

Enhancing Quality Education through Practice-Based Learning: A Study on the Management Curriculum of National PG College and Its Alignment with SDG 4

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Abstract -The study looks at how the Management curriculum at National PG College contributes to Sustainable Development Goal 4 (Quality Education), focusing on practical papers. By reviewing existing literature, curriculum frameworks, and SDG guidelines, the study shows that practice-based learning improves skill development, employability, critical thinking, and overall learning outcomes. The paper concludes that practical components strongly support the goals of SDG 4 and suggests enhancing SDG-focused teaching methods.

Keywords- Practice-based learning, SDG 4, quality education, management curriculum, experiential learning, higher education.

I. INTRODUCTION

The fourth goal for sustainable development basically says that everyone, everywhere, deserves a fair chance at getting a good education [4], [7]. Universities are the main players here, as they shape how we learn and what we do in class to keep things going for a long time [3], [6], [12]. This paper looks at if this kind of hands-on learning fits in with the goals for quality education that the world wants [13].

II. LITERATURE REVIEW

Achieving Sustainable Development Goal 4 (SDG 4) has become an important priority for universities and higher education institutions around the world. Institutions are now under growing pressure to bring sustainability, inclusive teaching practices, and lifelong learning opportunities into their academic programs and broader educational frameworks [3], [4], [7]. Research also highlights the important role universities play in helping students develop the knowledge, skills, and values they need to contribute to sustainable development and become responsible members of society [6], [13].

Practice-based learning has gained attention as a practical way to make learning more engaging while helping students build useful skills. Kolb's Experiential Learning Theory explains learning as an ongoing cycle in which students gain concrete experiences, reflect on those experiences, develop new ideas or concepts, and then put those ideas into practice through active experimentation [8]. Research suggests that this kind of learning can strengthen students' problem-solving and critical-thinking abilities while also improving their readiness for employment and the workplace [5], [14].

In management education, designing a strong curriculum means finding the right balance between theoretical knowledge and practical application. Biggs and Tang [1]

stress the importance of constructive alignment, where learning outcomes, teaching methods, classroom activities, and assessment are all connected and work toward the same goals. Research also suggests that competency-based and industry-focused curricula can better prepare graduates for the demands of the workplace while helping them develop the professional skills they need to succeed [2], [14].

The National Education Policy (NEP) 2020 places strong emphasis on experiential learning, multidisciplinary education, skill development, and outcome-based approaches to teaching and learning [11]. Recent research suggests that curriculum reforms based on these principles can help students become more employable, encourage innovation, and strengthen the skills they need for continuous learning throughout their careers [15], [16].

Table I: Review of Literature

Theme	Review of Literature
SDG 4 and Higher Education	Higher education institutions play a critical role in achieving SDG 4 by integrating sustainability, inclusive learning, and lifelong education into curricula and institutional strategies [3], [4], [7], [13].
Practice-Based Learning (Experiential Learning)	Kolb's Experiential Learning Theory positions learning as a cycle involving experience, reflection, conceptualization, and experimentation [8]. Practice-based learning improves competence, problem-solving ability, and employability among students [5].
Curriculum Design in Management Studies	Effective management curricula balance theoretical foundations with applied learning components [1]. Competency-based and industry-aligned curriculum design enhances skill relevance and graduate preparedness [2], [14].
Indian Higher Education Context (NEP 2020)	NEP 2020 emphasizes experiential, multidisciplinary, and skill-focused education aligned with SDG 4, promoting internships, practical work, and outcome-based learning frameworks [11], [15], [16].

Source: Compiled by author from different research studies.

III. RESEARCH GAP

Despite the growing literature on SDG 4, experiential learning, and curriculum reforms, limited research has examined how specific management curricula contribute to SDG outcomes through practical papers. This gap provides

the basis for the present study in the context of management education in India.

