Assessment of Clothing and Textile Practices and Their Impact on Students' Creative Skills in Secondary Schools in Nasarawa State, Nigeria

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Abstract
Clothing and textile education occupy a central place within Home Economics in Nigerian secondary schools, offering learners structured opportunities to design, construct, decorate, and manage garments and fabric-based products. Beyond vocational competence, this area of the curriculum carries a largely underexploited potential to nurture creative skills such as fluency, flexibility, originality, and elaboration in adolescent learners. This paper theoretically examines clothing and textile practices in secondary schools in Nasarawa State, Nigeria, and their relationship with students' creative skills development. Drawing on Guilford's (1967) structure-of-intellect model, Torrance's (1974) theory of creative thinking, and Vygotsky's (1978) socio-constructivist perspective, the paper argues that the extent to which clothing and textile instruction stimulates creativity depends on how practices are taught rather than merely on the presence of the subject on the timetable. The review synthesises existing empirical literature, presents a conceptual framework linking instructional practice to creative outcomes, and identifies teacher competence, workshop facilities, curriculum delivery, and assessment style as the principal moderating factors. The paper concludes that where clothing and textile practices are delivered through activity-based, learner-centred methods, they can meaningfully strengthen students' creative capacities, and it offers recommendations for curriculum planners, teacher-training institutions, and school administrators in Nasarawa State.

Keywords: *clothing and textiles, creative skills, secondary education, Home Economics, Nasarawa State, vocational education*

1. Introduction

Clothing and textiles have long been taught as a core component of Home Economics in Nigerian secondary schools, combining scientific knowledge of fibres and fabrics with the practical arts of design, construction, and decoration (National Educational Research and Development Council [NERDC], 2014). Unlike purely theoretical subjects, clothing and textiles is inherently activity-driven: learners measure, cut, sew, embellish, and evaluate their own products, placing them in repeated cycles of imagining, testing, and refining ideas. This cycle mirrors what creativity researchers describe as the generative core of creative thinking, namely the production of ideas that are both novel and useful (Amabile, 1996).

In principle, therefore, clothing and textile education should function as fertile ground for creative development. In practice, however, many Nigerian secondary schools deliver the subject through rote demonstration, limited practical exposure, and examination-driven

teaching that leaves little room for learners to experiment, take design risks, or elaborate on their own ideas (Arubayi & Obunadike, 2011; Mpofu et al., 2023). The gap between the theoretical promise of the subject and how it is actually practiced in classrooms motivates the present review. Nasarawa State, a predominantly agrarian and semi-urban state in Nigeria's North-Central geopolitical zone, presents a useful context for this discussion. Its secondary schools operate within the same national curriculum as the rest of the country, yet, like many states outside the major urban centers, often contend with constrained funding, sparse workshop facilities, and an uneven distribution of specialist Home Economics teachers. Understanding how clothing and textile practices are conducted in this setting and how such practices relate to the creative skills students are expected to develop is therefore both theoretically and practically relevant. This paper is a theoretical assessment rather than an empirical field study. It synthesizes existing literature and educational theory to build a coherent account of how clothing and textile practices can be expected to shape students' creative skills, and it proposes a framework and set of propositions that can guide future empirical work in Nasarawa State and comparable contexts.

2. Statement of the Problem

Creativity is increasingly recognized as one of the core competencies learners need for the twenty-first century, alongside critical thinking, communication, and collaboration (Torrance, 1974). Vocational subjects such as clothing and textiles are well positioned to cultivate this competency because they require learners to translate abstract ideas into tangible products. Yet observation of secondary school practice in many parts of Nigeria, including Nasarawa State, suggests that clothing and textiles is frequently taught as a body of facts to be memorized for examinations rather than as a design-based, exploratory activity. Where practical sessions are infrequent, poorly equipped, or tightly scripted by the teacher, students have few opportunities to exercise fluency in generating design ideas, flexibility in adapting materials, originality in decoration, or elaboration in finishing a garment. The consequence is a subject that may satisfy curriculum coverage requirements while under-delivering on its creative potential. Without a clear theoretical account of how specific clothing and textile practices relate to specific dimensions of creativity, it is difficult for curriculum planners and teachers in Nasarawa State to know which aspects of instruction most need attention. This paper addresses that gap.

