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Interdisciplinary Pedagogy and Faculty Work Outcomes in Sustainable Commerce Education: A Conceptual Framework for Self-Financing Colleges in Kerala

Sushama M. C.

Research Scholar, Department of Commerce, VELS University, Tamil Nadu

Research Supervisor: Dr. Vennila Fathima Rani

***Abstract*-- The growing emphasis on multidisciplinary and sustainable higher education has created new opportunities and demands for commerce faculty. Interdisciplinary pedagogy connects commerce with areas such as human resource management, economics, technology, environmental studies and behavioural sciences, enabling learners to examine complex business problems from multiple perspectives. Yet, the organizational conditions under which faculty design and deliver such pedagogy—and the implications for their work engagement and job satisfaction—remain insufficiently integrated in conceptual discussions of commerce education. This paper develops a faculty-centred conceptual framework for examining the relationship between interdisciplinary pedagogical practices and faculty work outcomes in self-financing colleges in Kerala. Drawing on Kahn's personal engagement perspective, self-determination theory and the Job Demands–Resources model, it conceptualizes interdisciplinary pedagogy as a potential job resource when supported by autonomy, collaborative planning, professional development, adequate time and institutional recognition. It also recognizes that additional coordination, assessment and workload may operate as job demands when such support is absent. The framework proposes that meaningfulness, perceived competence and collegial relatedness may connect interdisciplinary practice with employee engagement, while engagement and perceived institutional support may be associated with job satisfaction. As a conceptual paper, it reports no primary-data findings. It concludes with testable propositions and a proposed quantitative research design for future investigation among commerce faculty in Kerala's self-financing colleges.**

***Keywords*-- interdisciplinary pedagogy, sustainable commerce education, faculty engagement, job satisfaction, job demands-resources, self-financing colleges, Kerala**

I. Introduction

Higher education is experiencing substantial changes in curriculum, teaching practice and institutional expectations. Digital transformation, sustainability concerns, changing labour-market requirements and increasingly interconnected business problems require graduates to combine knowledge from different fields.

Commerce education is particularly suited to interdisciplinary approaches because contemporary issues—including responsible consumption, digital finance, entrepreneurship, ethical governance and sustainable business—cannot be adequately understood through a single disciplinary lens.

India's National Education Policy 2020 emphasizes multidisciplinary learning, curricular flexibility, faculty and institutional autonomy, and the integration of teaching, research and professional development (Ministry of Education, 2020). These priorities provide a policy rationale for interdisciplinary commerce education. However, implementation depends substantially on faculty members, who interpret curricula, coordinate learning activities, design assessments and support students' academic development.

Interdisciplinary teaching may involve team teaching, cross-disciplinary projects, shared assessment, case-based learning and the integration of digital or sustainability-related themes. Such practices can enhance professional meaning, collaboration and opportunities to develop new skills. At the same time, they can require additional planning, coordination and emotional effort. Research on interdisciplinary teaching teams has highlighted both the collegial benefits of collaboration and the difficulty of sustaining it when faculty are time-constrained and institutional resources are insufficient (Nursey-Bray et al., 2012).

These tensions are especially relevant to self-financing colleges, where faculty experiences may be shaped by employment arrangements, workload allocation, compensation, access to professional development and institutional support. Faculty engagement and job satisfaction are not simply individual attitudes; they are also connected to the conditions in which academic work is organized. This paper therefore shifts attention from student learning outcomes alone to the faculty experience of implementing interdisciplinary pedagogy.

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The paper has three objectives: (1) to explain how interdisciplinary pedagogy may function as a job resource or job demand for commerce faculty; (2) to develop a conceptual framework connecting pedagogical practices, employee engagement and job satisfaction; and (3) to propose propositions and a research design suitable for empirical testing in self-financing colleges in Kerala.

II. Conceptual Background And Literature Review

2.1 Interdisciplinary pedagogy in commerce education

Interdisciplinary pedagogy involves the purposeful integration of concepts, methods or perspectives from two or more disciplines to address a shared learning problem. In commerce, this may include linking accounting with sustainability reporting, marketing with consumer psychology, finance with digital technology, or human resource management with organizational behaviour. The approach is more than placing separate subjects beside one another; it requires intentional connections that help learners interpret a problem holistically.

For faculty, interdisciplinary teaching can create opportunities for intellectual renewal, peer learning and curriculum innovation. It may also demand common planning time, negotiation over learning outcomes, coordination of teaching schedules and agreement on assessment standards. Thus, its influence on faculty outcomes is unlikely to be uniformly positive or negative. The institutional design and resources accompanying the practice are likely to matter.

