

Comparative Analysis of Curriculum Books across Primary, Secondary, and Higher Education

M. S. Girish Rathod*

Abstract

This paper presents a comprehensive analysis of the different types of curriculum books—Textbooks, Prescribed Books, Recommended Books, Suggested Books, and Reference Books—and their roles across primary, secondary, and higher education levels. By exploring how these categories of books are used, this study highlights the shifts in educational strategies and student engagement across different academic stages, providing a framework for understanding the evolution of learning resources.

Keywords: Reference Books, Textbooks, Prescribed Books, Recommended Books, Suggested Books

Introduction

Educational systems worldwide rely on structured curriculum materials to impart knowledge and guide students through their learning journeys. These materials range from core textbooks, which form the backbone of learning, to more specialised and optional readings like reference books and suggested books. The use of these resources varies across different levels of education—primary, secondary, and higher education—as students' needs and the complexity of subjects evolve.

This paper aims to provide an in-depth analysis of how different types of curriculum books are used in these educational stages. By examining the distinction between textbooks, prescribed books, recommended books, suggested books, and reference books, we seek to understand their pedagogical roles and how they shape the learning experience.

Here's how they differ:

Textbook

- *Definition:* A textbook is the primary book used for teaching a particular subject or course. It usually covers the entire syllabus or curriculum.
- *Context:* Textbooks are often mandated by educational boards or institutions, especially in primary and secondary education.
- *Usage*
 - *Primary/Secondary Education:* Textbooks are essential and form the core material for study. Students follow these closely for exams and assignments.
 - *Higher Education:* Textbooks still play a key role, but they are often supplemented by other materials like research papers and reference books.
- *Examples:* NCERT textbooks in India, Pearson's school textbooks, college-level textbooks like "Calculus by James Stewart".

Prescribed Book

- *Definition:* A prescribed book is a book that is officially selected or mandated by an educational institution or authority for a course. It must be followed by students.
- *Context:* The prescribed book may or may not be the same as the textbook, but it is required reading.
- *Usage:*
 - *Primary/Secondary Education:* It is often synonymous with a textbook, especially when only one book is mandated for a subject.

* College Librarian (Associate Professor Grade), Government First Grade College, Ayanur, Shivamogga, Karnataka, India.
Email: girishrathodms@gmail.com

- *Higher Education*: Prescribed books may include both textbooks and other essential readings (e.g., specific academic texts, handbooks).
- *Examples*: In law or medical schools, specific texts like “Harrison’s Principles of Internal Medicine” may be prescribed.

Recommended Book

- *Definition*: A recommended book is suggested by the instructor or institution to complement the prescribed textbook. It is not mandatory but can enhance understanding.
- *Context*: Recommended books offer alternative perspectives, additional examples, or more in-depth material.
- *Usage*:
 - *Primary/Secondary Education*: Less common, but sometimes recommended for students looking to gain extra knowledge or for additional exercises.
 - *Higher Education*: Frequently used to deepen understanding of a subject or for further study beyond the basic curriculum.
- *Examples*: A math teacher might recommend extra problem-solving books or a literature teacher may suggest additional novels to read.

Suggested Book

- *Definition*: A suggested book is similar to a recommended book but is often even less formal. It might be proposed as optional reading or for enrichment.
- *Context*: Suggested books are often for students who wish to go beyond the course requirements.
- *Usage*:
 - *Primary/Secondary Education*: Rarely used, but may be offered for students who wish to explore topics independently.
 - *Higher Education*: More common in higher education for students interested in a topic that may not be directly examinable.
- *Examples*: A suggested reading list in a university course might include historical texts or niche books related to a particular field of study.

Reference Book

- *Definition*: A reference book is used for consulting specific information rather than for continuous reading. It may provide more detailed or technical explanations.
- *Context*: Reference books are not part of the regular syllabus but are used for clarification, additional data, or deeper knowledge.
- *Usage*:
 - *Primary/Secondary Education*: Not frequently used, except in higher classes where students may consult them for projects or deeper understanding.
 - *Higher Education*: Essential, especially in research-based or technical courses. Students use them to look up concepts, theories, or technical details not covered in their textbooks.
- *Examples*: Dictionaries, encyclopaedias, technical manuals, and advanced subject-specific books like “CRC Handbook of Chemistry and Physics.”