IV. OBJECTIVES

1. To theoretically evaluate the alignment of the Management curriculum with SDG 4.
2. To analyze the contribution of practical papers to skill enhancement.
3. To examine the role of practice-based learning in achieving quality education.
4. To recommend ways to improve SDG integration in curriculum design.

V. CONCEPTUAL FRAMEWORK

A. Conceptual Framework for SDG 4 Alignment

This study uses a conceptual **SDG 4 Alignment Framework** built around three key dimensions drawn from **SDG Targets 4.3, 4.4, and 4.7**. The framework is intended to examine how management education can support the broader goals of quality education, skill development, and sustainable development.

B. SDG Targets 4.3: Access to Quality Technical Education

This dimension focuses on whether students are given meaningful opportunities to connect classroom learning with practical experience. It includes practical exposure, applied learning opportunities, and a curriculum that places sufficient emphasis on developing relevant, job-oriented skills.

C. SDG Targets 4.4: Employability and Professional Skills

This dimension focuses on the practical skills students need to succeed in the workplace and build a strong professional career. It includes the ability to analyse situations, make sound financial decisions, solve problems effectively, and develop the confidence and skills needed to meet the changing demands of the industry.

D. SDG Targets 4.7: Sustainable Development Competencies

This dimension focuses on the broader competencies students need to make responsible decisions and contribute positively to society and sustainable development. It includes financial responsibility, ethical decision-making, efficient use of resources, and the ability to think critically about complex issues.

The selected practical papers were assessed using these three dimensions to understand how far they contribute to quality education and support the broader objectives of SDG 4. The assessment also helps identify the role these practical subjects can play in developing students' professional skills, responsible decision-making abilities, and competencies needed for sustainable development.

VI. METHODOLOGY

This study adopts a qualitative descriptive research design based entirely on secondary data analysis. The research

investigates the alignment of the Management curriculum with Sustainable Development Goal 4 (SDG 4) through a curriculum mapping approach.

Secondary data were collected from four sources:

1. Curriculum documents and syllabus of management papers offered in the course.
2. United Nations and UNESCO publications related to SDG 4.
3. National Education Policy (NEP) 2020 documents.
4. Peer-reviewed literature on experiential learning, curriculum design, employability, and higher education.

The analysis was conducted in three stages. First, practical components of the selected papers were identified. Second, these components were mapped against SDG Targets 4.3, 4.4, and 4.7. Third, their contribution to employability, competency development, and sustainable learning outcomes was evaluated using a conceptual alignment framework.

VII. ANALYSIS

A. Overview of Curriculum

The management curriculum offered through the courses of BBA & BBA (Digital Business), College demonstrates a structured and progressive framework that integrates theoretical foundations with strong practical skill-building components, thereby contributing significantly to the goals of

SDG 4 – Quality Education. The selected papers—Business Statistics, Cost Accounting, Management Accounting, Financial Management, and Taxation Laws—reflect a balanced combination of conceptual understanding and applied learning, enabling learners to develop analytical, financial, and decision-making competencies relevant to managerial roles.

Business Statistics equips students with analytical techniques such as measures of central tendency, dispersion, probability, correlation, and regression, enabling practical data interpretation and evidence-based decision-making.

Cost Accounting provides hands-on exposure to costing methods, preparation of cost sheets, reconciliation, budgeting, and variance analysis, strengthening operational and cost-control capabilities.

Management Accounting advances this learning by focusing on marginal costing, budgeting, cash flow statements, break-even analysis, and responsibility accounting skills crucial for managerial planning and control. **Financial Management** introduces students to capital budgeting techniques, cost of capital, leverage, dividend decisions, and working capital management, thus enhancing financial decision-making proficiency.

Taxation Laws further adds practical relevance by covering computation of income, deductions, exemptions, and assessment procedures under Indian tax regulations, preparing students for real-world financial compliance tasks.

Overall, the curriculum systematically develops statistical literacy, financial acumen, cost efficiency, analytical reasoning, and regulatory understanding. These practical papers collectively embody **experiential and application-**

based learning, enabling students to acquire essential skills for employability, professional competence, and lifelong learning key pillars of SDG 4.