2.2 Employee engagement and job satisfaction

Employee engagement refers to the investment of physical, cognitive and emotional energy in work roles. Kahn (1990) identified psychological meaningfulness, safety and availability as conditions that influence whether individuals bring their full selves to work. In academic settings, meaningful interdisciplinary assignments may strengthen the perceived value of teaching, while psychological safety and adequate resources may enable faculty to participate openly in collaborative work.

Job satisfaction, by contrast, concerns an individual's evaluation of their job and work experiences. It may include satisfaction with the work itself, supervision, colleagues, recognition, compensation, advancement and working conditions. Engagement and satisfaction are related but distinct: a faculty member may be deeply involved in an innovative course while remaining dissatisfied with workload or employment conditions. Treating them as separate outcomes is therefore important.

2.3 Theoretical foundations

Kahn's (1990) engagement perspective informs the proposed psychological pathways. Interdisciplinary work may enhance meaningfulness by connecting teaching to authentic, complex problems; competence through opportunities to develop and apply new knowledge; and psychological safety through supportive collaboration. These pathways are conditional rather than automatic.

Self-determination theory proposes that autonomy, competence and relatedness are central psychological needs that support high-quality motivation and well-being (Deci & Ryan, 2000; Ryan & Deci, 2000). Faculty may experience interdisciplinary teaching as motivating when they have meaningful choice in course design, feel capable of contributing across disciplinary boundaries and experience respectful collegial relationships. Conversely, mandated collaboration without adequate voice or support may frustrate these needs.

The Job Demands–Resources (JD-R) model distinguishes job demands that require sustained effort from job resources that help achieve work goals, reduce demands or stimulate growth (Bakker & Demerouti, 2007). Interdisciplinary pedagogy can be a resource when it provides autonomy, peer support, learning opportunities and recognition. It can become an additional demand when it adds uncompensated preparation, coordination and assessment duties. This dual possibility is central to the framework.

2.4 Faculty work context in self-financing colleges

Self-financing colleges are diverse in size, governance, affiliation, resources and employment practices; they should not be treated as a homogeneous category. Nevertheless, faculty work conditions such as workload, employment security, salary adequacy, career opportunities and access to institutional resources are relevant contextual variables when examining job satisfaction. Recent studies specifically focused on self-financing college teachers in Kerala have examined economic well-being, work culture, institutional environment and employment-related concerns (Ghosh et al., 2025; Jaishree & Niyaf, 2025; Tommandru et al., 2024). These context-specific studies help establish the relevance of faculty work conditions, but they do not directly test the integrated relationship between interdisciplinary pedagogy, engagement and satisfaction proposed here.

The literature therefore points to a conceptual opportunity: interdisciplinary pedagogy is often discussed as a curriculum or student-learning strategy, while faculty engagement and satisfaction are examined through organizational and employment factors.

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A faculty-centred model can connect these streams without assuming that pedagogical innovation independently resolves structural employment concerns.

III. Research Gap And Contribution

Three gaps motivate this paper. First, interdisciplinary pedagogy and faculty work outcomes are frequently treated as separate topics, leaving limited conceptual explanation of how teaching practices may shape faculty engagement and satisfaction. Second, the potential dual role of interdisciplinary work—as both a resource and a demand—requires explicit attention. Third, self-financing colleges in Kerala provide a meaningful setting in which to examine how institutional support and employment conditions may shape faculty experiences of pedagogical change.

The paper's contribution is a conditional, faculty-centred framework. Rather than claiming that interdisciplinary pedagogy necessarily improves satisfaction, it proposes that the relationship depends on psychological experiences and the availability of organizational resources. It also separates employee engagement from job satisfaction and identifies institutional support as a contextual factor.

IV. Proposed Conceptual Framework

The framework positions interdisciplinary pedagogical practices as the focal predictor.

These practices include cross-disciplinary curriculum design, collaborative or team teaching, integrated projects and assessments, and the use of authentic sustainability-oriented business problems. The model proposes two pathways:

Resource pathway: Interdisciplinary pedagogy, when supported by autonomy, competence development, collegial collaboration, time and recognition, may enhance psychological meaningfulness, perceived competence and relatedness. These experiences may be associated with higher faculty engagement. Engagement may, in turn, be positively associated with job satisfaction.

