Enhancing Home Economics and Textiles Education in Malawian Secondary Schools: Tackling Challenges and Exploring Innovative Solutions

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Abstract: - This paper explored how students gained knowledge and skills in Home Economics (HEC) and Clothing and Textiles (CT) within the context of the disintegrated curriculum in Malawian secondary schools. It was based on the interpretive paradigm and constructivist theory, using a mixed-methods research design that leaned toward qualitative approaches. The main research question investigated how the teaching and learning environment, along with educational policies, influence the development of knowledge and skills in these subjects. The study specifically examined the knowledge and skills taught in HEC and CT, the teaching methods used, and the factors affecting the selection of these methods. Data collection involved five techniques: document analysis, questionnaires, classroom observations, face-to-face interviews, and focus group discussions, with a total of 163 participants from two educational divisions and six secondary schools. Results showed that students have limited knowledge and skills in HEC and CT, with instruction mainly theoretical and little practical assessment. Both subjects face significant challenges, including insufficient resources, a lack of innovative teaching methods, and a reliance on traditional strategies. Teachers tend to strictly follow curriculum documents, leading to less engaging activities, while the use of information and communication technology (ICT) remains uncommon. The study found issues such as inadequate time allocation, a shortage of qualified teachers, and structural problems within the curriculum. To improve HEC and CT instruction, the study recommends integrating ICT, adopting innovative teaching strategies, providing refresher courses for teachers, building well-equipped labs, and enhancing financial and administrative support for schools.

Keywords: Constructivist Theory; Mixed-Methods Research; Curriculum Disintegration. Innovative Teaching Methodologies. Home Economics (HEC) and Clothing and Textiles (CT) disintegrated Curriculum; education policies.

1. Background / Introduction

Home Economics is a vital elective science subject in Malawian secondary schools, designed to equip students with key skills for self-reliance and employability in various fields, including nutrition, environmental health, fashion, and food science (Bohm, 2023; Bernert & Abacka, 2021). The subject spans a wide range of disciplines focused on meeting the daily needs of individuals and families and on promoting effective resource management within home environments (Concesso et al., 2018; Maina & Kitainga, 2018). There is a strong emphasis on providing students with both theoretical knowledge and practical skills, which are increasingly important in today's technology-driven society (Epjavsek, 2021).

Despite its importance, Home Economics education in Malawi faces several challenges. One significant issue is the disintegration of the curriculum, which weakens the cohesion required for effective teaching and learning. The current educational policies often undervalue the subject, categorizing it as a lesser science, which reflects broader

societal views of its significance (Gondwe, 2018). This perception contributes to inadequate resources, insufficient teacher training, and limited engagement in practical learning experiences (Nevenglosk et al., 2022; Okorie & Effiong, 2021).

The teaching and learning environment is vital in shaping the outcomes of Home Economics education. When educational policies and support systems are insufficient, students' motivation tends to decline, which can lead to poorer learning results and hinder the country's social and economic progress (Maina & Kitainga, 2018; Wall & Leckie, 2017). Limited access to innovative teaching methods and reliance on traditional instructional strategies worsen these issues, often resulting in a largely theoretical approach that fails to engage students effectively (Epjavsek, 2021).

An analysis of the current Home Economics curricula in Malawi indicates that most instruction is highly theoretical, with limited opportunities for practical assessments and real-world applications. This method not only hinders skill development but also limits students' readiness for careers that require hands-on experience and practical knowledge. Factors contributing to this include insufficient time designated for practical learning and a shortage of qualified instructors in the subject (Okorie & Effiong, 2021 & (Bohm, 2023)).

To address these challenges, it is crucial to cultivate an educational environment that promotes innovative teaching methods and the integration of information and communication technology (ICT) into the curriculum (Bernet & Abacka, 2021). Furthermore, offering refresher courses for teachers and improving financial and administrative support for schools would help enhance instruction and learning outcomes in Home Economics (Federal Ministry of Education, 2012). Incorporating practical learning experiences is essential, as it fosters active engagement, critical thinking, and the development of skills vital to students' future success across various fields (Maina & Kitainga, 2018).

The practical teaching and learning of Home Economics in Malawian secondary schools rely on reevaluating educational policies, enhancing teacher training, and adopting innovative methods that emphasize the development of practical skills. These adjustments are vital to ensure students are well-prepared to meet the demands of modern society and to make positive contributions to their communities (Kunkwenzu, 2017; Malawi Vision 2063 Agenda). The future of Home Economics education depends on a unified effort to elevate its status and acknowledge its significance in students' overall development.

In this current context, Home Economics has been split into two subjects within the secondary school curriculum: Home Economics and Clothing and Textiles. This has raised concerns about whether the current multidisciplinary curriculum's learning environment and educational policies sufficiently prepare students for the knowledge, skills, and attitudes required in Home Economics and Clothing and Textiles at the secondary level in Malawi. As a result, the study was conducted to examine the knowledge and skills students acquire in Home Economics in its disintegrated form within Malawian secondary schools. The focus was specifically on the type of knowledge gained, the teaching methods employed, and the factors influencing the teaching and learning environment for HEC and CT.