Each of these categories serves different purposes and caters to different educational needs at various stages.

Objectives of the Study

The main objectives of the study are:

- To understand students’ perspectives on the use of various curriculum books.
- To gather insights from teachers regarding their choices of curriculum books and how they integrate various types of books into their teaching methods.
- To understand how educational institutions select and manage the use of curriculum books.

Literature Review

The concept of using structured curriculum materials, particularly textbooks, has been a subject of academic inquiry for decades. Textbooks, as the primary teaching tool, are designed to cover the curriculum in a standardised manner and are often the first learning resource introduced to students in their academic lives (Anderson, 2006). Research by Apple and Christian-Smith (1991) emphasises that textbooks serve not just

an educational function but also reflect the cultural and ideological values of a society.

Prescribed books are commonly found in both primary and secondary education, often provided by national or regional educational boards (NCERT, 2018). These books ensure that all students have access to the same fundamental resources, but they often limit the depth and diversity of knowledge by focusing narrowly on what is required for examinations (Altbach, 1991).

In contrast, recommended books and suggested books represent a more flexible approach, providing supplementary resources that allow for deeper exploration of topics. These materials are particularly relevant in higher education, where students are encouraged to engage with various sources to build a more comprehensive understanding of their field (Hutchinson & Torres, 1994).

Reference books offer another dimension to curriculum materials, especially in specialised or research-driven subjects. These books, which may include encyclopaedias, dictionaries, or technical manuals, are used to clarify and extend knowledge beyond the standard curriculum (Fox & Fox, 2000).

Methodology

This study conducts a comparative analysis of the roles and functions of different curriculum books across primary, secondary, and higher education levels. Data were collected through:

- Textual analysis of curriculum guidelines from educational institutions across various regions.
- Interviews with educators from each education level to understand how they incorporate these books into their teaching strategies.
- Surveys of students to gauge the importance and usage of different book types in their academic progression.

The focus of this research was on how the reliance on textbooks and prescribed books decreases as students advance through the educational system, with an increasing emphasis on recommended, suggested, and reference books in higher education (Fig. 1).

Comparison across Education Levels

A comparative data Table 1 will show how each type of book is used at different levels of education:

Table 1

<i>Book Type</i>	<i>Primary Education</i>	<i>Secondary Education</i>	<i>Higher Education</i>
Textbook	Core material, Essential for basic learning, covers core curriculum and mandated by curriculum, provides foundational knowledge.	Core material, still central but slightly advanced, often aligned with exams.	Core material, Important but supplemented by more specialised resources. supplemented by other resources, broad yet focused.
Prescribed Book	Same as textbook, mandatory by school/board. mandatory for learning.	Often the same as a textbook, but sometimes an additional mandatory book. May include additional workbooks or guides.	Mandatory course material may include textbooks or other resources. Often more than one book, including textbooks and academic texts for languages.
Recommended Book	Rare, but used for extra practice or gifted students.	Often used to complement textbooks for deeper understanding.	Commonly used for supplementary knowledge, often not mandatory.
Suggested Book	Rare, occasionally for enrichment.	Sometimes suggested for interested or advanced students.	Often suggested for independent exploration of subjects.
	Rare, occasionally for enrichment or advanced students.	Sometimes suggested for additional reading outside the syllabus.	Commonly used, provides extra insight or material for independent learners.

Book Type	Primary Education	Secondary Education	Higher Education
Reference Book	Rare, occasionally for enrichment or advanced students.	Sometimes suggested for additional reading outside the syllabus.	Frequently used, especially for research, technical explanations, or deeper dives into topics.
	Almost non-existent, except dictionaries.	Occasionally used for difficult subjects or projects.	Frequently used for research, technical subjects, and advanced studies.

