland launched *A Healthy Weight for Ireland: Obesity Policy and Action Plan* (2016-2025). *A Healthy Weight for Ireland* sets out, over a ten-year period, targets and actions to achieve which in turn aims to produce measurable outcomes in reducing the levels of overweight and obesity in Ireland and in assisting people to achieve better health. The policy outlines 'Ten Steps Forward' and twenty priority actions that will be taken to achieve the ambitious aims by 2025. Of the ten steps, and in the context of exploring the role of Home Economics education, the key priority action which this article will focus on relates to developing and implementing a 'whole of school' [sic] approach to healthy lifestyle programmes referencing curriculum, nutrition, physical activity, smoking, alcohol and mental wellbeing (Department of Health, 2016).

Why Home Economics is a sustainable and effective food education intervention

The discipline of Home Economics was initiated in 1908 as a world-wide response to social challenges of health, poverty, gender inequality and other social issues (International Federation for Home Economics (IFHE), 2008). According to the IFHE the discipline is 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 (IFHE, 2008, p.1). Home Economics is a problem-solving-oriented discipline

and addresses practical, real world, perennial problems or concerns of individuals and families in a socially responsible manner. Problems are deemed to be practical because they are problems experienced in everyday life and can impact on family health and wellbeing. Recurrent problems exist from generation to generation and include health, diet-related diseases; food security, food poverty etc. (Caraher and Reynolds, 2005).

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 (IFHE, 2008, p.2). Home Economics education aims to facilitate the empowerment of students to have a positive relationship with food. It is underpinned by a constructivist approach to teaching and learning where students are engaged in experiential learning. Consequently, students develop transferable skills and knowledge and an ability to be adaptive in order to address everyday food and health issues. The value of Home Economics, according to Pendergast (2001), is that is does not teach a skill for the sake of that skill, it teaches for application, it teaches informed decision-making in various scenarios, it teaches evaluative and critical thinking skills, and it empowers individuals – no matter what their circumstances (2001, p.8). McGowan *et al.* (2015) found that the integration of practical culinary skills, knowledge, attitudes and confidence are all essential elements of a programme which aims to enhance dietary quality.

This is further iterated by Condrasky and Hegler (2010) who state that programmes focusing on producing sustainable healthy eating behaviour through culinary confidence and nutrition alertness are a successful approach to begin the restoration of our nation's health (p.1). Home Economics education can add an element often missing in other subjects: by adding an active dimension of doing, which requires students to think critically and reflectively about the content and the process. It can increase their level and complexity of thinking about food and health issues. Consequently, Home Economics can play a key role in developing food literacy skills and competencies in young people. It is the application of theoretical knowledge and principles to practical situations, in a critical and reflective manner that is inherent in Home Economics, which ensures it has the capacity to deliver clear and comprehensive food education.

The Home Economics Teaching Profession in Ireland

One of the strengths of Home Economics from an education perspective is the high degree of professional capacity and subject expertise of the Home Economics teachers. There is a coherence in terms of how they are educated, with the majority obtaining a Bachelor of Education (Home Economics). All Home Economists working in an education setting must have undertaken a comprehensive programme of initial teacher education (equivalent to 120 European Credit Transfers (ECTs)). In order to register as a Home Economics teacher in the Republic of Ireland an applicant must meet certain criteria as set out by the Teaching Council Ireland. This includes holding a degree-level equivalent (minimum 180ECTs), having studied Home Economics up to and including third-year level and the discipline Home Economics comprising at least 90 ECTs of the degree. Applicants are also required to demonstrate they have undertaken a post-primary initial teacher education programme of study (minimum 120 ECTs) which includes the theory, methodology and practice of teaching Home Economics.

Furthermore, the study of the discipline Home Economics during the degree must include theoretical and practical content in the areas of Food Studies; Family Resource Management; Textiles, Fashion and Design; Home Design and Management and Social Studies and importantly, the application of these areas to the individual, family and society (Teaching Council, 2013). There is one national Association of Teachers of Home Economics (ATHE), which has a strong membership base and plays an important role on a number of fronts including professional development, policy and curriculum development, and advocacy and promotion of and for Home Economics education.

Home Economics Education in the Republic of Ireland – an established subject

Home Economics, under various names, has had a place in Irish primary and post-primary schools long before the establishment of the Irish Free State (1921). At the turn of the 19th century domestic subjects including needlework, cookery, laundry and household management were seen as

important areas of study for girls not only for teaching lifeskills but also as vocational subjects. As post-primary education was the reserve of the elite classes the provision of study in domestic subjects was made at primary level. Under the Revised Programme for National Schools (1900) cookery was mandatory for all girls in primary schools. Sixty minutes once a week was recommended in the timetabling of cookery in schools. Interestingly, the limited diet of the time was evident in the outline areas of study on the course which included cooking potatoes and cabbage; slicing and frying potatoes; setting and lighting fires; boiling, frying and poaching eggs; making tea, coffee and cocoa; uses of milk; uses of meal including 'stirabout' or gruel and bread (Hyland and Milne, 1987).

