

Experiences of Teachers Implementing the New Food and Textiles Technology Syllabus in Eswatini

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Abstract

Food and Textile Technology is a revised curriculum introduced in the Prevocational programme in Eswatini in 2020. Mandated to align with Cambridge Examination Board standards, this change aimed to meet accreditation requirements and increase student enrolment. This study explores how teachers are adapting to curricular changes. The objectives were to establish challenges experienced by food and textile technology teachers, and to determine their attitudes towards the new curriculum. A mixed-methods study was conducted within a pragmatist framework. Food and Textile Technology teachers in the country constituted the target population. Total population sampling was employed due to the limited number of teachers, utilizing both quantitative and qualitative data analysis. Findings revealed significant time pressures due to curriculum overload, teacher bias in teaching integrated subjects, and a shortage of funds and resources. Despite these challenges, teachers demonstrated a strong inclination towards teaching the subject. Teachers exhibited a notable level of familiarity with the syllabus content. Recommendations include reducing practical assessments, reviewing the syllabus, and pursuing official recognition for Prevocational schools to alleviate workload and financial burdens. Additionally, hiring more teachers could help reduce teacher bias.

Key words: Competency based education, Curriculum implementation, Challenges, Teachers experiences, Prevocational education.

Introduction

The addition of Food and Textile Technology to Eswatini's Prevocational curriculum, in place of Home Economics, was to meet Cambridge accreditation standards and increase student enrolment. Vocational Education (VE) is important for socio-economic development, and Eswatini's 1984 National Education Review Commission reported an imbalance in favour of academic subjects. Suggestions were to expand practical subjects so that students would possess vocational skills. However, Prevocational Vocational Education (PVE) in Eswatini has been affected, including a lack of accreditation, negative attitudes from stakeholders, and poor incorporation of self-reliance (Dlamini & Vilane, 2017). Lack of accreditation hindered tertiary progression and resulted in low intake (Dlamini & Vilane, 2017; Nyoni, 2018). To ensure accreditation benchmark, ECESWA and Eswatini Ministry of Education and Training partnered with Cambridge in a bid to get accredited. This required a detailed review of the programme, resulting in the modification of subject matter, programme and subject names, and assessment approaches, without altering the fundamental philosophy of the programme.

Statement of the Problem

Teachers are pivotal in curriculum implementation, yet their perspectives are often overlooked (Hakutumbulwa, 2021). In Eswatini, the new Food and Textiles Technology syllabus, a revision of the former Prevocational Home Economics/Consumer Science, presents a significant pedagogical shift. Anecdotal evidence suggests teachers are struggling, expressing concerns about its suitability and alignment with educational goals. They report feeling unprepared and overwhelmed. Existing research highlights broader Prevocational Education challenges (Dlamini & Vilane, 2017; Nyoni, 2018), but lacks specific focus on these teachers' experiences. This study aims to document their perceptions and adaptations, addressing the gap in understanding their lived realities and contributing to more supportive curriculum reform.

Research Objectives

The objectives of the study were to:

- 1) Determine teacher's attitude towards the new curriculum.
- 2) Establish challenges faced by food and textile technology teachers on curriculum change.

Theoretical Framework

The study adopts John Dewey's experiential learning theory. Dewey's *Experience and Education* is a foundational text in this field. His theory posits that learning is an active process influenced by knowledge, the social environment, content organization, the teacher's role, learner readiness, and the learning outcomes generated from experiences. John Dewey's theory of education, and specifically his emphasis on experiential learning, is highly pertinent to grasping the experiences of Eswatini teachers when dealing with the new Food and Textiles Technology syllabus. Dewey promoted learning through action, an imperative aspect in applied subjects such as Food and Textiles.

The Dynamics of Change in Vocational Education

Vocational instructors in skills training institutions are faced with numerous challenges that impact performance, including complacency, outdated syllabi, and inadequate industrial exposure (Ismail, Nopiah, & Rasu, 2018). Motivation is critical but often lacking. Transfer of hands on skills is hindered by limited industrial exposure of instructors. Curriculum objectives are challenged by factors such as insufficient teacher involvement, ill-defined objectives, and insufficient qualified staff (Mabuza, 2020). Change, an ever present characteristic of changing environments is most frequently met with rebellion (Ewenstein & Sologar, 2015).