The study's results will greatly enhance Home Economics and Clothing and Textiles Education by pinpointing challenges and suggesting innovative strategies. This will assist policymakers and curriculum developers in designing relevant curricula that tackle global issues.

2. Literature Review

Conceptualization of Home Economics

Home Economics is a vital vocational subject in Malawi's education system, important at both secondary and higher education levels. It covers essential areas such as food and nutrition, textiles, and life skills, making a significant contribution to personal and societal growth (Ministry of Education, Science, and Technology (MOEST, 2022; Azonuche & Abamba, (2024).). The importance of Home Economics is highlighted by its ability to equip students with practical skills needed to handle various aspects of life. As societal needs and challenges change, so should the curriculum to ensure it stays relevant and responsive to current demands (Pendergast, 1999).

Repeated calls for curriculum updates to include entrepreneurial components enhance graduates' readiness for diverse career paths in an increasingly competitive global economy (Kehinde et al., n.d.).

The need to adapt educational content is becoming even more urgent, given the youth unemployment rates and evolving job markets in Malawi. Home Economics can serve as a foundation for entrepreneurial efforts by developing skills such as critical thinking, resource management, and practical application of knowledge (MIE, 2008). This supports global trends that promote skill-based education, encouraging self-sufficiency and responsible citizenship (Baker, 2015).

Importance of Effective Pedagogical Approaches

The teaching of Home Economics at the secondary school level must go beyond rote learning, creating an environment where students can participate in hands-on learning. According to MIE (2008) and Kunkwenzu (2007), the teaching methods used in Home Economics should reflect a comprehensive development approach, preparing students to meet societal needs effectively. Engaging instructional techniques that include real-world applications are essential to develop key life skills like nutrition, financial literacy, and sustainable practices.

One key pedagogical approach is inquiry-based learning, which encourages students to explore real-world challenges and develop solutions. This method not only promotes active participation but also improves critical thinking skills and fosters a sense of responsibility toward societal issues (Bridget, 2020). Additionally, collaborative learning, where students work in groups, builds teamwork and communication skills, essential for both personal and professional growth (Alberta, 2000). Incorporating technology into teaching can further boost student engagement and provide access to a wider array of resources, enriching the overall learning experience (Epjavsek, 2021).

Research indicates that effective teaching strategies in Home Economics greatly affect student outcomes. An analysis of various teaching methods showed that those with practical, hands-on activities led to increased student motivation and success (Okorie & Effiong, 2021). This highlights the need to shift from traditional teaching approaches to more innovative methods to better address students' diverse learning needs.

Theoretical Framework of Home Economics and Clothing and Textiles Education

Dewey's Constructivist Learning Theory

The framework underpinning Home Economics and Textiles education is rooted in various theories that support its pedagogical methods. Constructivist theories champion experiential learning and recognize the role of the learner in constructing knowledge (Dewey 2009, Mulkeen et al. (2004); (Haapaniemi et al., 2019) and Janni et al. (2022),). In this context, practical activities and real-world applications within Home Economics promote deeper understanding and retention of knowledge. Furthermore, the Social Learning Theory (Bandura, 1977) emphasizes the impact of observational learning in skill acquisition students benefit from observing peers and instructors demonstrate practical techniques in areas such as cooking and textile skills.

Understanding these theoretical foundations provides insight into the necessity for implementing curriculum changes that prioritize practical learning experiences. This aligns with the vision of the Sustainable Development Goals in Malawi, particularly Goal 4, which advocates for inclusive and equitable quality education and promotes lifelong learning for all (United Nations, 2015).

Therefore, the study examined whether students experience teaching and learning environments and educational policies that promote meaningful knowledge and skill development. Classroom observations and teaching methods were evaluated for their effectiveness in enhancing skill development in HEC and CT. Additionally, policy documents such as timetables and instructional materials were reviewed to assess how well the secondary curriculum equips students with essential knowledge and skills in these subjects within a disintegrated curriculum and how they connect to other science subjects.

Theoretical Framework Models

Bohm (2022), Hein (1991), and Kolb (1984) conclude that for the social constructivist, the real is not something to be discovered; it is not pre-existing, but we create it within a social context. Kolb also argues that we construct reality through our actions. People, as members of a group, collectively invent the properties of the world. In this regard, the findings aimed to identify the position of HEC and CT regarding knowledge and skill acquisition in the secondary school curriculum in Malawi. Refer to **figure 1** to establish an understanding on how these theories have informed the study in exploring best practices in the teaching and learning environment alongside education policies in HEC and CT within the disintegrated curriculum. Aimed to enhance the teaching and learning of the subjects.