In post-primary schools, cookery was mostly being taught in convent schools to girls and mainly to fourth standard or higher. In 1899, cookery was taught in 125 schools and 2887 pupils were examined. Domestic Economy and Hygiene was taught in 117 schools and 1302 pupils were examined (Durcan, 1972, p.96). Despite cookery being very popular among the students, the provision was restricted due to the underfunding of schools in equipment, materials and fuel for the fire. Teaching cookery was regarded as an important lifeskill for girls from a health, social and vocational perspective. However old-fashioned a notion this may seem now, it was regarded at the time as essential that young girls would have the skills necessary to manage a home and look after their family. By 1925, programmes in domestic science included practical cookery and were a popular choice for females. In 1925, out of a total of 1,062 girls at Intermediate level (Junior, aged 12-15), 29% (n=305) studied Domestic Science; by 1935, this had increased to 51% (n=1287), and by 1957, this had increased further so that 74% of all girls (n=5368) examined for the Intermediate certificate at the age of 15 years sat the Domestic Science exam (Department of Education, 1962, p.192). Initially, Domestic Science was offered in post-primary schools only to girls; however, in 1965, for the first time, seventeen boys undertook the Domestic Science Leaving Certificate examination which is the examination taken on completion of the final two years of senior cycle education. In 1967, the name changed to Home Economics and in 1969 a new syllabus was offered at senior level focusing on a broader academic programme and including more scientific content. A further revised Senior Cycle syllabus was introduced in 2004, which aimed to enable students with the necessary lifeskills required for healthy, resourceful living.

In Ireland, students have a statutory requirement to complete the first three years of post-primary education. This is referred to as the Junior Cycle (lower secondary education) and normally students are 12-15 years old. They can then progress to Senior Cycle (upper secondary education) and this is normally for students aged 15-18 years.

At junior level the Junior Certificate Home Economics syllabus was introduced in 1991. The rationale for the Junior Certificate Home Economics (ages 11-15) curriculum (1991) is to develop important skills for living. It aims to provide students with the knowledge and practical skills for application to everyday life contexts (Department of Education, 1990). The curriculum comprises five core areas of study (Food Studies and Culinary Skills; Consumer Studies; Social and Health Studies; Resource Management and Home Studies; Textiles Studies) and an optional area of study from a choice of three (Childcare; Design and Craftwork; Textile Skills). In 2016, at Junior Certificate level, 60,247 students sat the examination in 2016, of which 36% (21,464) studied Home Economics (State Examinations Commission, 2016).

In recognition of the importance of teaching practical food lifeskills, a minimum of 40% of the programme is dedicated to Food Studies and Culinary Skills. The assessment comprises written examination, an optional area of study project and a practical food and culinary skills examination which accounts for 35% of total marks at higher level and 45% at ordinary level. For the purpose of this paper, the focus will primarily be on the Food Studies, Culinary Skills and the Health Studies component of the Junior Certificate Home Economics curriculum.

The Department of Education's Chief Inspector for Home Economics has identified examples of excellent practice in the teaching of practical food sessions with a focus on the development of students' practical skills and the integration of relevant theoretical knowledge. They noted that the development of students' practical skills was facilitated by a staged approach, where clear teacher instruction and the explanation and

demonstration of key processes and new skills occurred at appropriate stages in the lesson (Inspectorate, p.29). Additionally, the Chief Inspector for the DES identified teachers who delivered Home Economics were for the most part very experienced, dedicated and committed (Inspectorate, p.8). It was also acknowledged that the Home Economics departments in the schools were well established and well organised (p.14). It is essential to maintain and build on this excellent level of practice in order to ensure that food education and culinary skills do not become marginalized.

In 2011, a consultation took place with young people in Ireland relating to overall curricula reform at Junior Cycle (DoYCA, 2011). Students involved in the consultation noted that learning lifeskills in Home Economics, and in particular learning to prepare and cook food in Home Economics classes, was one of the most useful things ever learned and it was identified as one of the two most essential skills young people in junior secondary education should learn. One student commented, "Home Economics because it is something I'll have my whole life" (Junior Cycle Student, DoCYA, 2011, p.8). Furthermore, senior cycle students, on reflecting on their Junior Cycle experience acknowledged Home Economics as being most useful and enjoyable because it is a practical lifeskill (*ibid.,* p.18). Furthermore, cooking was one of the elements identified by this group of senior students as an essential requirement of a Junior Cycle programme. The practical, skill based orientation of the subject was identified as a key strength of the subject (National Council for Curriculum and Assessment (NCCA), 2004; Smyth *et al.,* 2006a and 2006b).

