Learner Analysis Report,2025

Amala Institute of Medical Sciences, Thrissur

Affiliated to Kerala University of Health Sciences (KUHS)

2024-2025

Amala Institute of Medical Sciences, Thrissur

Learner Analysis Report,2025

1. Institution Profile

Name of Institution	Amala Institute of Medical Sciences (AIMS)
Affiliation	Kerala University of Health Sciences (KUHS)
Reporting Period	June 2024 – June2025
Total Number of Departments	27
UG Programmes Offered	MBBS, 2024 Batch
Report Compiled By	Dr. Twinkle Wilson C, IQAC Analyst, AIMS, Thrissur
Date of Submission	20-07-2025

The Learner Analysis Report, 2025 provides a comprehensive evaluation of academic performance, learning trends, and support needs among students at Amala Institute of Medical Sciences. This report aims to identify strengths and gaps in student learning, facilitating evidence-based strategies for academic enhancement. By analysing performance indicators, feedback, and progression metrics, the report serves as a critical tool for educators, mentors, and administrators to tailor interventions that promote inclusive and effective learning environments. The findings from this analysis will guide institutional efforts in fostering academic excellence and student success.

2. Objective

To identify and support students with different learning capabilities through tailored interventions and enrichment strategies, thereby improving academic outcomes and personal development.

Table1: Criteria for Categorization of Learner

Learner Category	Identification Criteria
Slow Learners	- Internal Assessment Score < 40% in theory. -Low clinical/practical performance (< 40%) - Attendance < 75% - Faculty/Mentor recommendation
Average Learners	Internal Assessment Score 40% < Learner < 75% in theory -Low clinical/practical performance 40% < Learner < 75% practical - Attendance < 75% - Faculty/Mentor recommendation
Advanced Learners	- Internal Assessment Score >75% in theory. - High clinical acumen - Active in research, conferences, and co-curricular activities

Source: Manual and Guideline for the Identification of Slow and Advanced Learners, 2025, Amala Institute of Medical Science, Thrissur, Kerala

Table 2: Internal Assessment Outcomes by Learner Category: A Three-Year Overview

Academic Year	2024-2025	Learner Category						Total students are 103 in two subjects and 102 in Physiology
Internal Assessment	Subjects	**Slow Learners**		**Average Learners**		**Advanced Learners**		
		Theory (%)	Practical (%)	Theory (%)	Practical (%)	Theory (%)	Practical (%)	
PCT-1	Anatomy	43(41.8)	6(5.83)	60(58.3)	79(76.7)	0	18(17.5)	
	Physiology	50(49)	0	52(51)	80(78.43)	1(0.98)	23(22.55)	
	Biochemistry	11(10.7)	0	92(89.3)	24(23.3)	0	79(76.7)	
PCT-2	Anatomy	6(5.8)	1((0.97)	97(94.2)	88(85.4)	0	14(13.6)	
	Physiology	4(3.9)	0	97(95.1)	87(85.3)	2(1.96)	16(15.69)	
	Biochemistry	30(29.1)	0	73(70.9)	25(24.27)	0	78(75.73)	

Academic Year	2023-2024	Learner Category						Total students are 103
Internal Assessment	Subjects	**Slow Learners**		**Average Learners**		**Advanced Learners**		
		Theory (%)	Practical (%)	Theory (%)	Practical (%)	Theory (%)	Practical (%)	
PCT-1	Anatomy	24(23.3)	6(5.8)	76(73.8)	85(82.5)	3(2.9)	12(11.7)	
	Physiology	53(51.5)	37 (36.3)	50(48.5)	65(63.7)	0	0	
	Biochemistry	7(6.8)	0	75(72.8)	56(54.4)	21(20.4)	47(45.6)	
PCT-2	Anatomy	11(10.7)	2(1.9)	91(88.3)	81(78.6)	1(0.97)	20(19.4)	
	Physiology	45(43.7)	3(2.9)	58(56.3)	95(92.2)	0	5(4.9)	
	Biochemistry	19(18.5)	1(0.97)	77(74.8)	48(46.6)	7(6.8)	54(52.4)	
Academic Year	2022-2023	Learner Category						Total Students are100
Internal Assessment	Subjects	**Slow Learners**		**Average Learners**		**Advanced Learners**		
		Theory	Practical	Theory	Practical	Theory	Practical	
PCT-1	Anatomy	20	71	80	29	0	0	
	Physiology	42	9	58	90	0	1	
	Biochemistry	23	64	76	0	1	36	
PCT-2	Anatomy	4	0	95	63	1	37	
	Physiology	25	6	75	92	0	2	
	Biochemistry	23	0	76	90	1	10	

Source: Marks collected from office of respective Departments, AIMS, Thrissur
Note: Method for Identify the Learners Based in the Internal Assessment Test (PCT-1&2) as per the CBME Norms.