Constructivist-Based Curriculum Integration Model (CB-CIM)

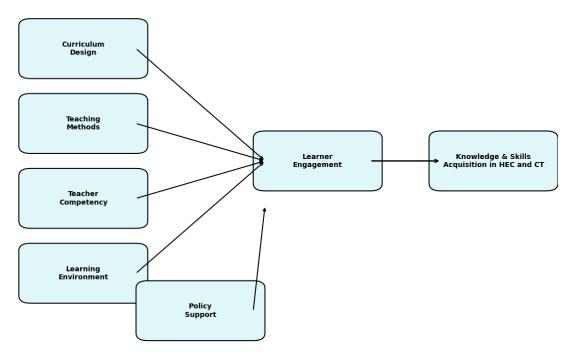


Figure 1: Constructivist-Based Integration Model in HEC and CT Teaching and Learning (source author)
Interpretivist Research Paradigm

The research paradigm is mainly defined by the core beliefs and assumptions that guide inquiry, methodology, data interpretation, and understanding within a specific research context (Creswell, 2007; Guba, 2000). This study was based on an interpretivist paradigm, focusing on analyzing strategies to improve the teaching of Home Economics (HEC) and Clothing and Textiles (CT) within the fragmented secondary school curriculum. Importantly, this approach aims to develop students' relevant knowledge and skills. The ontological perspective supported by interpretivism emphasizes producing descriptive analyses that foster a deep interpretive understanding of social phenomena (Helning, 2004). As Krauss (2005) highlights, individual self-understanding must serve as the foundation for social interpretation, focusing on negotiating and preserving meanings in specific contexts. This was a key focus of the study, aiming to gain a thorough understanding of the practices and strategies used in Malawian secondary schools and to suggest ways to enhance the teaching and learning of HEC and CT. Moreover, Creswell (2007) and Kraus (2015) state that the interpretivist approach encourages the use of mixed methods by combining qualitative and quantitative techniques to gain a comprehensive understanding of research phenomena, which was employed in this study.

Challenges in Teaching Home Economics and Clothing and Textiles

Despite its importance, the effective implementation of Home Economics education in Malawi faces several challenges. An analysis of the current Home Economics curricula indicates an over-reliance on theoretical

instruction, with limited opportunities for practical assessments (Bohm, 2023). Such an approach hampers the development of essential skills and diminishes students' readiness for future careers that necessitate hands-on experience.

One significant structural issue is the insufficient time allocated to practical learning within the curriculum (Kunkwenzu, 2017). Many educational institutions prioritize theoretical knowledge under examination pressure, which likely compounds students' disengagement from the subject. Additionally, there is a notable shortage of qualified Home Economics teachers, resulting in inadequate teaching methods and limited student exposure to modern practices (Phiri, 2015).

Moreover, student motivation drops in environments lacking educational policies and support systems, a phenomenon observed by Maina and Kitainga (2018) and Wall and Leckie (2017). This decrease in motivation can have a ripple effect on learning outcomes, influencing the country's overall educational landscape. Tackling these issues requires re-evaluating educational policies and improving teacher training to adopt a comprehensive approach to Home Economics and Textiles education.

Recommendations for Curriculum and Instructional Improvements

Addressing the identified challenges necessitates a multi-faceted approach that prioritizes innovative teaching methods and integrates technology into the curriculum (Bernet & Abacka, 2021). The incorporation of information and communication technology (ICT) can not only facilitate access to up-to-date resources but also support diverse learning modalities. Refresher courses for teachers are crucial to equip them with current pedagogical skills and strategies (Kunkwenzu, 2017).

Moreover, revising the curriculum to include a balanced mix of theoretical and practical learning is essential. This includes expanding practical assessments and ensuring students engage in hands-on experiences that reflect real-world applications of Home Economics principles (Maina & Kitainga, 2018). Such a curriculum revision should also consider partnerships with local industries and community organizations to create internship and practical learning opportunities, further bridging the gap between education and employability.

3. Methodology

This study aimed to examine the knowledge and skills students acquire in Home Economics in its disintegrated form within Malawian secondary schools. The focus was specifically on the type of knowledge gained, the teaching methods employed, and the factors influencing the teaching and learning environment for HEC and CT.

Research questions were developed to establish an understanding on the type of knowledge gained, the teaching methods employed, and the factors influencing the teaching and learning environment for HEC and CT.

RQ1: How do different pedagogical approaches used in Home Economics (HEC) and Clothing and Textiles (CT) programs influence the depth and types of knowledge and skills students acquire in the disintegrated format?

RQ 2: What are the key contextual and institutional factors that influence the teaching and learning environment in Home Economics (HEC) and Clothing and Textiles (CT), and how do they interact to shape educational outcomes?

This study aimed to examine best practices and strategies for teaching Home Economics (HEC) and Clothing and Textiles (CT) in their disintegrated forms and to suggest ways to enhance instruction of these subjects, focusing on knowledge and skill acquisition among learners. This research adopted a mixed-methods design with a qualitative approach, grounded in constructivist learning theory, and an interpretive research paradigm, which are essential for examining the disintegrated curriculum as a dynamic process that necessitates the interaction of various systems to achieve desired outcomes. This approach enabled better triangulation of findings. (Dick & Carey, 2010; Mahmodi & Barzegar, 2017; Mertens, 2010).