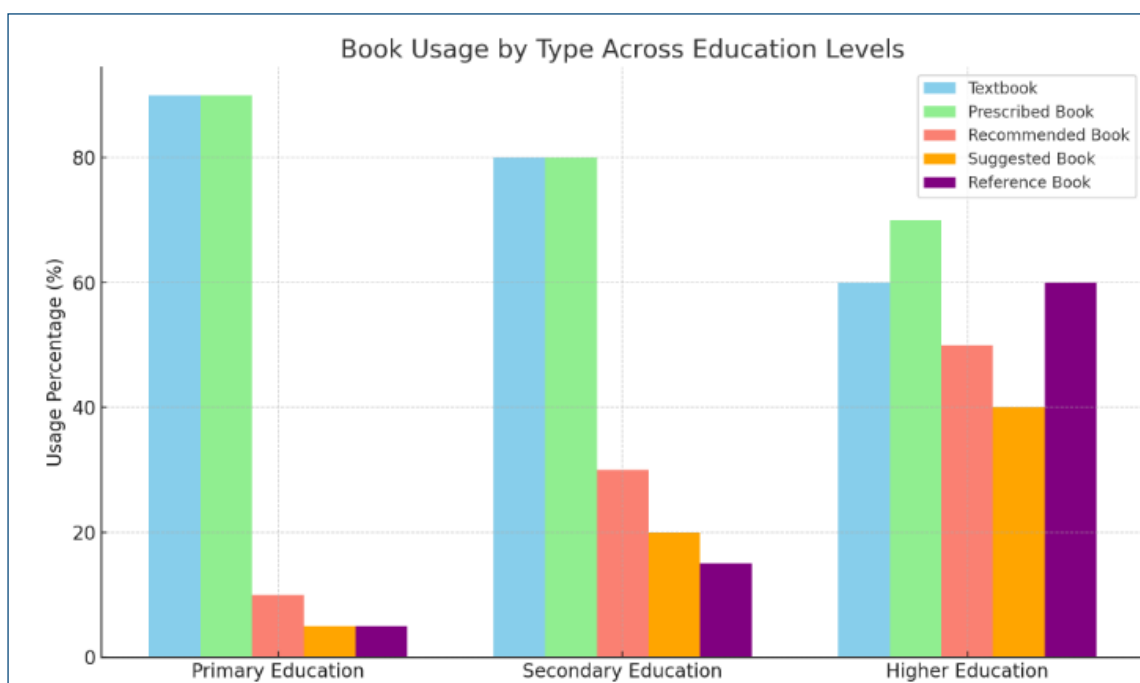


Fig. 1: The Usage of Different Types of Books

(Textbooks, Prescribed, Recommended, Suggested, and Reference Books) across primary, secondary, and higher education.)

Data Analysis and Interpretation

Data Analysis of Students

Table 2: Students Feedback

Question	Option A	Option B	Option C	Option D	Total Responses
How often do you use textbooks?	40% (160)	30% (120)	20% (80)	10% (40)	400
Do teachers recommend additional books?	60% (240)	40% (160)	N/A	N/A	400
How often do you use recommended books?	30% (120)	50% (200)	10% (40)	10% (40)	400
How helpful are textbooks?	50% (200)	30% (120)	10% (40)	10% (40)	400
Importance of reference books	20% (80)	50% (200)	30% (120)	N/A	400

Table 3: Frequency of Textbook Usage

Frequency of Textbook Usage	Percentage
Daily	40%
Weekly	30%
Occasionally	20%
Never	10%

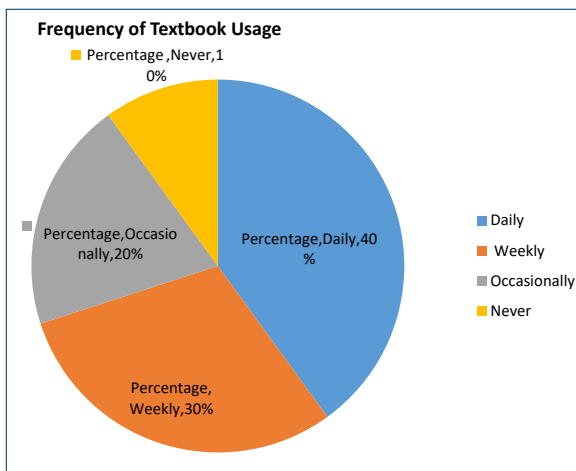


Fig. 2: Frequency of Textbook Usage

- 40% of students use textbooks daily, showing that textbooks are still essential, particularly in primary and secondary education (Tables 2, 3, and 4).
- 30% use textbooks weekly, indicating that students may rely on other resources or attend more practical-based classes (Figs. 2, 3, and 4).

