

TASK-BASED LEARNING IN PHARMACY EDUCATION: AN INNOVATIVE
APPROACH TO COMPETENCY DEVELOPMENTDr. Shamna M. S.^{1*}, Dr. Shini Dominic², Prof. Deepa Cherian³, Dr. Jose Kurien⁴, Mrs. Rajina P. V.⁵, Ms. Vinaya D. V.⁶^{1,5,6}Assistant Professor, College of Pharmaceutical Sciences, Govt. Medical College, Kottayam.^{2,3,4}Professor, College of Pharmaceutical Sciences, Govt. Medical College, Kottayam.

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Medical College, Kottayam.<https://doi.org/10.5281/zenodo.18107285>**How to cite this Article:** Dr. Shamna MS^{1*}, Dr. Shini Dominic², Prof. Deepa Cherian³, Dr. Jose Kurien⁴, Mrs. Rajina PV⁵, Ms. Vinaya DV⁶. (2025). Task-Based Learning In Pharmacy Education: An Innovative Approach To Competency Development. International Journal of Modern Pharmaceutical Research, 10(1), 37-39.**ABSTRACT**

Task-Based Learning (TBL) is an educational strategy that emphasizes learning through structured, real-world tasks that mirror professional roles and responsibilities. In pharmacy education, TBL aligns with the evolving expectations of practice, including patient-centered care, interprofessional collaboration, medication therapy management, and evidence-based decision making. This article discusses the principles, design, implementation, and advantages of TBL in pharmacy curricula, highlighting its role in bridging theory–practice gaps. Evidence from international and Indian settings supports its effectiveness in improving communication skills, clinical reasoning, teamwork, and workplace readiness. Recommendations for integrating TBL into B.Pharm and Pharm.D programs are also provided.

KEYWORDS: Competency Based Education, Experiential Learning, Clinical Skill Development, Pharmacy Practice Training, Task Based Learning.**1. INTRODUCTION**

Pharmacy education worldwide is transitioning from traditional didactic teaching to competency-based and student-centered learning models. The shift is driven by the expanding role of pharmacists in patient care, pharmacovigilance, public health, and clinical decision making. Conventional lecture-based learning often fails to equip students with the skills required for complex, real-world tasks such as patient counselling, medication review, prescription audit, and adverse drug reaction (ADR) reporting.

Task-Based Learning (TBL) has emerged as a highly effective pedagogical method for developing both cognitive and practical competencies required in modern pharmacy practice. In TBL, learning occurs through the completion of authentic tasks that pharmacists encounter in their daily work, enabling students to synthesize knowledge, apply skills, and demonstrate professional behavior.^[1]

2. CONCEPT AND PRINCIPLES OF TASK-BASED LEARNING

TBL originated from workplace and vocational training models. In healthcare education, it is rooted in experiential learning theories proposed by Kolb and constructivist approaches that emphasize learning by doing.^[2]

Core principles of TBL

Authentic tasks – tasks reflect actual pharmacy practice (e.g., counselling a diabetic patient, preparing a drug information query).

Integration of knowledge and skills – students draw on pharmacology, therapeutics, communication, and ethics simultaneously.

Learner autonomy – students make decisions, manage information, and solve problems independently.

Reflection – students analyse their performance and identify gaps for improvement.

Assessment embedded into tasks – evaluation occurs through rubrics, OSCEs, checklists, and reflective portfolios.^[3]

TBL promotes deep learning, competency development, and continuous improvement. It aligns well with Pharmacy Council of India's vision for outcome-based education and practice-ready graduates.

3. DESIGNING A TASK-BASED LEARNING MODULE FOR PHARMACY

Effective TBL design involves identifying core competencies, selecting relevant tasks, preparing structured guidelines, and aligning assessments.