3. Three-Year Comparative Academic Performance Overview (2022–2025)

The learner performance assessment spanning the academic years 2022–2023 to 2024–2025 provides a thoughtful perspective on the evolving academic journey of students in the foundational disciplines of Anatomy, Physiology, and Biochemistry. Based on internal assessments (PCT-1 and PCT-2), and organized across slow, average, and advanced learner categories for both theory and practical components, this analysis highlights meaningful progress, persistent areas of concern, and valuable opportunities for further academic refinement.

In Anatomy, a consistent upward trend is evident across the three years. From an initially high proportion of slow learners, particularly in practical during 2022–2023, there has been steady and commendable progress. By 2024–2025, slow learners in theory had decreased from 41.8% to 5.8%, while in practical were nearly eliminated. Average performers remained dominant throughout, and the increasing number of advanced learners in practical from 12 in 2023–2024 to 20 in 2024–2025 reflects improved skill acquisition and learner engagement. While the absence of advanced theory learners remains an area for development, the overall performance in Anatomy reflects positively on the effectiveness of instructional support and remediation strategies.

In Physiology, the data presents a more varied pattern. Encouragingly, there has been a significant improvement in practical performance, with slow learners reducing from 36.3% in 2023–2024 to none in 2024–2025. However, theory continues to present challenges. While there was a reduction in slow learners in theory from 49% in 2024–2025 PCT-1 to 3.9% in PCT-2 advanced learners in theory remain scarce. Average learners consistently form the majority in both theory and practical, which reflects a stable academic baseline. These findings suggest that while students are making progress, additional efforts to strengthen conceptual clarity and stimulate higher-order thinking in theory are needed.

In Biochemistry, performance trends are more complex. Practical outcomes have been consistently strong, with a high and rising percentage of advanced learners from 45.6% in 2023–2024 to over 75% in 2024–2025. This sustained excellence in practical learning highlights students' strong application skills and the effectiveness of hands-on instruction. However, the theory component continues to pose a challenge. The proportion of slow learners in theory rose from 6.8% in 2023–2024 to 29.1% in 2024–2025, underscoring the need for targeted academic support. The disparity between theory and practical performance suggests that greater integration of clinical relevance and contextual understanding in theoretical teaching may be beneficial.

Across all three subjects, a few key patterns emerge. There is an encouraging trend of progressive improvement in practical performance, particularly in Anatomy and Biochemistry. The majority of learners consistently fall within the average category, reflecting general academic stability. At the same time, the limited presence of advanced theory learners across all years highlights the need to strengthen enrichment strategies. Encouragingly, the steady

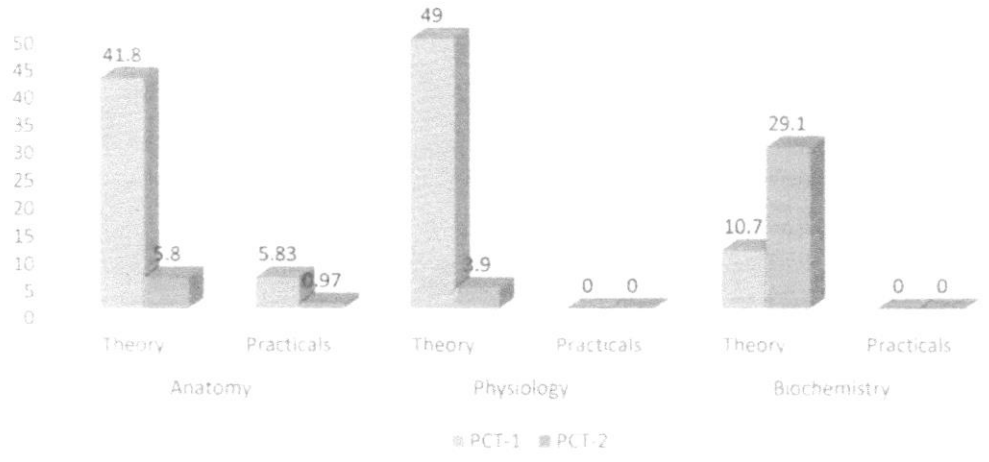
decline in slow learners over time indicates that remediation efforts are having a positive impact.