Teacher Recommendation of Additional Books

Table 4: Teacher Recommendation of Additional Books Outside the Curriculum

Recommendation	Percentage
Yes	60%
No	40%

- 60% of students report that their teachers recommend additional books, signifying the growing importance of recommended books, especially in secondary and higher education.

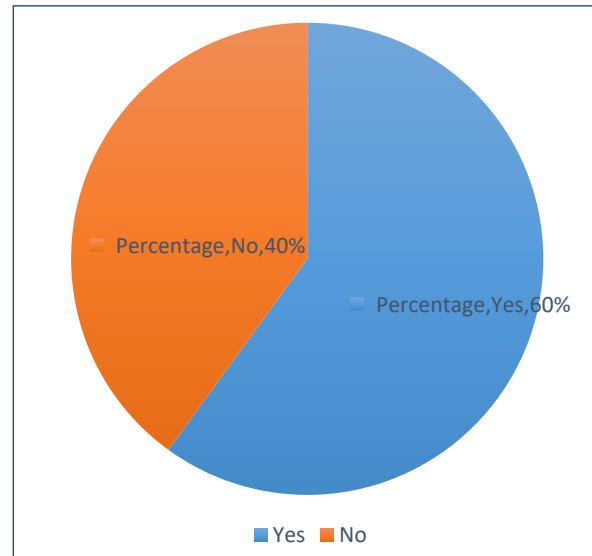


Fig. 3: Teacher Recommendation of Additional Books Outside the Curriculum

Importance of Reference Books

Table 5: How Important Students Find Reference Books

Importance of Reference Books	Percentage
Very important	20%
Somewhat important	50%
Not important	30%

- 50% of students find reference books “somewhat important,” especially in higher education, where they are used to support detailed research and specialised knowledge (Tables 5, 6, 7, and 8).

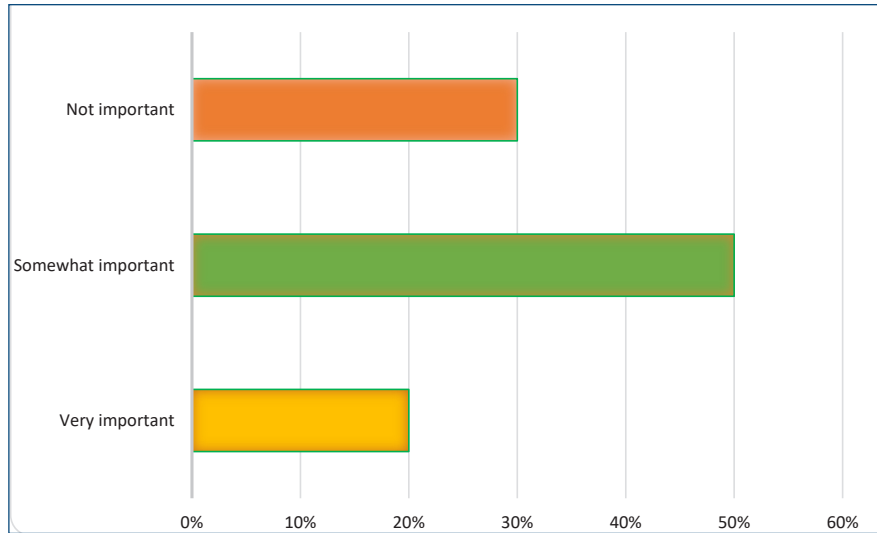


Fig. 4: How Important Students Find Reference Books

Data Analysis of Teachers

Table 6: Teachers Feedback

Question	Option A	Option B	Option C	Option D	Total Responses
Do you use prescribed books for teaching?	80% (80)	15% (15)	5% (5)	N/A	100
How often do you recommend additional books?	60% (60)	30% (30)	10% (10)	N/A	100
Importance of reference books in your subject	40% (40)	50% (50)	10% (10)	N/A	100