Sample Site, Sample Determination, and Sampling Techniques

Determining an appropriate sample size is crucial for ensuring the validity of research results. A sample is a subset of elements chosen from a larger population using systematic methods. In this study, the sample size of 163

participants was calculated using Cochran's formula (1977), which aids researchers in estimating the necessary number of participants to attain a specific level of accuracy. The sample included 8 teachers, 1 ministry official, 6 head teachers, and 148 students. This selection process was especially relevant given the study's mixed-methods research design, which involved collecting data through various techniques, including document analysis, classroom observations, focus group discussions, and interviews. Data were gathered from students via focus groups, while key informant interviews were conducted with subject teachers. The research focused on two educational divisions and six secondary schools in Malawi that offer Home Economics (HEC) and Clothing and Textiles (CT). The study covered national co-educational and non-co-educational, convetional boarding, and day secondary schools, as well as community day public secondary schools. No private schools were included because none offered HEC and CT in the selected two divisions at the time of the study. These schools were purposefully selected through purposive sampling, following the recommendations of Mertens (2010) and Creswell (2013), who advise targeting groups with specialized knowledge about the studied phenomenon. This method ensured that the sample comprised qualified educators actively teaching HEC and CT, enabling an in-depth examination of how teacher preparedness influences pedagogical strategies and decision-making processes and the learning environment.

Data Analysis

In this study, we examined the important link between teacher preparedness and the teaching methods they use by applying Spearman's rank correlation. This test was selected because, unlike the Pearson correlation coefficient, Spearman's rank does not assume normality of the variables and is more appropriate for small sample sizes (Spearman, 1961; Spearman, 1987). For the qualitative part of the research, the sample size was determined based on data saturation, which was reached when additional data no longer generated new insights or themes (Creswell, 2013; Cresswell et al., 2023; Cresswell, 2009 & Mertens, 2010). Eight teachers were interviewed in this study. In each school, students were grouped into sets of at least 8, resulting in 18 focus groups.

Qualitative data collected from interviews, focus group discussions, and field notes were systematically recorded and transcribed into digital files. This data underwent a rigorous process of reduction and reconstruction through open coding, enabling the identification of key themes such as "teacher preparedness," "frequently used strategies," and "curriculum-related factors." Related categories were systematically compared to clarify relationships among the identified themes, ultimately providing a foundation for analyzing the research topic: "enhancing Home Economics and Clothing and Textiles (HEC and CT) education, including challenges and innovative teaching strategies within a disintegrated curriculum." This methodological approach supports Holiday's (2001) assertion in Henning (2004) that synthesizing raw data moves the inquiry from "messy reality" toward a structured understanding. The thematic organization, involving coding, categorization, and theme extraction, facilitated a nuanced discussion of the emerging themes, presented in the Results and Discussion section. Additionally, these themes were compared against document analyses and frequency tables, which were graphically represented to illustrate classroom activities and strategies. This triangulation approach aligns with Creswell's (2007) mixed-methods model, promoting a comprehensive understanding of the effectiveness of HEC and CT instruction within Malawi's disintegrated secondary school curriculum, while maintaining alignment with Dewey's (2009) Constructivist theory and interpretivist paradigm.

Validity, Reliability, and Trustworthiness of Results

Validity refers to the soundness and credibility of research findings, greatly impacting the strength of conclusions, while reliability relates to the reproducibility of these results (Durrheim & Wassenaar, 1999). In qualitative research, both concepts are essential for establishing trustworthiness (Kunkwenzu, 2007).

A pilot study conducted in May 2022 at two schools refined the study tools and estimated data-collection time (Creswell, 2008). Main data collection took place from May 2023 to July 2024, using data triangulation and participant validation to increase trustworthiness. Even though the research study was limited to six Malawian secondary schools.

Ethical approval (DMISEU/R&D/AD/2024/013) was secured, with informed consent and participant confidentiality maintained (Lincoln & Guba, 1985). This process highlighted teachers' preparedness, instructional strategies, and students' curriculum experiences in order to explore strategies of enhancing teaching and learning of Home Economics and Clothing and Textiles (Mertens, 2010; Creswell, 2013).

4. Results and Discussions

Concepts and Teaching of Home Economics

The study's findings underscore the importance of separating Home Economics and Clothing and Textiles (CT) to enhance educational outcomes. As emphasized by Jannie et al. (2022), a focused curriculum facilitates deeper learning, allowing students to develop specific skill sets vital for their future careers. The Ministry of Education, Science, and Technology (MOEST, 2017) supports this approach by advocating for the inclusion of additional CT topics in the senior secondary syllabus. The learners' testimony reflects a positive shift; the separation of subjects provides ample opportunity for practical engagement. Consequently, this focused methodology enhances both knowledge retention and practical skill acquisition among students "We send our teachers to training, for example, there was another one in CT; one teacher from each division attended during curriculum orientation in CT... we also provide financial support when requested for practical work... though not often because of limited resources... but we try (HTs 1). It's good that the subjects are now separated. I believe I will learn more now and will have enough time for practical work," (learner 16").