3. Purpose and Objectives of the Study

The purpose of this paper is to theoretically assess clothing and textile practices in secondary schools in Nasarawa State and examine their relationship with students' creative skills. Specifically, the paper seeks to:

1. examine the nature of clothing and textile practices commonly found in Nigerian secondary school curricula;
2. relate these practices to established theories of creativity, particularly Guilford's structure-of-intellect model and Torrance's theory of creative thinking;
3. identify the instructional and institutional factors that moderate the creativity-enhancing potential of clothing and textile education; and
4. propose a conceptual framework and recommendations for strengthening the creative outcomes of clothing and textile instruction in Nasarawa State.

4. Theoretical Framework

4.1 Guilford's Structure-of-Intellect Model

Guilford (1967) proposed that intellectual functioning includes a distinct dimension of divergent production, the capacity to generate multiple responses to a single stimulus. He

argued that creativity could be broken down into measurable operations, including fluency, flexibility, originality, and elaboration. Applied to clothing and textiles, a learner who can propose several ways to finish a neckline demonstrates fluency; one who can rework a design when the intended fabric is unavailable demonstrates flexibility; one who introduces an unusual embellishment demonstrates originality; and one who refines stitching, trims, and finishing details demonstrates elaboration. Guilford's model therefore supplies the vocabulary this paper uses to describe creative outcomes in a practical subject.

4.2 Torrance's Theory of Creative Thinking

Building on Guilford's work, Torrance (1974) developed a theory of creativity centred on the capacity to sense problems, generate varied solutions, and refine them into workable outcomes. Torrance held that creativity is not confined to a gifted few but can be deliberately nurtured through classroom environments that reward curiosity, tolerate unconventional ideas, and give learners room to experiment. This view underpins the argument of the present paper: whether clothing and textile instruction develops creativity is less a matter of the subject's content and more a matter of the pedagogy and classroom climate through which that content is delivered.

4.3 Vygotsky's Socio-Constructivist Perspective

Vygotsky (1978) emphasized that learning, including creative learning, is socially mediated and develops most effectively within a learner's zone of proximal development, that is, tasks slightly beyond what a learner can do alone but achievable with guidance. In a clothing and textiles workshop, this suggests that creative growth is best supported when teachers scaffold learners through progressively more open-ended design tasks, moving from closely guided pattern-copying toward independent design decisions, rather than requiring either total imitation or total independence from the outset. Together, these three theories frame clothing and textile practice as a potential engine of creative development whose output depends heavily on instructional design: the content (Guilford), the classroom culture (Torrance), and the scaffolding process (Vygotsky) must align for creative skills to emerge.

5. Conceptual Review

5.1 The Concept of Clothing and Textile Practices

Clothing and textiles, as taught within Home Economics, typically comprises six broad thematic areas in the Nigerian senior secondary curriculum: study of fabrics, garment construction, clothing maintenance, consumer education, decorative processes, and wardrobe planning (NERDC, 2014; University Press PLC, 2020). Each theme combines conceptual knowledge with hands-on application, whether learners are testing fibre properties, drafting patterns, mending garments, budgeting for a wardrobe, or applying decorative techniques such as embroidery, appliqué, and tie-and-dye. Table 1 in the empirical review section below situates these practices within existing research, while Table 2 later in this paper maps each theme onto the specific creative skill it is best positioned to develop.

5.2 The Concept of Creative Skills

Creativity has been defined in various but converging ways. Amabile (1996) describes it as the production of ideas that are both novel and useful, while Guilford and Torrance operationalize it through fluency, flexibility, originality, and elaboration. In the context of secondary education, creative skill is best understood not as innate artistic talent but as a trainable set of thinking habits: the willingness to generate many ideas, the ability to shift between different approaches, the confidence to produce something distinctive, and the discipline to carry an idea

through to a finished, detailed product. These habits are precisely what design-based subjects such as clothing and textiles are, in theory, well suited to build.