B. Mapping Practical Papers to SDG 4

Table II
SDG 4 Alignment Assessment Framework

Practical Paper	SDG 4.3	SDG 4.4	SDG 4.7	Alignment Level
Financial Accounting	2	3	3	High
Business Statistics	1	3	2	High
Cost Accounting	2	3	3	High
Management Accounting	2	3	2	High
Financial Management	2	3	3	High
Taxation Laws	2	2	3	High

Source: Authors' compilation based on UNESCO SDG 4 targets.

1 = Moderate Contribution

2 = Strong Contribution

3 = Very Strong Contribution

The practical components embedded across the selected management curriculum papers—Business Statistics, Cost Accounting, Management Accounting, Financial Management, and Taxation Laws—demonstrate strong alignment with the core dimensions of SDG 4: Quality Education. Specifically, these papers contribute directly to SDG 4.3 (Equal access to quality technical and vocational education), SDG 4.4 (Enhancing relevant skills for employment and entrepreneurship), and SDG 4.7 (Promoting knowledge, skills, and values for sustainable development). These dimensions are consistent with the objectives of quality education and employability outlined in SDG 4 and related educational literature [4], [7], [12], [14].

1. Contribution to SDG 4.3: Equal Access to Quality Technical and Vocational Education

The curriculum includes well-structured practical components such as statistical problem-solving, preparation of cost sheets, computation of tax liabilities, financial decision models, and budgeting exercises. These components offer students accessible, standardized, and high-quality technical learning opportunities irrespective of their academic background. By integrating hands-on tasks within theoretical subjects, the curriculum supports inclusive access to applied business education.

2. Contribution to SDG 4.4: Skills for Employment, Decent Jobs, and Entrepreneurship

The practical papers strengthen essential professional competencies required in the corporate and entrepreneurial sectors. The selected papers contribute to SDG 4.4 as Business Statistics builds analytical and data interpretation skills, Cost and Management Accounting enhances cost-control, pricing, marginal costing, budgeting, and variance analysis capabilities, Financial Management develops capital budgeting, financial planning, and investment evaluation skills, and Taxation Laws equips students with tax computation and compliance knowledge essential for employability.

These skills directly support SDG 4.4 by preparing students for industry-aligned roles in finance, analytics, operations, and business decision-making.

3. Contribution to SDG 4.7: Education for Sustainable Development and Responsible Citizenship

The curriculum embeds several components that foster responsible, ethical, and sustainable thinking: Budgetary control and variance analysis in Cost accounting encourage efficient resource usage, while knowledge of taxation laws promotes responsible financial citizenship, the paper of Financial management topics such as capital structure, cost of capital, and working capital management promote sustainable financial decision-making.

Through these practical applications, the curriculum cultivates critical thinking, financial literacy, data-driven reasoning, and accountability—key attributes required for sustainable development as emphasized in SDG 4.7.

Integrated Outcome

Collectively, the practical papers contribute to SDG 4 by fostering inclusive access, employment-oriented competencies, and responsible, sustainable professional skills. This mapping illustrates that the curriculum effectively integrates both academic depth and practical relevance, reflecting a strong alignment with global educational objectives.

C. Contribution of Practice-Based Learning

Experiential and application-based learning approaches have been widely recognized as effective tools for improving employability, analytical skills, and professional competence [5], [8], [14].

The practical components embedded within the selected papers Basic Knowledge of Financial Accounting, Cost Accounting, Business Statistics, and Income Tax in India play a crucial role in enhancing the overall quality of management education. Collectively, they strengthen the curriculum by fostering employability skills, analytical abilities, application-oriented learning, and industry readiness, which align with the broader vision of SDG 4: Quality Education.