Table 7: Usage of Prescribed Books in Teaching

Usage of Prescribed Books	Percentage
Yes	80%
Sometimes	15%
No	5%

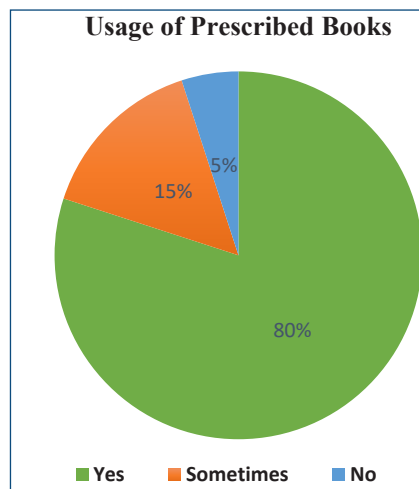


Fig. 5: Percentage of Teachers using Prescribed Books

- 80% of teachers use prescribed books, indicating the reliance on centralised curriculum materials across primary and secondary education (Figs. 5, 6, and 7).

Table 8: Importance of Reference Books in Teaching

<i>Importance of Reference Books</i>	<i>Percentage</i>
Very important	40%
Somewhat important	50%
Not important	10%

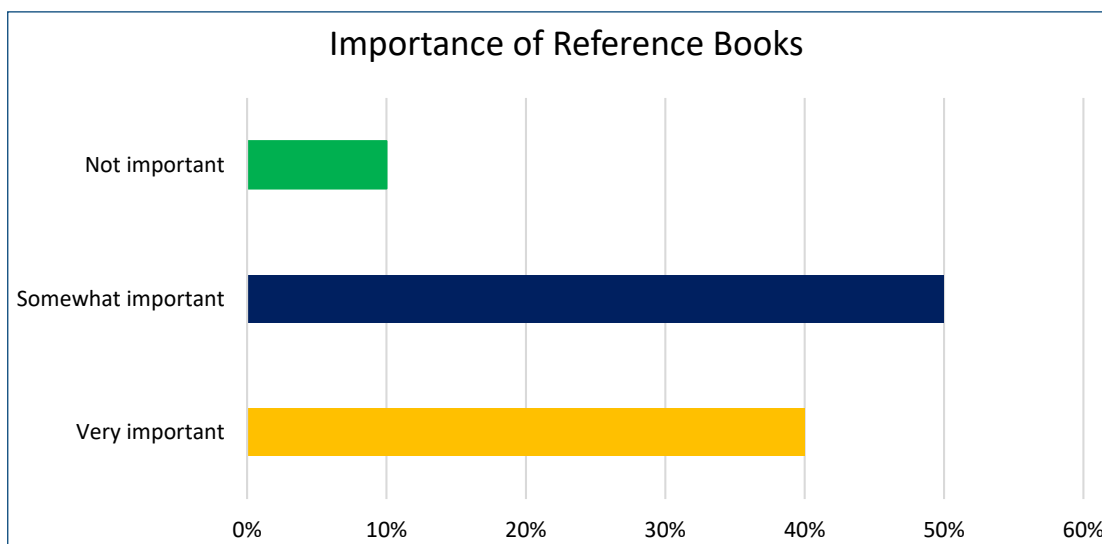


Fig. 6: How Teachers Perceive the Importance of Reference Books in Their Subjects

- 50% of teachers consider reference books “somewhat important” in the secondary and higher education levels, especially in technical subjects

where detailed reference material is necessary (Fig. 6).

Data Analysis of Administrator

Table 9: Administrators Feedback

<i>Question</i>	<i>Option A</i>	<i>Option B</i>	<i>Option C</i>	<i>Option D</i>	<i>Total Responses</i>
How often is the curriculum updated with new books?	20% (20)	30% (30)	40% (40)	10% (10)	100
Does the institution provide access to reference books?	70% (70)	30% (30)	N/A	N/A	100
Major challenge in providing curriculum books to students	40% (40)	30% (30)	20% (20)	10% (10)	100

Table 10: Frequency of Curriculum Updates

<i>Update Frequency</i>	<i>Percentage</i>
Annually	20%
Every few years	30%
Rarely	40%
Never	10%