5.3 Clothing and Textile Education in Nasarawa State

Secondary education in Nasarawa State follows the national senior secondary curriculum, with Home Economics, including clothing and textiles, offered largely as an elective vocational subject. As in many other Nigerian states outside the major commercial centres, schools in Nasarawa State vary widely in the resources available for practical subjects: some possess sewing machines, mannequins, and dedicated workshop space, while others rely on improvised materials or limit instruction to theory because of inadequate equipment and funding. This unevenness is consistent with findings elsewhere in Nigeria that link resource availability directly to how much genuinely practical, exploratory work students are able to undertake (Arubayi & Obunadike, 2011; Mpofu et al., 2023).

6. Empirical Review

Although no single existing study has focused specifically on Nasarawa State, a body of related Nigerian and international literature offers useful insight into how clothing and textile instruction is practiced and how it relates to broader learning outcomes, including creativity. Table 1 summarizes key contributions.

Table 1: Summary of Related Studies Reviewed

Author(s) / Year	Focus of the Study	Key Insight Relevant to This Review
Arubayi & Obunadike (2011)	Problems of teaching and learning Clothing and Textiles in senior secondary schools, Anambra State	Identified poor learner attitude, weak pedagogical skills among teachers, and inadequate instructional materials as recurring constraints on effective practice
Isa, Mammam, Badar & Bala (2020)	Teaching methods and academic performance of secondary school students in Nigeria	Found that the method through which practical subjects are delivered strongly shapes learning outcomes, supporting a shift toward activity-based instruction
Nwosu, Etiubon & Ofem (2022)	Activity-based learning and students' non-cognitive skills in south-south Nigeria	Confirmed that hands-on, activity-based approaches strengthen learners' non-cognitive and problem-solving capacities, a category into which creative skill formation falls
Marcketti & Gordon (2022)	Educational value of clothing and textile museums and artefacts	Argued that exposure to textile objects and processes cultivates historical and aesthetic sensibility that feeds into design imagination
Mpofu, Magagula, Manwa & Manwa (2023)	Teachers' pedagogical knowledge in teaching practical fashion and fabric skills to high school learners	Reported that teachers' limited pedagogical preparation constrains how much practical, creativity-oriented instruction learners actually receive

Author(s) / Year	Focus of the Study	Key Insight Relevant to This Review
British Council Nigeria (2021)	Creative education and skills development across Nigerian tertiary institutions	Noted that fashion and textile design remain under-resourced within Nigeria's creative-skills pipeline, with an outdated curriculum and weak progression from secondary to higher levels

Taken together, these studies point to a consistent theme: the creative potential of clothing and textile education is frequently constrained not by the subject matter itself but by how it is taught. Negative learner attitudes, weak teacher pedagogical preparation, insufficient practical exposure, and an emphasis on examination performance over exploratory design work recur across the literature (Arubayi & Obunadike, 2011; Isa et al., 2020; Mpofu et al., 2023). Conversely, where instruction is activity-based and learners are given room to plan, adapt, and finish their own work, non-cognitive and problem-solving capacities the same capacities that underlie creativity tend to improve (Nwosu et al., 2022).

7. Mapping Clothing and Textile Practices to Creative Skills

Building on the theoretical framework in Section 4, Table 2 proposes a theoretical mapping between the standard components of the clothing and textiles curriculum and the specific dimension of creativity each is best positioned to cultivate. This mapping is intended as a heuristic for teachers and curriculum planners in Nasarawa State rather than as an empirically tested claim, and it forms the basis for the conceptual framework presented in Section 8.