Factors Influencing the Implementation of Home Economics (HEC) and Clothing and Textiles (CT)

Institutional and Curriculum-Related Factors

The findings show that students enrolled in HEC and CT often lack the supportive environment needed for effective skills acquisition and knowledge development. Teachers reported insufficient administrative support, which hinders the successful implementation of the curriculum. This aligns with the observations of Nevenglosk (2022) and Bohm (2023), who note that inadequate administrative support can negatively affect student performance. Additionally, the study highlights challenges in curriculum implementation, such as infrequent practical work due to crowded schedules. Teachers often resort to less challenging activities, and the use of ICT in lessons remains sporadic. Innovative teaching methods are frequently overlooked, affecting overall educational outcomes. "Our teacher feels lonely and always tired, so she cannot help us effectively. She often seems exhausted. We need the government to send us more teachers because we enjoy learning the subject... As first-year students, we've only done practical work once (Learner 1). As form three students, we only did practical work twice in form two, and this term we want more practical work because it teaches us how to cook good meals (Learner 14)". The findings from this study are similar to those by Lewin and Stewart (2003), who highlight that increasing workloads negatively affect teachers' effectiveness. Studies by Cooper (2001), Maina and Kitainge (2018), Ashong (2021), Bohm (2023), Okorie et al. (2021), and Epjavsek (2021) also show that teachers often work beyond their paid hours, leading to fatigue, which was also observed in this study. This exhaustion hinders teaching and learning, contradicting Dewey's (2009) constructivist theory, which stresses the importance of mental engagement in learning. As a result, the lack of a supportive learning environment leads to reduced knowledge and skill development among students.

The classroom observations indicated a restrictive learning environment, characterized by a scarcity of challenging activities that promote deeper understanding (Prosper, 2025; Chuks, 2011; Biggs, 1999). This aligns with the idea that a highly structured educational framework hinders learners' ability to construct personal meaning from their experiences. Educational literature emphasizes that knowledge acquisition goes beyond passive listening; it develops through active engagement with the environment (Kolb, 2014; Kolb & Fry, 1975). As a result, the clear deficiencies in teaching Home Economics (HEC) and Clothing (CT) within a disintegrated secondary school curriculum further affect meaningful learning experiences and exploration. "When it comes to completing work, I need to reduce rushing. I use activity-based approaches and make sure to stick to the syllabus to avoid wasting time. Otherwise, I won't finish. Imagine HEC periods only four per week—how can I teach all the content with practical work included? There is a mismatch between what is in the official document and what

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we actually teach (teacher Chabwera). In this secondary school curriculum, there are too many subjects, so fitting them all within the required time isn't possible. We just try to cover parts of each".

The approach leads to minimal acquisition of relevant knowledge and skills. This means that learners are rarely exposed to challenging tasks that could foster curiosity and a positive attitude toward the subject. Additionally, teachers seldom use strategies such as demonstrations, hands-on activities, or projects in their teaching and learning processes. This was due to combined professional and school pressures that burden teachers.

Teacher Preparedness

(Kunkwenzu, 2007) emphasises that while books on teaching Higher Education Curriculum (HEC), Critical Thinking (CT), and other Science subjects can be helpful, well-structured training courses are often much more effective. These courses offer a practical framework that helps teachers grasp complex concepts through handson practice. The study shows that many teachers struggle with HEC and CT due to inadequate training and the lack of refresher courses to update their knowledge. Therefore, it is essential for training colleges to develop comprehensive curricula that prepare teachers to effectively handle HEC and CT. "When we meet as a team in training, we share ideas. But for you to find a chance for a refresher course or training, it's often too selective. Those who have already made a name tend to go. Especially females, not us young males who just graduated, so how can one grow professionally?" (Teacher Chabwera).

Teaching colleges and secondary school administrators need to develop a mechanism to bring together teachers from diverse backgrounds and equip them with common knowledge to teach the integrated curriculum effectively, including HEC and CT. This suggestion is also expounded by Duibhir and Cummins (2012), who believe that the understanding of important concepts of the subjects depends on the study of that subject. Alignment of college and secondary school is also required so that specialization of HEC and CT can be achieved. In addition, male teachers need to be encouraged to act as role models in the teaching of HEC and CT (Maina & Kitainge, 2018).

From the discussion, the challenges teachers face in delivering the Home Economics (HEC) and Clothing and Textiles (CT) stem from inadequate training and limited in-service opportunities. This lack of professional development hinders teamwork during joint teaching and reveals a broader deficiency in both content and pedagogical knowledge, ultimately affecting student engagement and learning outcomes. As also expressed by teacher "This CT subject is very difficult one cannot teach. I myself I even do not know how I passed this ta the college It was well taught, difficult ija ya ma slopper aaa (pattern development / block patterns)" Hence, assign teachers to fixed positions to deliver the content and ensure sufficient knowledge and skills acquisition.

Inadequate Teaching and Learning Resources

Lack of teaching and learning resources such as books, laboratory facilities, and equipment —particularly in CT; time constraints; curriculum structures; and policy issues, such as national examination schedules, the involvement of HEC, and CT in national projects, were highlighted as challenges to effective curriculum implementation. I use my own pamphlets, which becomes a challenge when sharing with learners. We tried to ask publishers, but they are very scarce, especially for CT, which is a challenge (teacher Chakhaza). Sometimes, due to inadequate facilities, HEC and CT equipment are stored in a borrowed office that also contains non-HEC or CT materials like bicycles, which are meant for needy students. See (teacher open up a room)—this is the room where we keep our materials, but only for HEC and CT. Since we do not have laboratories, we plan to divide this space into two. Bicycles are kept here temporarily during holidays. The outside world could encroach on the otherwise isolated and protected HE and CT space, making it unsafe. Additionally, a machine is not yet installed, waiting for contractors, and HEC has not purchased small equipment. We hope you can assist us in acquiring these small items. We discussed this issue at length (CT teacher 1). These challenges have a negative impact on student learning and motivation.