Demand pathway: When interdisciplinary teaching is introduced without workload adjustment, planning time, role clarity or institutional support, it may increase coordination burden and role conflict. These demands may weaken the positive relationship between interdisciplinary practice and faculty engagement or satisfaction.

Institutional support is proposed as a moderator that can strengthen the resource pathway and reduce the strain associated with additional demands. Relevant support may include leadership encouragement, shared planning time, training, digital and teaching resources, fair workload allocation, recognition and opportunities for professional growth.

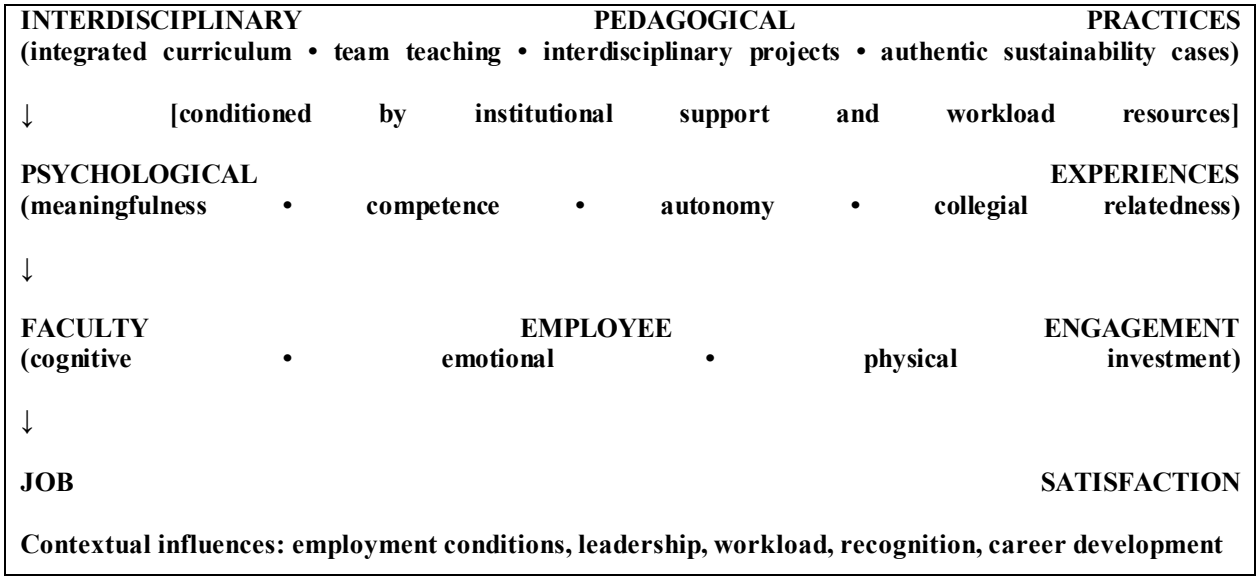


Figure 1. Proposed conceptual framework linking interdisciplinary pedagogy with faculty engagement and job satisfaction.

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V. Propositions

Proposition 1: The extent of faculty participation in interdisciplinary pedagogical practices is positively associated with perceived meaningfulness of academic work, when faculty have adequate autonomy and resources.

Proposition 2: Perceived meaningfulness, competence and collegial relatedness are positively associated with faculty employee engagement.

Proposition 3: Faculty employee engagement is positively associated with job satisfaction, while remaining conceptually distinct from it.

Proposition 4: Perceived institutional support positively moderates the relationship between interdisciplinary pedagogical practices and faculty engagement.

Proposition 5: Additional workload and coordination demands weaken the positive association between interdisciplinary pedagogical practices and faculty engagement and job satisfaction.

Proposition 6: Faculty engagement may partially mediate the relationship between supported interdisciplinary pedagogical practices and job satisfaction.

VI. Proposed Research Methodology

6.1 Research design and population

The framework can be tested through a quantitative, cross-sectional survey of commerce faculty employed in self-financing colleges in Kerala. A multi-stage sampling approach may be used to select colleges across relevant regions and institutional characteristics, followed by proportionate or stratified selection of eligible faculty. The final sample size should be determined through an a priori power analysis based on the number of predictors, expected effect sizes and planned statistical technique; a fixed sample should not be selected without this justification.