1. Enhancing Employability Skills

Practice-based learning ensures that students develop competencies that are highly valued in professional settings. The practical components of these courses are crucial for career readiness, equipping students with directly applicable skills. Financial Accounting and Cost Accounting practicals provide hands-on experience in preparing journals, ledgers, ratio analyses, cost sheets, and inventory valuations skills that are essential for roles in corporate finance, accounting firms, and auditing. Furthermore, Income Tax practical tasks, such as computing taxable income and preparing returns, build the foundational compliance knowledge required for taxation consultancy and related jobs. Finally, Business Statistics practicals strengthen data-handling capacity, enabling learners to proficiently work with spreadsheets, statistical tools, and quantitative models, which are vital skills for modern analytics-driven roles.

Practical papers encourage students to move beyond theoretical understanding and engage in problem-solving, interpretation, and logical reasoning.

Assignments of problem solving of variance analysis in Cost Accounting or performing correlation and regression in Business Statistics encourage students to work with real data and derive meaningful insights. Similarly, practical exercises in Income Tax require them to interpret legal provisions and apply tax rules to different income situations, strengthening their analytical judgment. Together, these activities help students develop the ability to assess situations, compare alternatives, and make informed, evidence-based decisions—an essential aspect of achieving SDG 4.4.

3. Advancing Application-Oriented Learning

Hands-on tasks, which are conducted in during class sessions, play a crucial role in connecting classroom learning with real-world application. Through accounting and taxation practicals, students experience how theoretical rules function within actual business processes, from preparing financial statements to understanding legal compliance. Similarly, statistical practicals help learners interpret data using real examples from business, economics, and market trends. Together, these practical experiences strengthen conceptual understanding and equip students to apply their knowledge confidently in internships, projects, and professional settings.

4. Improving Industry Readiness

The selected papers together help learners build strong technical skills, develop domain-specific knowledge, and gain practical exposure, ensuring they are well-prepared for the demands of modern industry. Courses in accounting and costing form a solid foundation for careers in finance, banking, auditing, and management. Knowledge of taxation further strengthens students' readiness for roles in corporate tax departments, consultancy firms, and compliance-oriented positions. Likewise, statistical skills have become increasingly valuable across data-driven sectors such as marketing, finance, and operations, enabling students to analyze information effectively and make informed decisions.

Overall Contribution to SDG 4 Through practical, hands-on learning, the selected papers clearly demonstrate how the curriculum supports SDG 4. They emphasize inclusive and relevant skill development aligned with Target 4.4, promote a practice-oriented teaching approach that prepares students for the changing demands of the job market, and foster lifelong learning through analytical and application-based activities. Overall, these practice-based elements enhance the quality of education by strengthening competencies, encouraging experiential learning, and building professional readiness, thereby contributing meaningfully to the goals of both the management curriculum and SDG 4.

D. Alignment with NEP 2020

The selected papers demonstrate a partial alignment with the pedagogical reforms proposed in NEP 2020, which emphasizes experiential learning, multidisciplinary education, competency development, and holistic student growth [11], [15], [16]. The selected papers—Basic Knowledge of Financial Accounting, Cost Accounting, Business Statistics, and Income Tax in India—demonstrate a partial alignment with the principles and pedagogical reforms proposed in the

National Education Policy (NEP) 2020. NEP 2020 emphasizes experiential learning, competency development, multidisciplinary education, and holistic student growth, all of which are reflected to varying extents in the practical components of these courses.

1. Alignment with Experiential and Skill-Based Learning

The NEP 2020 places strong emphasis on hands-on learning and practical application [11], [15], and exposure to real-world situations, and the selected papers reflect this approach to a certain extent. They include practical accounting tasks such as journal entries, ledger posting, and preparing financial statements; cost accounting exercises like cost sheet preparation, variance analysis, and budgeting; business statistics practicals that strengthen data interpretation, quantitative reasoning, and analytical skills; and income tax assignments that involve tax computation and applying statutory rules. While these components align with NEP's vision of experiential learning, their overall scope is still narrower than the comprehensive and holistic model proposed in NEP 2020.