Implementer orientations, guided by data and experience, are essential. Uncertainty about change processes assures failure. Resistance can provide useful feedback. Fear of the unknown, personal issues, and external pressures drive change resistance. Mistrust, communication issues, and unrealistic schedules exacerbate this.

Conceptual framework

The introduction of the new Food and Textiles Technology syllabus in Eswatini sets the stage for this study. The core components of this new curriculum, including its goals, content, assessment methods, and innovative aspects, are crucial in shaping how teachers perceive and implement it. However, teacher characteristics, such as qualifications, experience, and attitudes, play a vital role in this process. The interplay between curriculum characteristics and teacher characteristics ultimately determines the quality and effectiveness of curriculum implementation. This study aims to explore the teachers' experiences by focusing on their perceptions, feelings, changes in teaching practices, and perceived impact on student learning. By investigating these aspects, we can gain valuable insights into the challenges and opportunities associated with implementing the new Food and Textiles Technology syllabus in Eswatini.

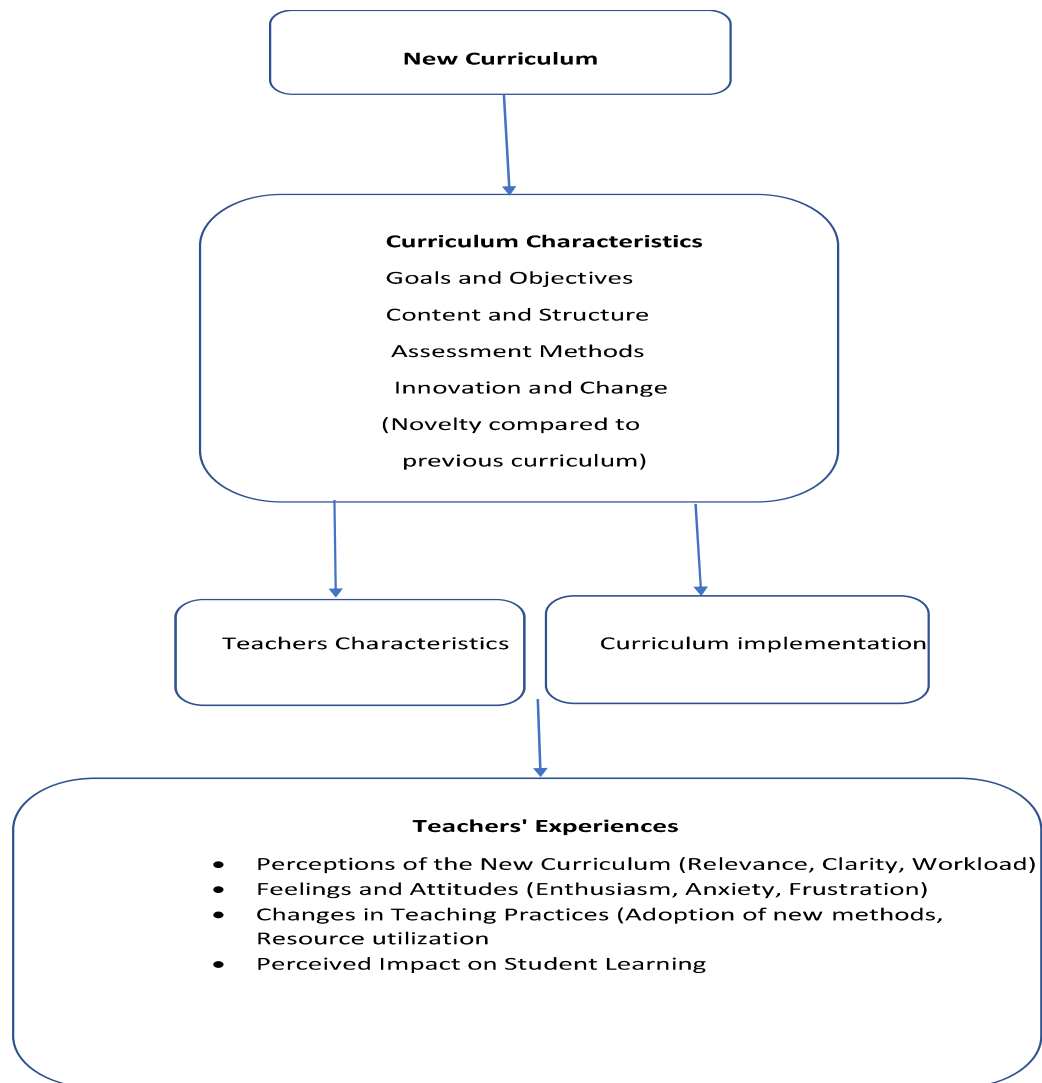


Figure 1: Conceptual framework

Methodology

This study adopted a pragmatist paradigm, balancing quantitative and qualitative approaches (Yardley & Bishop, 2017). The chosen paradigm aligns well with the research approach as it helps provide a comprehensive understanding. It also provides philosophical and methodological foundations to the use of mixed methods research. A sequential mixed methods approach was employed for this study to comprehensively investigate teachers' experiences with the new PVE syllabus. By

combining quantitative and qualitative data, this research aimed to capture both broader trends and detailed insights. This approach enhanced the study's originality by addressing the limitations of single-method designs. The design of the study was descriptive survey research employing both the qualitative and quantitative approaches for data collection and data analysis.

The study was conducted in Eswatini, targeting Prevocational Food and Textiles Technology (FTT) teachers in sixteen schools across the country's four regions. Total population sampling approach which is a type of purposive sampling was employed for both quantitative and qualitative data collections because of the limited number of Food and Textile technology teachers. This method is suitable for small, well-defined populations.

As outlined by Yardley and Bishop (2017), qualitative methods include interviews, observations, focus groups, and document analysis. Survey questionnaire with closed-ended questions was developed from the literature review and it was used to collect quantitative data. The questionnaire comprised structured questions using 6 point Likert scales to measure teachers' levels of agreement on various aspects of the new syllabus. The rating on the scale was as follows: 6 = Strongly Agree; 5 = Agree; 4 = Slightly Agree; 3 = Slightly Disagree; 2 = Disagree; 1 = Strongly Disagree. This study specifically used