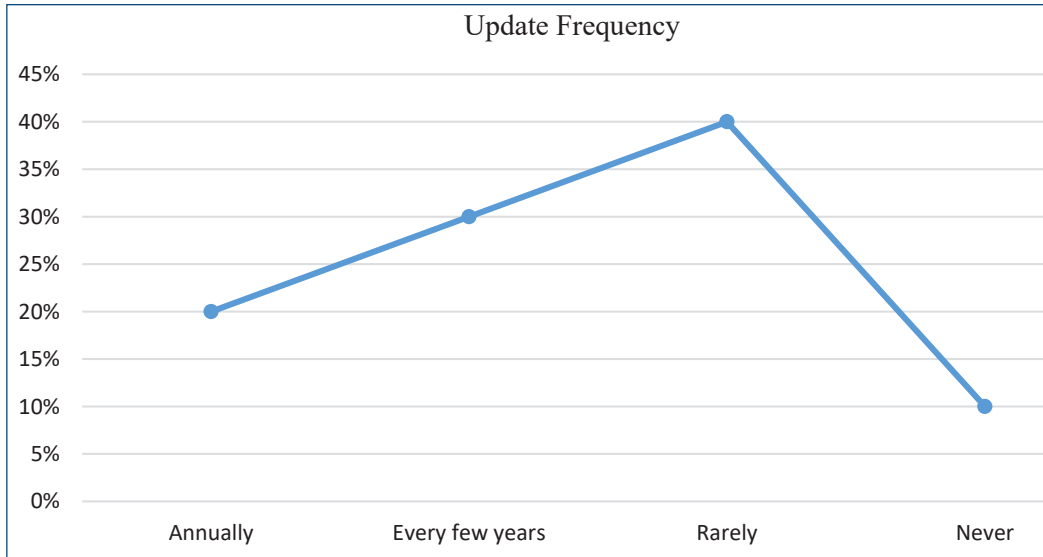


Fig. 7: Frequency of Curriculum Updates in Schools

- 40% of institutions rarely update their curriculum books, indicating that many schools are still dependent on older materials, which could affect the relevance and quality of education (Tables 9, 10, and 11).

- 70% of institutions provide access to reference books, highlighting that reference materials are becoming more available, especially in higher education settings (Fig. 8).

Table 11: Access to Reference Books

Access to Reference Books	Percentage
Yes	70%
No	30%

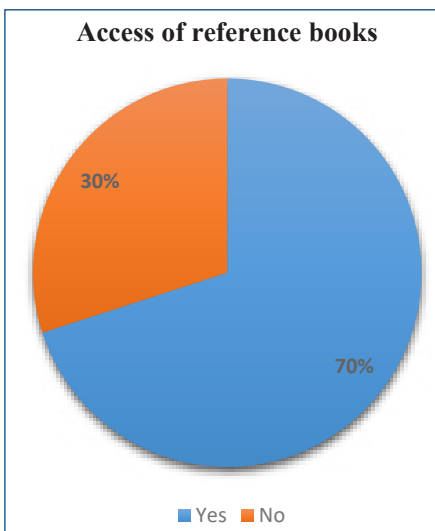


Fig. 8: School Access to Reference Books

Summary of Interpretation

- Textbooks and Prescribed Books are crucial in primary and secondary education, with 80% of teachers and 40% of students reporting daily usage. The reliance on these books gradually decreases in higher education, where students begin to explore recommended and reference books more often.
- Reference Books are widely considered valuable in higher education, with 50% of teachers and 40% of students finding them important, particularly in specialised fields.
- Recommended and Suggested Books are growing in importance, with 60% of students reporting that their teachers recommend additional books to enhance understanding. This trend is more common in secondary and higher education.
- Challenges remain in accessing diverse resources, particularly with only 40% of institutions updating their curriculum materials frequently. This can hinder students' exposure to up-to-date information.

Analysis and Findings

Textbooks and Prescribed Books

In primary education, textbooks are synonymous with prescribed books. These books are the central learning tools, providing structured and simplified explanations of concepts across subjects like mathematics, science, and languages. Textbooks ensure consistency and uniformity in the delivery of education (Choppin, 2008).

As students transition to secondary education, textbooks remain central, but prescribed books may also include additional resources, such as workbooks or study guides. These prescribed books ensure that students stay aligned with national and regional exam syllabi, reinforcing the learning objectives set by educational boards.