Overall, the academic progress observed over the past three years is truly encouraging, and it reflects the collective efforts of faculty and students alike. At the same time, we humbly recommend the introduction of enrichment opportunities for high-performing students, including research exposure, honors modules, and peer-led academic initiatives. These steps will help to foster a more balanced academic environment; one supports every learner in realizing their full potential.

4. Graphical Overview of Learner Performance and Trends – Academic Year, 2024–2025

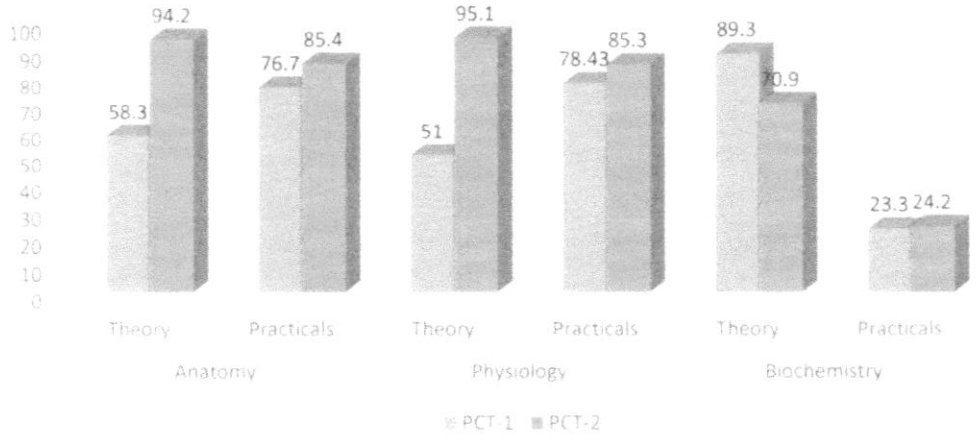
This graphical overview illustrates learner performance trends at Amala Institute of Medical Sciences for the academic year 2024–2025. It highlights the distribution of slow, average, and advanced learners based on internal assessments, and reflects the impact of academic support measures like Academic Remedial Programmes and peer mentorship

Figure1: Distribution and Progress of Slow Learners in Amala Institute of Medical Sciences: 2024–2025 (in Percent)



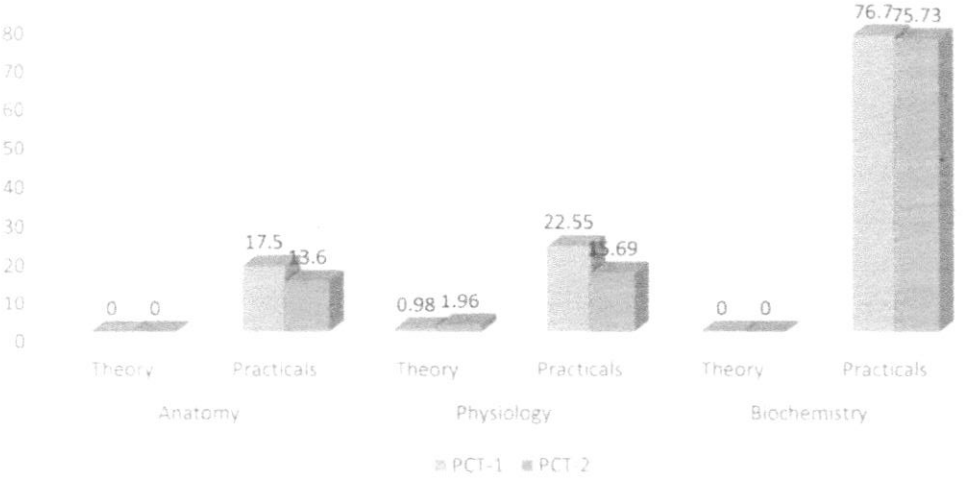
Source: Constructed by the IQAC Analyst based on data from *Table 2*.

Figure2: Distribution and Progress of Average Learners in Amala Institute of Medical Sciences: 2024–2025(in Percent)



Source: Constructed by the IQAC Analyst based on data from *Table 2*.

Figure3: Distribution and Progress of Advanced Learners in Amala Institute of Medical Sciences: 2024–2025(in Percent)



Source: Constructed by the IQAC Analyst based on data from *Table 2*.

The internal assessment analysis for the academic year 2024–2025 reveals encouraging academic progress and identifies areas requiring focused academic support. The comparison between PCT-1 and PCT-2 results demonstrates the positive impact of timely pedagogical interventions, particularly through the Academic Remedial Programme initiated after the first internal assessment.