5. Time Factors and the Mismatch bBetween the Official Curriculum Document and the School Setting

The study shown in table 1 reveals that HEC is mismatch with regard time allocation in schools.

Table 1: Time allocation for junior section

	School 1	School 2	School 3	School 4	School 5	School 6	School 7	School 8
Нес	160	160	180	180	240	240	240	240
CT	0	0	180	180	240	0	240	240
policy	240	240	240	240	240	240	240	240

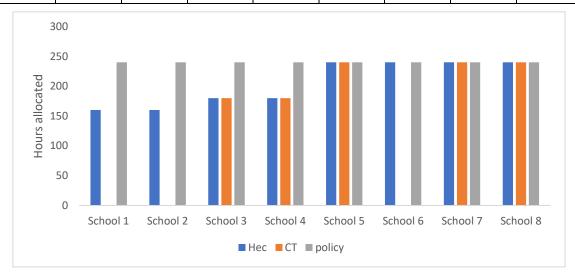


Figure 2: Time allocation for junior section

Table 2: Time allocation for senior section

	School 1	School 2	School 3	School 4	School 5	School 6	School 7	School 8
Нес	240	240	0	180	320	320	320	320
CT	0	0	0	180	320	0	320	0
policy	320	320	320	320	320	320	320	320

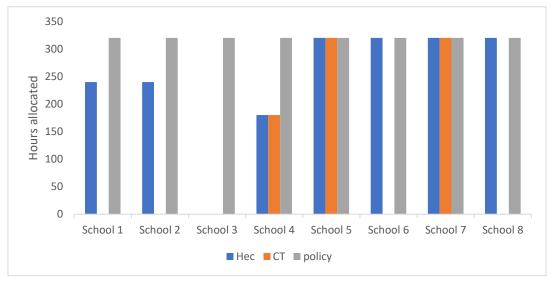


Figure 3: Time allocation for the senior section

The study results, presented in Table 2 and Figures 2 and 3, reveal a discrepancy in time allocation for Home Economics and Clothing and Textiles subjects in secondary schools compared to the revised curriculum policy document. According to the results, the policy states that there are three 40-minute periods per week in the junior section (Forms 1 and 2 = 240 minutes) and four 40-minute periods in the senior section (Forms 3 and 4 = 320minutes) for all science subjects, including HEC and CT. However, findings show that some schools allocate different periods: for example, District Boarding Convention Secondary Schools (DBCSS) 40 assigns three or six periods per week for both junior and senior sections across all science subjects, except senior Biology, which has four or eight periods. The results indicate a gap between the timetable and the policy document regarding time allocation. Furthermore, the study shows variation in the number and duration of periods among schools. Some National Boarding Non-core Secondary Schools (NBNCSS) have 40-minute periods allocated for HEC/CT, such as six (NBNCSS40) and five (NBNCSS40), aligning with the revised curriculum. District conventional boarding schools, like 1 (DBNCSS40) and 2 (CBCSS40), also follow a similar pattern with 40-minute periods across all subjects, including CT and HEC, matching the policy. In contrast, District Day Secondary Schools (DDSS) and Community Day Secondary Schools (CDSS) display variation and mismatches in period counts and length. For example, 5 (DCSDS35) allocates three or six periods for junior sciences and three or six for senior sciences, including HEC and CT, with each period lasting 35 minutes. 3 (CDCDS35) follows a similar pattern but assigns four or eight periods with a consistent 35-minute duration. These disparities have a negative impact on how teachers conduct themselves in terms of teaching strategies.

Excessive workload in a short time can harm learners' understanding and their ability to use information (Wertsch, 1997; Hein, 1991). Teachers often see rushing through topics without enough resources or time as ineffective. This conflicts with Dewey's (2009) constructivist theory, which encourages providing meaningful input and engaging students in challenging tasks to support learning.

The study also highlights the absence of key topics in the new curriculum of HEC and CT. This also affected the implementation of the HEC and CT curricula in Malawian secondary schools. The curriculum neded to be cultualary responsive. This can help the Malwian HEC and CT students effectively acquire relevant skills to meet with society and global economic challenges.

6. Conclusion and Recommendations

The study highlights that while separating Home Economics (HEC) and Clothing and Textiles (CT) into individual subjects allows for more targeted teaching and deeper learning, significant challenges persist that impede proper knowledge and skill development. The findings reveal that limited administrative support, a lack of innovative teaching strategies, heavy teacher workloads, curriculum overload, and unclear education policies create a restrictive learning environment. As a result, students have few hands-on opportunities, which are crucial for these subjects that focus on practical skills. This restrictive setup not only conflicts with modern educational theories, like Dewey's constructivism, but also diminishes the curiosity and engagement necessary to foster a positive attitude toward the real-world applications of HEC and CT concepts. Ultimately, these barriers undermine the potential educational benefits of disintegrating subjects, leading to a decline in student performance and skill development.

Recommendations

To address the identified challenges and improve the effectiveness of HEC and CT teaching, several recommendations were suggested. Implementing these suggestions will help educational stakeholders eliminate barriers that hinder effective teaching and learning in Home Economics and Clothing and Textiles, ultimately ensuring students acquire the skills and knowledge they need for their future careers.