2. Contribution to Holistic and Multidisciplinary Learning

NEP 2020 promotes broad-based multidisciplinary education and integration of knowledge across disciplines [11]. They integrate numerical analysis through Business Statistics with financial decision-making, link legal frameworks like Income Tax with business and accounting concepts, and strengthen students' financial literacy and quantitative skills—enabling them to engage with fields such as economics, finance, and policy analysis. While these elements show a moderate alignment with the NEP's vision, the scope for deeper interdisciplinary integration—especially with areas such as technology, entrepreneurship, and sustainability—still remains limited.

3. Development of Competency-Based Education

Competency-based education is a key pillar of NEP 2020 and focuses on measurable learning outcomes and skill acquisition [11], [15]. However, the curriculum still falls short of fully aligning with NEP's outcome-based approach, as assessments continue to rely heavily on traditional examinations rather than truly measuring the competencies students are expected to develop.

4. Limited Integration of Technology and Digital Skills

NEP 2020 emphasizes digital learning, technology integration, and data-driven education systems [11], [15]. While the Business Statistics paper provides some exposure to data handling, it still lacks strong integration of digital tools such as software applications, spreadsheets, or analytics platforms. Similarly, the Accounting and Taxation papers do not adequately incorporate practical digital resources like Tally, GST portals, or ERP systems, which NEP 2020 recommends to enhance students' employability. Therefore, although there is some alignment with NEP guidelines, it remains only partial and could be significantly strengthened.

5. Gaps in Incorporating 21st Century Skills and Flexibility

Critical thinking, flexibility, and holistic development are among the major goals of NEP 2020 [11], [15]. While the selected papers do support analytical skill-building, they do

not provide flexibility, project-based learning, or interdisciplinary electives, which NEP strongly advocates.

The selected practical papers show partial alignment with NEP 2020 by supporting experiential learning, competency development, and foundational skill enhancement. However, deeper reforms such as digital integration, interdisciplinary project work, and outcome-based assessment—are required to fully meet NEP’s vision of holistic, flexible, and future-ready education.

VIII. FINDINGS AND RECOMMENDATIONS

The analysis clearly shows that practical papers play an important role in improving students’ learning experiences and overall outcomes. They make the curriculum more engaging while also supporting the goals of SDG 4 by giving students opportunities to learn through hands-on experiences. These practical components help students build valuable skills in employability, problem-solving, critical thinking, and active participation, preparing them to handle real-world challenges with greater confidence. These findings are in line with earlier research that highlights the importance of experiential and skill-based learning in improving both employability and the quality of education [5], [12], [14].

There is still considerable scope to strengthen the curriculum’s alignment with SDG 4. One way to do this is by introducing more sustainability-focused modules that help students explore global challenges through practical and real-world perspectives. More community-based projects could also give students the chance to apply what they learn in the classroom to actual social situations. In addition, regular faculty development programs focused on SDG-based teaching methods, along with periodic updates to practical subjects in line with changing academic and industry expectations, would help keep the curriculum relevant, future-focused, and meaningful for students.

IX. CONCLUSION

The study clearly shows that practice-based learning is much more than an additional feature of the curriculum. It plays an important role in improving the overall quality of education. When students are given opportunities to work with real-world situations, take part in hands-on activities, and learn through experience, they can better connect theoretical concepts with the practical skills they will need in today’s competitive professional environment.

In this context, the Management curriculum at this reputed institution shows strong alignment with the objectives of SDG 4. The inclusion of practical papers, field-based assignments, and skill-focused activities reflects the institution’s effort to provide students with an education that is relevant, inclusive, and focused on meaningful learning outcomes.

At the same time, the findings suggest that there is still scope to make the curriculum even stronger. Regular curriculum updates and a deeper integration of practical and experiential learning could help students gain greater exposure to real-world challenges. These efforts would also support the broader goals of SDG 4 and the National Education Policy (NEP) 2020 [4], [11], [15].

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