In higher education, the role of textbooks and prescribed books shifts. While they still provide foundational knowledge, the increasing complexity of subjects requires students to explore beyond these resources. Educators often prescribe a set of key textbooks, but students are expected to use a combination of textbooks and other materials for a more well-rounded understanding.

Recommended and Suggested Books

In primary education, recommended books are seldom used. However, in some cases, teachers may suggest additional reading material for students who require extra practice or are more advanced.

In secondary education, the use of recommended books becomes more prevalent. Teachers often suggest supplementary texts to help students deepen their understanding, especially in subjects like science, mathematics, and literature. For instance, recommended reading lists may include extra practice books for mathematics or alternative viewpoints for history subjects.

In higher education, the use of recommended and suggested books is integral to the learning process. Students are encouraged to consult a variety of sources beyond the prescribed materials. Recommended books often include academic texts, journal articles, or research

papers that allow students to engage with multiple perspectives on a topic. Suggested books, while not mandatory, are crucial for students interested in further exploring a particular subject.

Reference Books

In primary and secondary education, reference books are rarely used except in cases where students engage in project-based learning. They may consult dictionaries, encyclopaedias, or simple atlases for specific assignments or projects.

In higher education, reference books play a vital role, particularly in technical or research-intensive fields. Reference books, including scientific manuals, law digests, or medical handbooks, provide the detailed information required for advanced academic work. These books are used for specific inquiries and are often consulted in conjunction with textbooks and academic papers.

Discussion and Recommendation

The findings from this analysis underscore the evolving role of curriculum books as students progress through the education system. The dominance of textbooks and prescribed books in primary and secondary education ensures that all students have access to the same basic educational materials. This is essential for building foundational knowledge and ensuring equity in education.

However, as students move into higher education, the reliance on textbooks decreases, and the use of recommended, suggested, and reference books increases. This shift reflects the growing complexity of subjects and the need for students to engage with a broader range of materials. Higher education encourages independent thought, critical analysis, and research, and these additional materials provide the depth necessary for such intellectual growth.

When recommending reading materials to the library, teachers, librarians, and administrators should be aware of the differences among various materials and their appropriate use at different educational levels.

Conclusion

This paper highlights the different roles that textbooks, prescribed books, recommended books, suggested books, and reference books play across the three levels of education. While textbooks and prescribed books dominate primary and secondary education, recommended, suggested, and reference books become more prevalent in higher education. These findings suggest that the gradual introduction of more flexible and independent learning materials is crucial in preparing students for advanced academic work and research.

The universities publish the Ability Enhancement Compulsory Courses (AECC) for the compulsory language curriculum textbooks in the undergraduate program; the higher education institutions (HEIs) establish the Board of Studies (BoS), which makes recommendations and suggests books for the remaining curriculum at the end of the syllabi.

Future research could focus on how digital resources and online reference materials are influencing the use of traditional curriculum books across educational levels.

References

- Anderson, B. (2006). The impact of textbooks on learning. *Journal of Educational Research*, 29(3), 145–162.
- Apple, M. W., & Christian-Smith, L. K. (1991). *The politics of the textbook*. Routledge.
- Choppin, J. (2008). Curriculum materials in secondary education. *Educational Review*, 41(1), 67–82.
- Fox, R., & Fox, M. (2000). Reference books: A critical resource in higher education. *Higher Education Journal*, 35(2), 89–104.
- Hutchinson, T., & Torres, E. (1994). The textbook as agent of change. *ELT Journal*, 48(4), 315–328.
- NCERT. (2018). Curriculum framework for primary and secondary education. National Council of Educational Research and Training.

Appendix-A: Survey Instrument

Questionnaire for Students

Section A: Demographics

- What is your current level of education?
 - Primary
 - Secondary
 - Higher Education
- Which subject(s) are you currently studying?