semi-structured interviews for qualitative data. To ensure trustworthiness of the qualitative data, several strategies were employed: credibility was established through triangulation of data from interviews and questionnaires; transferability was supported by providing a rich contextual background; dependability was achieved by maintaining clear and traceable documentation of the research process; conformability was addressed by being explicit about the researcher's assumptions; validity was ensured through appropriate methodological choices and data integrity; and reliability was reinforced by consistently applying the research methods. Statistical Package for Social Sciences (SPSS) version 20.1 was used to compute means and standard deviations. Data analysis is a labour-intensive

process of identifying patterns, themes, and categories within large volumes of textual data. Thematic analysis, a flexible approach, was employed in this study to identify and describe patterns within the data.

Findings and Discussion

The syllabus length presents a significant challenge, hindering completion within allocated timeframes. Premature practical examinations disrupt core content teaching, with rigid deadlines and limited skill focus hindering comprehensive development (Mutegi, 2014). Teachers report increased workload due to project demands, shifting focus from holistic learning to examination preparation: *"The early introduction of guided practical examinations...disrupted the teaching and learning process,"* stated Teacher J; and Teacher 'F' noted, *The guided practical component significantly increased the workload.*

Teachers adjust to slow-learning students, further contributing to perceived syllabus length. Inclusive classrooms are crucial (Carter & Darling-Hammond, 2016). Vague learning objectives also contribute to delays, with teachers often exceeding syllabus scope. Clear objectives are essential for effective teaching and evaluation (Lambdin & Frishberg, 2018). Consequently, students graduate underprepared for real-world demands.

Scarcity of Teaching and Learning Resources

Prevocational schools face a significant shortage of teaching and learning materials, compounded by shared laboratory facilities, hindering effective instruction (Maffea, 2020). Teachers report that shared labs disrupt practical lessons and contribute to equipment loss and damage. Essential laboratory furniture is often lacking, forcing teachers to borrow from other classrooms, causing further disruption: *"Shared facilities and limited equipment, compounded by losses, hinder practical*

prevocational lessons” observed Teacher ‘M’ and Teacher B noted “*Competing demands and resource scarcity reduce lesson frequency and effectiveness*”

The absence of a prescribed textbook for Food and Textile Technology forces reliance on unverified sources, undermining teacher confidence (Mabuza, 2019). This deprives teachers and students of the benefits associated with textbooks, such as improved lesson management and standardized instruction (Millar & Schrier, 2015). The scarcity of resources and lack of essential materials negatively impacts both teachers' ability to deliver effective lessons and students' opportunities for hands-on learning.