6.2 Measures and instrument development

A structured questionnaire may contain: (a) frequency and perceived quality of interdisciplinary teaching practices; (b) faculty engagement; (c) job satisfaction; (d) perceived institutional support; (e) psychological meaningfulness, autonomy, competence and relatedness; and (f) workload and coordination demands. Established scales should be selected where appropriate, with wording adapted cautiously to the college context. Any adapted instrument should undergo expert review, pilot testing and reliability and validity assessment.

Demographic and employment variables—such as teaching experience, designation, contract status and institutional characteristics—may be included as controls where theoretically justified.

6.3 Data analysis

The analysis may begin with descriptive statistics and missing-data checks, followed by assessment of internal consistency and construct validity. Correlation and regression analysis can examine the proposed associations. If the sample and measurement properties are adequate, structural equation modelling may be used to test indirect effects and moderation. Common-method bias should be considered because the proposed variables are collected from the same respondents at one time. Procedural remedies may include anonymity, clear separation of predictor and outcome sections, and neutral item wording. A longitudinal or multi-source design would provide stronger evidence about temporal relationships.

6.4 Ethical considerations

Participation should be voluntary and based on informed consent. Respondents should be assured that individual answers will not be shared with college management and that reporting will be aggregated. Institutional permission and applicable university or research-ethics approval should be obtained before data collection. No empirical findings should be reported until data have been collected, analysed and verified.

VII. Discussion

The proposed framework suggests that interdisciplinary pedagogy should be understood not only as a curriculum innovation but also as a form of academic work design. When faculty can shape the learning process, learn from colleagues and receive recognition for their contribution, interdisciplinary work may provide meaningful resources for engagement. This interpretation is consistent with Kahn's emphasis on meaningfulness, safety and availability and with self-determination theory's focus on autonomy, competence and relatedness.

The JD-R perspective adds an important qualification: innovation can increase demands as well as resources. A college may encourage interdisciplinary projects while leaving existing teaching loads, administrative responsibilities and assessment requirements unchanged. Under such circumstances, the same practice intended to enrich academic work may contribute to time pressure or role conflict. The framework therefore cautions against assuming that pedagogical reform alone will improve faculty well-being.

For self-financing colleges, the proposed model also implies that engagement and satisfaction need to be interpreted alongside broader employment conditions. Supportive collaboration may strengthen faculty experience, but it cannot be assumed to compensate for concerns relating to pay, security, workload or career progression. Institutional interventions should combine pedagogical support with transparent workload policies and fair employment practices.

VIII. Implications For Practice And Policy

College leaders may consider establishing interdisciplinary teaching teams with defined responsibilities, common planning time and shared assessment guidelines. Faculty development programmes can help commerce teachers connect disciplinary knowledge with sustainability, technology, behavioural science and other relevant fields. Recognition systems may acknowledge collaborative curriculum development, mentoring and interdisciplinary projects as legitimate academic contributions.

Human resource practices are equally important. Workload allocation should account for course redesign, team coordination and assessment preparation. Institutions can strengthen engagement by providing access to teaching resources, peer mentoring, professional development and supportive leadership. Periodic faculty feedback can help identify whether interdisciplinary initiatives are experienced as meaningful resources or as additional uncompensated demands.

At the policy level, the multidisciplinary aspirations of NEP 2020 require enabling conditions at the institutional level. Implementation should therefore attend not only to curricular structures but also to faculty autonomy, professional learning, time and support.

IX. Limitations And Future Research

This paper is conceptual and does not present primary data or test the proposed propositions. Its framework draws on established theories but requires empirical validation in Kerala's diverse self-financing college context. The cross-sectional survey design suggested above would identify associations but would not establish causality. Future research could use longitudinal data, interviews or comparative case studies to explore how faculty experience interdisciplinary work over time. Comparative studies across aided, government and self-financing institutions may also clarify the role of employment context.

Further research should examine whether effects vary by teaching experience, institutional size, discipline mix or the intensity of interdisciplinary collaboration.

X. Conclusion

Interdisciplinary pedagogy offers a promising approach to sustainable commerce education, but its implications for faculty depend on how academic work is organized. This paper proposes a conceptual framework connecting interdisciplinary pedagogical practices with faculty employee engagement and job satisfaction through psychological experiences and institutional resources. It recognizes that interdisciplinary work may simultaneously create opportunities for growth and additional demands. By integrating Kahn's engagement perspective, self-determination theory and the JD-R model, the paper provides testable propositions and a proposed research design for future empirical study. The central implication is that sustainable pedagogical innovation should be accompanied by faculty-centred support, realistic workload planning, autonomy, collaboration and recognition.

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