- 1. Increase Administrative Support: Educational authorities should prioritize offering strong administrative backing for HEC and CT teachers. This includes dedicating resources for training workshops focused on innovative teaching methods and effective curriculum implementation.
- 2. Enhanced Teacher Training: Professional development programs should be tailored to equip educators with skills in integrating information and communication technology (ICT) and innovative teaching

methodologies into HEC and CT curricula. This would facilitate more engaging and compelling learning experiences.

- **3.** Curriculum Review and Realignment: A thorough review of the curriculum framework should be conducted to ensure it aligns with practical learning needs. Focus should be on activity-based learning that encourages critical thinking and real-world application of concepts.
- **4. Reducing Teacher Workload:** Strategies should be created to effectively manage teachers' workloads. This may involve hiring more staff or adjusting class sizes so teachers can give more attention to handson activities and promote a deeper understanding of the subjects.
- 5. Promoting Hands-On Learning and innovative Strategies: Schools should focus on scheduling more practical sessions within the curriculum. This can be done by setting aside dedicated time for hands-on work in both HEC and CT, thereby creating a more interactive educational experience that reflects the nature of these subjects.
- **6. Encouraging Student Feedback:** Schools should implement mechanisms for gathering student feedback regarding their learning experiences in HEC and CT. This data can be invaluable for continually assessing and improving pedagogical practices.

Notes:

In Malawi, Home Economics and Clothing and Textiles are among the elective subjects offered in the science stream at secondary schools. These subjects are taught from Forms 1 to 4. However, in some schools, they were only available in Form 1 at the time of the study. In the senior section, specifically in Form 3, students can choose either Home Economics or Clothing and Textiles as an optional subject based on their school's specific guidelines. Each student is required to select a minimum of six subjects, including English, to sit for the Malawi School Certificate of Education (MSCE).

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- 2. **Prof. Vinnaras Nithyanantham**, is my research supervisor from School of Doctoral Studies, UNICAF University, Cyprus, who guided the whole research study from conceptualization, data generation, meaning making and vetted for final manuscript production.

References

- [1] Adelson, J. L., & McCoach, D. B. (2011). Development and psychometric properties of the math and me survey: Measuring third through sixth graders' attitudes toward mathematics. *Measurement and Evaluation in Counselling and Development*, 44(4), 225-247. Retrieve from https://journals.sagepub.com/doi/pdf/10.1177/0748175611418522?casa_token
- [2] Agarwal, J and Malhotra, N.K. (2005). An integrated model of attitude and affect. *Journal of Business Research*, 58(4), pp.483-493

Tuijin Jishu/Journal of Propulsion Technology

ISSN: 1001-4055 Vol. 46 No.04 (2025)

[3] Ajzen, I. (1993). Attitude theory and the attitude-behavior relation. *New directions in attitude measurement*, 41-57.

- [4] Ashong, E. L. D. (2021). An exploration of innovations for teaching home economics the views and experiences of home economics teachers and students in teacher education universities in Ghana [Thesis, University of Education, Winneba]. http://41.74.91.244:8080/handle/123456789/3010
- [5] Azonuche, J. E., & Abamba, D. C. (2024). Factors influencing Choice of Clothing and Textiles among undergraduate students: A study of Teaching facilities, Career prospects and Strategies improvement. Shodh Sari-An International Multidisciplinary Journal, 3(1), 369–393.
- [6] Blessing, C., & Patrick, C. (n.d.). Demonstration and Discussion Teaching Methods in the Enhancement of Academic Achievement of Students in Senior School Biology in Yenagoa and Ogbia Local Government Areas, Bayelsa State. Retrieved October 14, 2024, from https://www.arcnjournals.org/images/2726145223 71491.pdf
- [7] Bohm, I. (2023). Cultural sustainability: A hidden curriculum in Swedish home economics? Food, Culture & Society, 26(3), 742–758. https://doi.org/10.1080/15528014.2022.2062957
- [8] Concesso et al (2018). Home Science. Tamil Nadu: Tamil Nadu textbook and educational services
- [9] Chuks, D. (2011). Impact of home economics laboratory in teaching and learning food and nutrition. https://www.academia.edu/91774430/Impact_of_home_economics_laboratory_in_teaching_and_learning food and nutrition
- [10] Dewhurst, D.E. & Pendergast, D. (2011). Teacher perceptions of the contribution of Home Economics to the development: A cross-cultural view. *International Journal of consumer studies*. Queensland, Australia
- [11] Elbyaly, M. Y. H., & Elfeky, A. I. M. (n.d.). FLIPPED CLASSROOM: ENHANCING FASHION DESIGN SKILLS FOR HOME ECONOMICS STUDENTS. European Chemical Bulletin.
- [12] Eno-Obong, H. (2006). Challenges of entrepreneurship in home economics and enhancement strategies. *Journal of Home Economics Research* 7, (2), 69-75.
- [13] Federal Government of Nigeria 2004, *National Policy of Education* Nigeria 4th edition NARDC Press. Yaba Lagos, Nigeria.
- [14] Haapaniemi, J., Venäläinen, S., Malin, A., & Palojoki, P. (2019). Home economics education: Exploring integrative learning. Educational Research, 61(1), 87–104. https://doi.org/10.1080/00131881.2018.15646 26
- [15] Harrigurus (2019). Factors affecting teaching of Home Economics Education in secondary schools. Retrieved November 27, 2019 from https://harrilibrary.blogspot.com
- [16] Joana, A., Selase, G. R., Selorm, G., & Emefa, A. F. (2015). Improving the Skill Component of Clothing and Textiles among Students in Second Cycle Institutions in Ghana and Its Effect on the Polytechnic Fashion Student. A Case Study of OLA Girls, Mawuko Girls and Mawuli Senior High School in Ho, Ghana. Journal of Education and Practice, 6(27), 20–27.
- [17] King'aru M.J. (2014). Factors contributing to poor performance of science subjects: Acase of Secondary Schools in Kiwe Division, Kinondoni Municipality. Tanzania: Open University
- [18] Kolb, D. A. (2014). Experiential Learning: Experience as the Source of Learning and Development. FT Press.
- [19] Kunkwenzu, E. D. (2007). Professional experiences of beginning home economics teachers in Malawi: A grounded theory approach. http://hdl.handle.net/10019.1/1408
- [20] Kumkwezu, D.E. (1997). Critical competencies for effective teaching. Perceptions of home economics teachers. Edith Cowan University
- [21] Luzuwano, M. (n.d.). EDUCATION STATISTICS REPORT. Retrieved September 5, 2024, from https://www.academia.edu/109409369/EDUCATION_STATISTICS_REPORT
- [22] Maina, R.A. & Kitainge ,K. (2018). *Improving Home Economics Education: A review of factors militating inclusion of home economics studies in Kenyani schools*. Kenya: University of Eldoret. Retrieved November 27, 2019 from www.omicsoonline.org
- [23] Malawi secondary school curriculum pdf download 2022—Google Search. (n.d.). Retrieved May 21, 2025, from https://www.google.com/search?sca_esv=340a42e2eabdb65d&rlz=1C1ONGR_enMW1082MW109