Table 2: Clothing and Textile Curriculum Components Mapped to Creative Skills

Curriculum Component	Typical Classroom Activity	Creative Skill Primarily Engaged
Study of fabrics	Identifying fibre types, testing fabric properties, matching fabric to garment purpose	Flexibility (categorising and re-categorising material possibilities)
Garment construction	Pattern drafting, cutting, sewing, fitting garments from a design idea	Elaboration (translating an idea into a detailed, finished product)
Decorative processes	Embroidery, appliqué, tie-and-dye, embellishment and surface design	Originality (producing unusual, personally distinctive design solutions)
Wardrobe planning	Coordinating outfits for occasions, budgeting, style and colour combination	Fluency (generating many workable combinations quickly)
Clothing maintenance & consumer education	Repair, recycling/up-cycling old garments, informed purchasing decisions	Problem-solving (reworking existing materials into new, useful forms)

This mapping suggests that a well-rounded clothing and textiles programme, one that gives adequate practical time to all six curriculum themes, should in theory expose students to the full range of creative operations identified by Guilford (1967). A programme skewed heavily toward theory, or toward only one or two themes such as fabric identification and garment construction, risks under-developing originality and problem-solving, the dimensions most closely tied to decorative and maintenance-related activities.

8. Conceptual Framework

Figure 1 synthesises the discussion above into a single conceptual framework. It positions clothing and textile practices as the primary input, shows how instructional factors and the school environment moderate the extent to which those practices are delivered in a creativity-friendly manner, and traces the resulting pathway through student engagement to measurable creative outcomes.

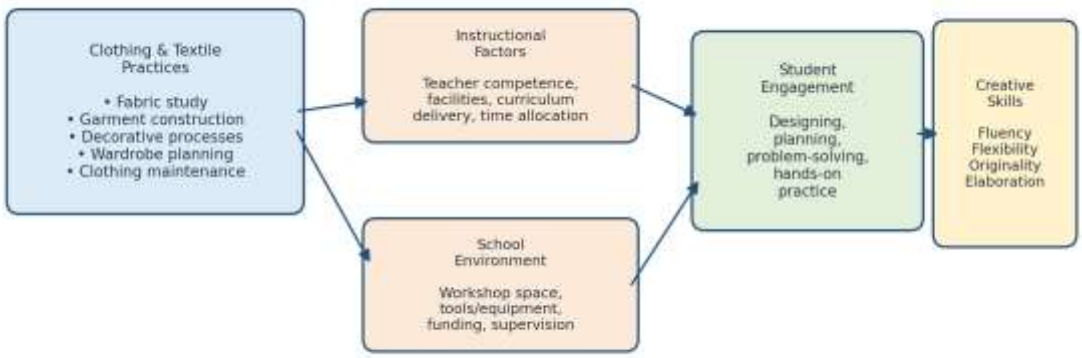


Figure 1: Conceptual framework showing the relationship between clothing and textile practices and secondary school students' creative skills development.

The framework makes explicit a central argument of this paper: clothing and textile practices do not automatically translate into creative skills. The relationship is mediated by instructional factors, such as teacher competence and curriculum delivery, and by the school environment, including workshop space, tools, and funding. Where these moderating conditions are weak, as is plausible in a number of Nasarawa State secondary schools, the pathway from practice to creative outcome is likely to be attenuated even when the subject itself is well timetabled.

9. Challenges Facing Creativity-Oriented Clothing and Textile Instruction

Drawing on the literature reviewed and the conceptual framework above, several challenges can be theoretically expected to limit the creative potential of clothing and textile instruction in Nasarawa State secondary schools:

- Inadequate workshop facilities and sewing equipment, which restrict how much hands-on practice students receive (Arubayi & Obunadike, 2011).
- Limited teacher pedagogical preparation for practical, learner-centered instruction, leading to demonstration-heavy rather than exploration-based teaching (Mpofu et al., 2023).
- Examination-oriented curriculum delivery that rewards accurate reproduction of taught techniques over independent design experimentation (Isa et al., 2020).

- Insufficient instructional time allocated to decorative processes and wardrobe planning relative to theory-heavy content, narrowing exposure to originality- and fluency-building tasks.
- Low societal and student valuation of vocational subjects relative to the sciences, which can dampen learner motivation and willingness to take creative risks.