Unattainable Curriculum Goals

Findings reveal prevocational programme objectives are unmet, with graduates facing unemployment and lacking applied skills. Students perceive the subject as irrelevant for tertiary education, leading to poor attendance and engagement (Langat, 2015). Shared laboratory facilities and time constraints hinder practical training, resulting in an overly theoretical curriculum, as noted by teachers: “*Shared labs and early exams severely hinder prevocational student skill development*” reacted Teacher ‘M’.” *Limited practical access and rushed preparation compromise curriculum goals* observed Teacher ‘K’.

Lack of real-world exposure limit’s objective attainment. The curriculum lacks clear guidelines for industry visits, depriving students of practical application and professional networking opportunities (Virtanen, Tynjala, & Etelapelto, 2014). Financial constraints further impede skill development by limiting access to essential teaching resources, leading to an imbalance between theory and practice. Effective learning requires a balanced approach, emphasizing practical lessons to bridge the theory-application gap.

Difficulty Balancing Expertise in dual Discipline

The fusion of Food and Nutrition and Fashion and Fabrics into Food and Textile Technology presents schools with multifaceted challenges. Instructors are overwhelmed with twin-subject competencies, impacting the quality of instruction and learner dedication. Teacher prejudice, with seniority to a subject, brings about imbalances, demotivating learner performance. Teachers point to the struggle in managing the dual subject, mentioning increased costs on single-subject practical lessons and intensive learner workloads as follows:

“We are struggling immensely to manage two subjects simultaneously. It is a demanding task for both teachers and students,” a teacher said; and *“The combined subject has significantly increased costs due to the need for separate practical lessons and examinations for both food and textile technology components revealed,”* noted Teacher ‘L’

Financial expenses are high, with resource-intensive practical subjects straining school budgets, limiting material procurement and hindering skill acquisition. The volume of practical exams, including several proposals and projects, is excessive, leading to student stress and burnout (Thornby, Bazeau, & Chen, 2023). Stress negatively impacts academic performance, possibly resulting in anxiety, depression, and academic failure, ultimately affecting student well-being.

Teachers Attitude towards the New Food and Textile Technology Syllabus

Prevocational Food and Textile Technology teachers were asked to rate their attitude towards the new syllabus. Results presented in Table 6 indicated that teachers generally have a slightly positive attitude towards the new syllabus (\bar{x} = 4.37). Specifically, teachers strongly agree that they are proud to teach the subject (\bar{x} = 5.06), find the practical lessons in the new syllabus intellectual, innovative, and stimulating (\bar{x} = 5.00), perceive the curriculum language as appropriate for their educational level (\bar{x} = 4.88), and are familiar with the entire content (\bar{x} = 4.56).

Furthermore, teachers tend to agree that it is moderately easy to access teaching information from the specified resources (\bar{x} = 3.94) and that the new syllabus is likely to produce desired outcomes (\bar{x} = 3.75). However, teachers tend to disagree that they possess the necessary skills required by the syllabus (\bar{x} = 3.24). The standard deviation of 1.05 indicates a relatively low level of variability in the responses of Prevocational Food and Textile Technology teachers.

Teacher attitudes	\bar{X}	SD	DE
1. I am proud to be a food and textile technology teacher	5.06	0.68	A
2. I have found the new syllabus to be intellectual stimulating	4.88	0.34	A
3. Practical in the new FTT syllabus are intellectual, innovative and stimulating	5.00	0.37	A
4. Language used in the new curriculum is at my educational level	4.88	0.62	A
5. It is easy to get information for teaching from the stated resource material	3.94	1.34	SLA
6. I am familiar with the entire content	4.56	1.26	A
7. I have the skills required by the syllabus	3.24	1.01	SDA
Overall Total	4.17	1.05	SLA

Table 1 Teachers' attitude toward the new Food and Textile Technology syllabus

Legend:	Descriptive Equivalent	(DE)
0-1.4	Strongly Disagree	(SD)
1.5-2.4	Disagree	(D)
2.5- 3.4	Slightly Disagree	(SD)
3.5 - 4.4	Slightly agree	(SA)
4.5 – 5.4	Agree	(A)
5.5 – 6	Strongly Agree	(SA)

Teachers reported positive attitude: pride to teach, thought-provoking practical lessons, and appropriate syllabus terminology. Teachers were closely familiar with

subject matter, determined it to be in line with curriculum goals, and had instant access to learning aids. Syllabus was found to be contemporary, contemporary, and more likely to create desired outcomes. Interviews confirmed findings, reflecting well-developed favourable attitude towards subject (Findings from teacher survey and interviews).