Section B: Use of Curriculum Books

- How often do you use textbooks in your studies?
 - Daily
 - Weekly
 - Occasionally
 - Never
- Are the textbooks you use prescribed by your school/institution?
 - Yes
 - No
- How helpful do you find textbooks for understanding the course material?
 - Very helpful
 - Somewhat helpful
 - Neutral
 - Not helpful
- Do your teachers recommend additional books outside the prescribed textbook?
 - Yes
 - No
- How often do you use recommended books for additional study?
 - Frequently
 - Occasionally

- Rarely
- Never
- Have you ever used suggested books provided by your teachers or school?
 - Yes
 - No
- How important do you find reference books (dictionaries, encyclopedias, etc.) in your study routine?
 - Very important
 - Somewhat important
 - Not important
- Which type of book do you think has helped you the most in your studies?
 - Textbook
 - Prescribed book
 - Recommended book
 - Suggested book
 - Reference book
 - All of the above

Section C: Book Access and Challenges

- How easy is it for you to access the textbooks and other recommended books for your course?
 - Very easy
 - Moderately easy
 - Difficult
- What challenges do you face in using these books? (Check all that apply)
 - Lack of access to physical copies
 - Difficulty understanding the material
 - Too much information
 - Not enough practice material
 - Other (Please specify) _____

Questionnaire for Teachers

Section A: General Information

- What is your current teaching level?

- Primary
- Secondary
- Higher Education
- What subject(s) do you teach?

Section B: Curriculum Books

- Which of the following books do you use as primary teaching material? (Check all that apply)
 - Textbooks
 - Prescribed books
 - Recommended books
 - Suggested books
 - Reference books
- How often do you assign textbooks for classroom learning?
 - Always
 - Often
 - Sometimes
 - Rarely
- Do you follow prescribed books as per school/institution guidelines?
 - Yes, strictly
 - Sometimes
 - No
- How often do you recommend additional readings (recommended books) to your students?
 - Frequently
 - Occasionally
 - Rarely
 - Never
- Do you suggest optional readings (suggested books) for students who want to explore topics further?
 - Yes
 - No
- How important do you find reference books for your students' understanding of the subject?
 - Very important
 - Moderately important
 - Not important

- How do you balance the use of textbooks with other resources like suggested or reference books in your teaching?

Section C: Challenges and Preferences

- What challenges do you face in implementing a variety of curriculum books in your classroom?
 - Lack of student access to multiple resources
 - Time constraints
 - Curriculum restrictions
 - Lack of teacher autonomy in choosing materials
 - Other (Please specify) _____
- In your opinion, what improvements could be made in the way curriculum books are used in your subject area?

Questionnaire for Administrators

Section A: Background Information

- What type of institution do you represent?
 - Primary school
 - Secondary school
 - College/University
- How is the selection of curriculum books (textbooks, prescribed books) determined in your institution?

Section B: Selection and Implementation of Curriculum Books

- Does your institution strictly follow national/regional curriculum guidelines for selecting textbooks and prescribed books?
 - Yes
 - No
- Are teachers allowed to recommend or suggest books outside the prescribed list?
 - Yes
 - No
- How often do you update the list of prescribed and recommended books?

- Annually
- Every few years
- Rarely
- Never

- What criteria are used for selecting reference books or other supplementary material in your institution? (Check all that apply)
 - Student needs
 - Teacher recommendations
 - National standards
 - Availability of books
 - Other (Please specify) _____

Section C: Access and Challenges

- Does your institution provide easy access to textbooks, recommended, and reference books for students and teachers?
 - Yes
 - No
- What are the major challenges faced by your institution in providing curriculum books to students?
 - Budget constraints
 - Availability of books
 - Diversity of resources for all students
 - Other (Please specify) _____
- How do you address the issue of students not having access to recommended or suggested books?

Appendix B: Statistical Outputs

Table-1 A comparative data will show how each type of book is used at different levels of education

Table-2 Students feedback

Table-3 Frequency of Textbook Usage

Table-4 Teacher recommendation of additional books outside the curriculum

Table-5 How important students find reference books

Table-6 Teachers feedback

Table-7 Usage of Prescribed Books in Teaching

Table-8 Importance of Reference Books in Teaching

Table-9 Administrators feedback

Table-10 Frequency of Curriculum Updates

Table-11 Access to Reference Books

Figure-1 The usage of different types of books

Figure-2 Frequency of Textbook Usage

Figure-3 Teacher recommendation of additional books outside the curriculum

Figure-4 How important students find reference books

Figure-5 Percentage of teachers using prescribed books

Figure-6 How teachers perceive the importance of reference books in their subjects

Figure-7 Frequency of curriculum updates in schools

Figure-8 School access to reference books