10. Implications for Theory and Practice

For theory, this review reinforces the view that creativity in vocational subjects is best understood as an emergent property of instructional design rather than an automatic by-product of subject content. Guilford's and Torrance's frameworks remain useful for naming what creative skill looks like in a practical subject, but Vygotsky's emphasis on scaffolding reminds curriculum designers that progression matters: students need to move gradually from guided replication toward independent design decisions. For practice, the implication is that improving clothing and textile education in Nasarawa State is unlikely to be achieved simply by increasing the number of periods allocated to the subject. Attention must also be paid to teacher training in creative pedagogy, provision of basic workshop tools, and assessment methods that reward originality and problem-solving alongside technical accuracy.

11. Conclusion

Clothing and textile education carry genuine, theoretically grounded potential to develop secondary school students' creative skills, spanning fluency, flexibility, originality, and elaboration. Whether that potential is realised in Nasarawa State's secondary schools, however, depends less on the presence of the subject in the curriculum than on how it is taught: the adequacy of facilities, the pedagogical competence of teachers, and the extent to which assessment and classroom culture reward exploration rather than mere replication. The conceptual framework proposed in this paper offers a starting point for both practitioners seeking to strengthen creative outcomes and researchers seeking to test these relationships empirically in Nasarawa State and similar contexts.

12. Recommendations

1. Ministries of education and school administrators in Nasarawa State should prioritize the provision of basic sewing machines, mannequins, and fabric materials to secondary schools offering clothing and textiles.
2. Teacher-training and continuous professional development programmes should include explicit training in creative, activity-based pedagogy, not only technical garment-construction skills.
3. Assessment in clothing and textiles should incorporate rubrics that credit originality, problem-solving, and design elaboration, rather than focusing solely on technical accuracy or theoretical recall.
4. Curriculum delivery should ensure adequate practical time for decorative processes and wardrobe planning, the themes most closely linked to originality and fluency, alongside garment construction.
5. Future empirical research should test the conceptual framework proposed in this paper directly within Nasarawa State secondary schools, using validated creativity measures such as the Torrance Tests of Creative Thinking.

References

Amabile, T. M. (1996). Creativity in context: Update to the social psychology of creativity. Westview Press.

Arubayi, D. O., & Obunadike, J. C. (2011). Problems of teaching and learning of Clothing and Textiles as perceived by senior secondary school students in Anambra State, Nigeria. Journal of Home Economics Research, 5(2), 113–139.

British Council Nigeria. (2021). Creative education and skills in Nigeria: A rapid analysis. British Council.

Dewey, J. (1938). Experience and education. Macmillan.

Federal Republic of Nigeria. (2013). National policy on education (6th ed.). NERDC Press.

Guilford, J. P. (1967). The nature of human intelligence. McGraw-Hill.

Isa, S. G., Mammam, M. A., Badar, Y., & Bala, T. (2020). The impact of teaching methods on academic performance of secondary school students in Nigeria. International Journal of Development Research, 10(6), 37382–37385.

Marcketti, S., & Gordon, J. (2022). Educational value of clothing and textile museums. In Handbook of museum textiles (pp. 341–354). Wiley.

Mpofu, M., Magagula, H., Manwa, L., & Manwa, L. (2023). An exploration of teachers' pedagogical knowledge on teaching practical skills in fashion and fabrics to high school learners. International Journal of Social Learning, 3(3), 378–394.

National Educational Research and Development Council. (2014). Senior secondary education curriculum: Home economics for SS 1–3. NERDC.

Nwosu, S. N., Etiubon, R. U., & Ofem, I. B. (2022). Effect of activity-based learning on basic science and technology students' non-cognitive skills in south-south Nigeria. International Journal of Innovative Science and Research Technology, 7(4), 1–9.

Torrance, E. P. (1974). Torrance tests of creative thinking: Norms-technical manual. Personnel Press.

University Press PLC. (2020). Home economics: Clothing and textiles for senior secondary schools. University Press.

Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Harvard University Press.