Passion and cautious Optimism

Food and Textile Technology teachers demonstrate a strong inclination towards teaching the subject. This positive attitude is primarily driven by recent observations of students successfully applying their acquired skills in real-life situations. Motivated by the perceived value of the subject, these educators are dedicated to equipping students with the necessary knowledge and skills as observed by Teacher 'H': *Previously, I felt embarrassed to be identified as a Prevoc teacher due to the negative stigma associated with the subject. However, the perception of Prevoc education has evolved, and we now attract students with diverse backgrounds and abilities.*

Research by Miciuliene, Kovalcikiene, and Daukilas (2020) underscores the pivotal role of teachers in student learning, with positively inclined educators often leading to improved student outcomes. Similarly, Sun and Leithwood (2015) highlight the significant impact of teachers on student learning.

Teacher Bias in Integrated Subject Teaching

Findings indicate that teacher bias significantly impacts the effective delivery of integrated subjects. Teachers often possess stronger expertise or passion for one subject over another, hindering their ability to provide balanced instruction. This imbalance challenges students' understanding and development of transferable skills as Teacher 'A' testified: *"While I am capable of teaching both subjects effectively, my primary passion lies in the textile's component. This has influenced my teaching focus, leading me to delve deeper into that area,"* while Teacher 'C' confirmed that:

“I am proficient in teaching both subject components, my experience has led me to specialize in one area, which I now find more enjoyable,”

According to Parker, Osei-Himah, Asare, and Ackah (2018), teachers' lack of expertise in a subject matter is evident in their difficulties with lesson planning, selecting appropriate activities, applying concepts to real-world situations, and fostering student learning. They lack confidence in executing these tasks effectively. Similarly, Mabuza (2020) noted that teachers without adequate subject knowledge struggle to select meaningful learning activities, provide clear explanations, ask probing questions, and assess student learning.

Familiarity with Content Breeds Confidence

Findings indicate that teachers possess a strong familiarity with the syllabus content. This familiarity likely stems from their prior studies at the high school and tertiary levels, providing a solid foundation for understanding the resource material. Familiarity can foster trust and comfort in teachers, as they are confident teaching topics they already know well. Teacher ‘E’ confirmed: *“I am well-versed in the content, as it is a familiar topic from my previous tertiary studies and teaching experience noted,”*.

Furthermore, teacher familiarity with the syllabus content can positively impact student learning. When teachers fully grasp the subject matter, they can effectively impart skills and knowledge. This, in turn, can lead to better student outcomes and the creation of high-quality assessment tools. Because teachers are already familiar with the material, developing assessments becomes a process of reiteration rather than creation from scratch. This contributes to their confidence and ease in teaching, ultimately facilitating the transfer of knowledge and skills to students. Studies by Jadama (2014) support these findings, emphasizing the positive correlation between teacher content familiarity and student learning and comprehension.

Summary /Recommendation

This research explores the problems encountered by instructors of Food and Textile Technology in teaching a new curriculum. Overloaded syllabus, early exams, and stressful projects are reported by the instructors, which interfere with teaching and students' skill acquisition. Limited resources, shared laboratories, and insufficient textbooks exacerbate the situation. Dual-discipline competence is difficult for teachers, who tend to lean towards one discipline. Despite these obstacles, teachers pride themselves on teaching the subject and acknowledge the syllabus's relevance and pedagogical suitability. They blame insufficient competence and overwhelming workloads, demanding curriculum review and resource enhancements. To enhance education in this field, a comprehensive review of the curriculum is necessary. This review should focus on content reduction, modification of practical exams, and clear learning objectives. Effective provision of resources, including purpose-built laboratories and textbooks, is essential. Professional practice must prioritize dual-discipline competence and bias reduction with industry exposure. Student workload and positive attitude are essential to engagement and must be addressed. Continual monitoring of the curriculum and analysis of student outcomes will ensure continuous improvement. Also, to equip teachers with more skills, in-service training is crucial, especially for new teachers. The Ministry of Education and tertiary institutions must ensure that the prevocational subject is taught in all teacher training institutions for the benefit of all teachers who might be hired for the programme. Furthermore, to help with teachers' bias, more teachers should be hired so that each teacher can concentrate on the topics they feel more comfortable teaching. The recommendations above are intended to make the curriculum more applicable to practical situations, equipping students with practical skills and knowledge.