In Anatomy, a significant transformation in learner performance was observed following the Academic Remedial Programme conducted for slow learners after the PCT-1 examination. The proportion of theory slow learners dropped dramatically from 41.8% in PCT-1 to just 5.8% in PCT-2, while practical slow learners decreased from 5.83% to an impressive 0.97%. This remarkable improvement reflects the effectiveness of the academic interventions, which included structured remedial sessions, small group tutorials, and peer mentorship support. The increase in practical advanced learners and consistent growth among average performers further underscores the success of these learner-centered strategies and enhanced clinical exposure.

Physiology also demonstrated a notable academic uplift. Following similar remedial measures, the number of theory slow learners reduced sharply from 49% in PCT-1 to 3.9% in PCT-2. Remarkably, no slow learners were recorded in practical in either phase, highlighting strong conceptual consolidation and effective skill-based learning. The predominance of average learners in PCT-2 reinforces a stable academic foundation, while the gradual increase in advanced practical performers reflects improved application and integration.

In Biochemistry, a contrasting trend emerged. While over 75% of students consistently performed well in practical, the proportion of theory slow learners increased from 10.7% in PCT-1 to 29.1% in PCT-2. Despite the implementation of academic support initiatives, this rise suggests the need for more targeted conceptual reinforcement and enhanced integration of theoretical content with clinical contexts. Nonetheless, the subject continues to demonstrate potential through its strong practical outcomes and a capable average learner segment.

Overall, the data indicates a positive academic trajectory, particularly in Anatomy and Physiology, where the post-PCT-1 Academic Remedial Programme played a pivotal role in transforming learner outcomes. However, the continued absence of advanced learners in theory across all subjects remains a concern. To bridge this gap, there is a need to introduce enriched academic opportunities, critical thinking tasks, and research-based learning to inspire and

nurture academic excellence. By persistently supporting slow learners and simultaneously fostering the development of high achievers, the institution can cultivate a balanced and inclusive academic environment that promotes the success of every student.

5. Observed Academic Patterns-2024-2025

Slow Learners – Common Gaps and Causes

A detailed review of internal assessment outcomes during the academic year 2024–2025 has brought to light specific academic gaps among slow learners, particularly in core first-year MBBS subjects. These patterns suggest a combination of academic and non-academic factors that contribute to learning challenges.

Table 3: Common Academic Gaps and Contributing Factors Among Slow Learners (2024–2025)

Subjects / Topics	Observed Issues	Contributing Factors
Anatomy – Gross Anatomy & Embryology	Inadequate conceptual clarity, poor retention	Language barrier, limited prior exposure to structured learning, low lecture attendance
Physiology – Neurophysiology & General Physiology	Difficulty in understanding abstract physiological mechanisms	Conceptual complexity, passive learning habits, lack of early remediation
Biochemistry – Enzymology & Metabolism	Poor numerical application, difficulty correlating with clinical aspects	Inconsistent class participation, language issues, fear of biochemistry as a subject
All subjects – Theory Assessments	Low scores in MCQ-based evaluations and written recall	Limited revision habits, weak foundation in basics, language comprehension gaps
All subjects – Practical Exams	Difficulty in interpretation, poor procedural recall	Reduced hands on exposure, performance anxiety, irregular practical attendance

This pattern analysis underscores the importance of early identification, targeted academic support, and individualised mentorship for at-risk learners. Addressing non-academic barriers such as language difficulties, learning strategies, and student confidence is equally essential in fostering inclusive and effective learning outcomes.

Table 4: Advanced Learners – Notable Strengths and Traits (2022–2025)

Year	Involvement (Research, Leadership, Activities)	Recognition (Awards, Ranks)
2022–2023	Displayed strong procedural knowledge; initiated participation in academic forums	Internal merit ranks; appreciation from faculty
2023–2024	Engaged in quiz competitions, peer tutorials, early research discussions	Certificates of merit; commendations at department level
2024–2025	Leadership in academic clubs, mentoring peers, poster submissions, student grants	Best Student Awards; recognition in academic meetings

Here's a professional and well-organized table for the section on Academic Interventions Implemented from 2022 to 2025, covering both slow and advanced learners:

Table 5: Academic Interventions Implemented (2022–2025)