3.1 Identify competencies

Competency areas include

Patient counselling and communication
Medication dispensing and documentation
ADR reporting and pharmacovigilance
Prescription audit and medication safety
Clinical problem solving and therapeutic planning
Public health and health promotion

3.2 Select authentic tasks

Tasks must be:

Relevant to real practice
Appropriate to students' level
Measurable and observable

Examples of tasks for B.Pharm and Pharm.D students:

Conducting a medication history interview
Preparing a drug information report using Micromedex
Performing a prescription audit using WHO criteria
Counselling an asthma patient on inhaler use
Identifying drug–drug interactions from case vignettes
Completing an ADR reporting form (PvPI)

3.3 Develop task instructions

Each task should include:

Background of the case
Learning outcomes
Step-by-step instructions
Evidence-based references
Required materials or forms
Evaluation rubric.^[4]

3.4 Facilitate the task

The teacher acts as:

Facilitator
Guide
Evaluator
Reflective mentor^[5]

Facilitation includes briefing, supervising practice sessions, providing feedback, and enabling group discussions.

3.5 Assessment strategies

OSCE stations
Task completion checklist
Viva voce

Peer assessment
Reflective writing
Rubric-based scoring

4. IMPLEMENTATION OF TBL IN PHARMACY CURRICULUM

4.1 Integration with theory and practical sessions

TBL can be embedded into:

Pharmacotherapeutics
Community pharmacy practice
Hospital pharmacy practice
Clinical pharmacy services
Pharmacy practice practicals
Public health modules like Social and Preventive Pharmacy, Pharmacovigilance etc.

For example, after theoretical teaching on hypertension, a task may require students to counsel a hypertensive patient using a standardized patient.

4.2 Classroom and hospital settings

TBL can be implemented in:

Skill labs
Community pharmacy model labs
Outpatient departments
Wards
Drug Information Centre
Patient Counselling Centre
Students perform tasks under supervision, ensuring safety and accuracy.

4.3 Interprofessional TBL

Collaboration with medical, nursing, and allied health students enhances communication and teamwork skills.^[6]

5. ADVANTAGES OF TASK-BASED LEARNING IN PHARMACY

5.1 Enhances clinical and practical competencies

Students develop real-world skills such as:

- ◇ Clinical reasoning
- ◇ Decision making
- ◇ Patient assessment
- ◇ Medication safety analysis

5.2 Improves communication and counselling skills

Tasks involving patient interaction strengthen verbal and non-verbal communication.^[7]

5.3 Strengthens problem-solving and critical thinking

Students learn to handle ambiguity, evaluate alternatives, and apply therapeutic knowledge.

5.4 Encourages teamwork and leadership

Working in small task groups develops collaboration and leadership abilities.

5.5 Promotes reflective practice

Reflection empowers students to identify strengths, address weaknesses, and grow professionally.

5.6 Bridges theory–practice gaps

TBL connects classroom learning with actual clinical pharmacy practice, making students more job-ready.^[8]

6. CHALLENGES IN IMPLEMENTING TBL

Despite its proven benefits, TBL faces challenges

- Need for trained faculty facilitators
- Increased workload in preparing realistic tasks
- Time constraints in busy academic schedules
- Limited access to skill labs and simulated environments
- Variation in student preparedness and confidence
- Institutions can overcome these through:
 - Faculty development programs
 - Structured templates for task creation
 - Collaboration with hospitals and community pharmacies
 - Use of standardized patients
 - Digital tools and e-portfolios^[9]

7. RECOMMENDATIONS FOR INDIAN PHARMACY INSTITUTIONS

1. Integrate TBL into existing practical's and clinical training.
2. Develop a task bank for core competency areas.
3. Conduct faculty orientation workshops on TBL.
4. Use a combination of simulation and real clinical environments.
5. Include TBL-based OSCEs in internal assessment.
6. Promote documentation using portfolios and checklists.
7. Align TBL activities with PQAC and KUHS Quality Assurance Standards.

8. CONCLUSION

Task-Based Learning is an effective and transformative pedagogical approach that can significantly enhance pharmacy students' clinical competencies, professional behaviour, communication skills, and readiness for modern pharmacy roles. As India strengthens its pharmacy practice regulations and patient-care responsibilities, TBL offers a structured, evidence-based, and practical method to prepare future pharmacists for real-world challenges. Integrating TBL into B.Pharm, Pharm.D, and postgraduate programs will contribute to a more skilled, confident, and patient-centered pharmacy workforce.

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