References

- Adom, D., Hussein, E. K., & Agyem, J. A. (2018). Theoretical and conceptual framework: Mandatory ingredients of a quality research. *International journal of scientific research*, 7(1), 438-441.
- Ciptaningsih, Y., & Rofiq, M. H. (2022). Participatory Learning with Game Method For Learning Completeness In Islamic Religious Education. *Fikroh: Jurnal Pemikiran Dan Pendidikan Islam*, 15(1), 18-29.
- Dlamini, M. P., & Vilane, A. A. (2017). Integrating high school agriculture curricula in Swaziland. *Mosenodi*, 20(2), 17-27.
- Ewenstein, B., Smith, W., & Sologar, A. (2015). Changing change management. *McKinsey Digital*, 1-4
- Grant, C., & Osanloo, A. (2014). Understanding, selecting, and integrating a theoretical framework in dissertation research: Creating the blueprint for your "house". *Administrative issues journal*, 4(2), 4.
- Hakutumbulwa, G. (2021). *Teachers' experiences regarding implementation of the revised Social Studies curriculum: The case of Khomas region, Namibia* (Doctoral dissertation, University of Namibia).
- Ismail, K., Nopiah, Z. M., & Rasul, M. S. (2018). Challenges faced by vocational teachers in public skills training institutions: A reality in Malaysia. *Journal of Technical Education and Training*, 10(2).
- Jadama, L. M. (2014). Impact of subject matter knowledge of a teacher in teaching and learning process. *Middle Eastern & African Journal of Educational Research*, 7(1), 20-29.
- Mabuza, D. C. (2019). Predictors of learning quality in the teaching and learning of fashion and fabrics. *UNESWA Journal of Education*, 2(1): 466-478
- Mabuza, D. C. (2020). Teachers' Reactions on the Curriculum Content in Consumer Sciences of Eswatini. *Research Journal of Family, Community and Consumer Sciences, Res. J. Family, Community and Consumer Sci.*, 8(2), 15-22
- Miciuliene, R., Kovalcikiene, K., & Daukilas, S. (2020). Vocational Teacher's Inclination to Impart Values in Vocational Training: The Importance of Pedagogical-Didactical and Psychological Factors. *European Journal of Contemporary Education*, 9(2), 350-364.
- Millar, M., & Schrier, T. (2015). Digital or printed textbooks: which do students prefer and why? *Journal of Teaching in Travel & Tourism*, 15(2), 166-185.

- Nyoni M.F (2018). Factors influencing the implementation of Prevocational Education Programmeme in Swaziland High Schools. *Unpublished Msc, Consumer Science Education Thesis*. University of Swaziland.
- Parker, J., Osei-Himah, V., Asare, I., & Ackah, J. K. (2018). Challenges faced by teachers in teaching integrated science in Junior High Schools in Aowin MunicipalityGhana. *Journal of education and practice*, 9(12), 65-68.
- Sun, J., & Leithwood, K. (2015). Leadership effects on student learning mediated by teacher emotions. *Societies*, 5(3), 566-582.
- Thornby, K. A., Brazeau, G. A., & Chen, A. M. (2023). Reducing student workload through curricular efficiency. *American Journal of Pharmaceutical Education*, 87(8), 100015.
- Virtanen, A., Tynjälä, P., & Eteläpelto, A. (2014). Factors promoting vocational students' learning at work: study on student experiences. *Journal of Education and Work*, 27(1), 43-70.
- Yardley, L., & Bishop, F. L. (2017). Mixing qualitative and quantitative methods: A pragmatic approach. *The Sage handbook of qualitative research in psychology*, 398-413.