The NCCA (2016), in the Background Paper for Home Economics, identified four key interconnected societal factors that suggest an ongoing relevance and requirement for Home Economics education in the 21st century. These include changes to the family and social systems; education for sustainable development and responsible living; food and health literacy and home and resource management. Home Economics education can address these trends in order to achieve healthy and sustainable living for individuals, families and society. In particular, societal changes pertaining to food and health literacy continues to be of concern as the obesity rates continue to rise.

Discussion

Early intervention in young children is often regarded as more effective in facilitating improved lifelong health trajectories rather than corrective efforts in later life (Gillman and Ludwig, 2013; Lichenstein and Ludwig, 2010). There have been numerous calls in the US for the re-introduction of compulsory home economics for all students as a means of addressing chronic diseases through encouraging the choice of healthy options, more fruit and vegetable consumption and the use of healthy cooking options (Lichtenstein and Ludwig, 2010; Vileisis, 2008). In a study conducted by Worsley *et al.* (2015), results demonstrated that Home Economics education was associated with higher levels of food knowledge across several age groups. According to Lavelle *et al.* (2016b), learning cooking skills as a young person is positively related to cooking and food practices, cooking confidence, health and diet quality in later life. Stitt (1996) maintained that in countries like Iceland and Finland, where Home Economics is compulsory and is a high status subject, the health of these nations is "far superior" to other countries in the developed world (p.28). Lichenstein and Ludwig (2010) also note that an informed generation of young people may have a positive influence on their families and serve as role models for having a positive attitude towards food ultimately reversing the upward trend for obesity and diet related diseases. The edited volume by Pendergast, McGregor, and Turkki (2012) shows the profession developing and adapting to future trends including global changes in diet and the need for a globally conscious consumer. The profession of Home Economics is key in many countries to the development of healthy populations. In countries such as Ireland the changing food system and the changing habits of the population often make it seem like the teaching of Home Economics and cooking are old-fashioned and unnecessary. In contrast, we argue that such knowledge and skills are essential elements of an engaged citizen. The skills are necessary to understand modern food and food processes, necessary to take control of food and health and to participate in a food secure society (Caraher, Wu and Seeley, 2010). Furthermore, in line with the increasing evidence of success of school-based interventions around food and healthy eating (see Makeeva, 2015;

Owen, 2013; Ryland, 2014) we argue that the profession of home economics is trained and well placed to co-ordinate and link the education activities to practical food provision and skills training in the school context (Fordyce-Voorham, 2010; Pendergast and Dewhurst, 2012). Our only reservation is that teaching at a secondary school level may be too late and the focus should be on incorporating Home Economics in primary schools as well (Upton, Taylor and Upton, 2012)

The Irish National Council for Curriculum and Assessment (2016), in the Background Paper for Home Economics, has identified four interconnected societal factors that suggest an ongoing relevance and requirement for Home Economics education and appropriately trained professionals in the 21st century. These include changes to the family and social systems; education for sustainable development and responsible living; food and health literacy and home and resource management. Home Economics education can address these trends in order to achieve healthy and sustainable living for individuals, families and society.

In particular, societal changes pertaining to food and health literacy continues to be of concern as the obesity rates continue to rise (Department of Health, 2016). Allied to the concern over the health of the nation is a suggestion of a decline in culinary skills in the general population (Stitt, 2006; Condrasky and Hegler, 2010; Caraher and Seeley, 2010). Cooking from scratch in homes is no longer considered the norm and interventions should focus on developing practical skills to increase cooking self-efficacy (Lavelle *et al.,* 2016a, Safefood, 2014). A lack of cooking skills, often coupled with deficit in nutritional knowledge, can influence families to eat outside the home (Hersch *et al.,* 2014). Home Economics is the only school subject which primarily aims at preparing students for everyday life and teaches students nutritional knowledge and practical food skills with a focus on increasing cooking self-efficacy. Home Economics is unique in its systematic, integrative approach where problems of everyday life are addressed in a holistic manner (CHEA, 1996, p.169).

In a study conducted by McGowan *et al.* (2016), findings demonstrate the need for interventions which are multifactorial and integrate a range of knowledge and psychological related factors in their design. According to Lichenstein and Ludwig (2010), a comprehensive curriculum such as Home Economics is required in schools for all students to teach young people the scientific and practical aspects of food and the basic skills of how to prepare food for themselves and their families. Consequently, it is hoped that students will develop a confidence in choosing, preparing and cooking food.

Conclusion

Home Economics in schools can be the linchpin for a comprehensive education programme which incorporates nutritional knowledge, scientific theory, and practical culinary and food skills in a sequential and integrated manner within a 'whole of school' approach. It maximises practical experiential learning for the student and teaches a sustainable healthy approach to, and relationship with, food. Lichenstein and Ludwig (2010) state that an investment in food education and 'bringing back' Home Economics may be among the best investments that a society can make. From an Irish perspective, Home Economics is already an established subject but ensuring all students have access at junior cycle is a worthwhile investment from a food education intervention perspective. This is important in the light of the societal and (ill)health changes occurring at a population level, as early intervention is cheaper than treating a problem once it has occurred.

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