Tuijin Jishu/Journal of Propulsion Technology

ISSN: 1001-4055 Vol. 46 No.04 (2025)

- 5&sxsrf=AHTn8zoHDmBhgmLPy8dW2d8qU0iI0Q_vbA:1747829219433&q=Malawi+secondary+scho ol+curriculum+pdf+download+2022&sa=X&ved=2ahUKEwiujoKew7SNAxXZdUEAHQkLF88Q1QJ6BAgrEAE&biw=1536&bih=730&dpr=1.25
- [24] Matthew, U. O., Kazaure, J. S., & Okafor, N. U. (2021). Contemporary development in E-Learning education, cloud computing technology & internet of things. EAI Endorsed Trans. Cloud Syst., 7(20), e3.
- [25] Mwampashi, L (2017). Assessment of secondary school students' perception and attitude toward learning science in Mvomero District: Tanzania
- [26] Mcleod, S. (2018). Attitudes and behavior. Retrieved January 13, 2020 from www.simplypsychology.org
- [27] Nevenglosky, E. A. (2018). Barriers to effective curriculum implementation [PhD Thesis, Walden University]. https://search.proquest.com/openview/d9d07dd15a6b0eaf118fb4f43ed64759/1?pq-origsite=gscholar&cbl=18750
- [28] Okorie, M. N., Effiong, M. M., & Akpan, A. F. (2021). Challenges and prospects of teaching home economics in college of education during economic recession era. A case study of the department of home economics, college of education, Afaha Nsit. International Journal of Educational Benchmark (IJEB), 18(1), 1–12.
- [29] Paas ,K., Taar, J., Mandimets, M & Karing, M. (2015). *The Physical Learning Environment of Home Economics Classes- Estonian Teachers and Pupils' Opinions*. Estonia: Tallinn University from http://corerj.soc.srcf.net/?page id=224
- [30] Prosper, K. (2025). Integrating Culturally Responsive Curriculum and Pedagogy in Home Economics Education. https://open.library.ubc.ca/soa/cIRcle/collections/graduateresearch/42591/items/1.0448688
- [31] Sundqvist, K. (2023, October 27). Digitalisation Meets Home Economics Teachers: A Mixed-Methods Study of the Conditions Related to Finnish Home Economics Teachers' Use of Information and Communication Technologies. Åbo Akademi Åbo Akademi University. https://www.doria.fi/handle/100 24/187910
- [32] Sylvester, S. (2021). Clothing and textiles course as a foundation for the fashion design and textiles programme in Accra Technical University [Thesis, University of Education Winneba]. http://41.74.91. 244:8080/handle/123456789/3092
- [33] Uwameiye, B. (2015). Students' perception of Home Econmics Classroom Learning Environment. *Literacy Information and Computer Education Journal (LICEJ)*. 4(1). PP.2155-2160
- [34] Wahome, G.O. (2005). Secondary school students' perception of Home science subject in Nairobe Province. Kenya: University of Nairob.
- [35] YLiftoff, L. (2016). *How a school's learning environment affects students' achievement*. Retrieved January 10, 2020 from www.learningliftoff.com