Year	Category	Intervention Type	Frequency	Mode	Faculty / Coordinator
2022–2023	Slow Learner	Remedial Classes (Theory & Practical)	Weekly	Offline	Dr. S Monica Diana Professor, Anatomy
	Advanced Learner	Journal Club Discussions, Quiz Training	Monthly	Offline	Dr. Mathew Joseph Assistant Professor, Anatomy
2023–2024	Slow Learner	Peer-Assisted Learning (PL) + Tutorials	Bi-weekly	Hybrid	Dr. Stelin Agnes Michael Associate Professor, Anatomy
	Advanced Learner	Research Cell Orientation & Mentorship	Once a term	Online	Dr. Mathew Joseph Assistant Professor, Anatomy

Year	Category	Intervention Type	Frequency	Mode	Faculty / Coordinator
2024–2025	Slow Learner	Focused Remedial + Mentoring Support	Weekly + Monthly	Offline	Dr. Stelin Agnes Michael Associate Professor, Anatomy
	Advanced Learner	Leadership Training + Poster Workshops	Quarterly	Offline	Dr. Mathew Joseph Assistant Professor, Anatomy

Table 6: Outcome Tracking and Impact

Year Identified	Category	No. of Students	Improved / Progressed	Repeated Year	Awards / Advancements	Remarks
2022–2023	Slow Learner	35	28	2	—	Most showed marked improvement in second sessional.
	Advanced Learner	5	—	0	Internal academic ranks, faculty praise	N/A
2023–2024	Slow Learner	42	34	3	—	Positive response to remedial and PL initiatives.
	Advanced Learner	9	—	0	Best Paper Presentation, quiz accolades	High engagement with research mentoring.

Table 7: Feedback Summary

Source	Key Comments / Suggestions
Students	Expressed gratitude for the supportive environment and appreciated the approachability of faculty during remedial sessions. Found peer-assisted learning helpful and requested its continuation.

Source	Key Comments / Suggestions
Mentors	Commended the responsiveness of students and noted improved engagement across sessions. Recommended ongoing mentor-mentee communication and early counselling for at-risk students.
Faculty	Appreciated the structured interventions and noticed tangible improvement in learner participation and performance. Encouraged more interdisciplinary academic activities.
Parents	Thanked the institution for regular academic updates and mentorship efforts. Noted increased confidence and motivation in their wards.

6. Recommendations for Future Action

In light of the observations gathered over the past academic years, the following suggestions are respectfully proposed to further enrich the learning experience and academic outcomes of our students:

1. **Early Identification and Tailored Support**

   It is kindly recommended that learner profiling be initiated at the beginning of each academic term to proactively identify students requiring additional support or enrichment. This will allow for timely and customized intervention strategies.

2. **Strengthening Mentor–Mentee Engagement**

   Enhancing the mentor-mentee framework through regular interactions and needs-based mentoring could help foster trust, motivation, and academic consistency, especially among borderline performers.

3. **Scaling Up Peer Learning (PL)**

   Expanding peer-led academic support sessions would not only aid slow learners but also provide leadership and revision opportunities for advanced learners. Structuring these sessions across departments may ensure consistency and greater impact.

4. **Incorporating Technology-Enhanced Learning**

   Leveraging online platforms for remedial content delivery, quizzes, and self-assessment tools may complement classroom learning and accommodate diverse learner paces and preferences.

5. **Fostering Research and Academic Exploration**

   Encouraging curious and high-performing students to participate in guided research,

interdepartmental projects, and academic forums will help them grow intellectually while enhancing the institution's scholarly profile.

6. **Engaging Families in the Learning Journey**

   Providing timely academic feedback to parents, especially of students needing support can build a cooperative alliance in nurturing student growth and well-being.

7. **Continuous Monitoring and Reflection**

   Instituting periodic academic reviews of ongoing interventions will help in assessing their effectiveness and adapting strategies based on data and feedback.

8. **Acknowledging Effort and Excellence**

   Celebrating both improvement and achievement through recognition certificates or appreciation during academic events can serve as powerful motivation for all learners.

Class Teacher/ Coordinator Made Progress Report

Insights and Suggestions

1. Observations on the Report

The Learner Analysis Report, 2025 is comprehensive and well-structured. It successfully categorizes learners based on defined academic criteria and provides a multi-year comparison that offers insights into academic progress. It identifies strengths and highlights areas needing improvement, especially in Biochemistry theory in 2024–2025. The inclusion of feedback from all stakeholders adds credibility.

2. Recommendations for Enhancing Student Outcomes

To further improve student performance and engagement, the following measures are suggested:

- Introduce diagnostic assessments at the beginning of the academic year to identify slow learners early.
- Expand the use of interactive tools like virtual labs, simulation apps, and YouTube explainers to support visual and auditory learners.
- Establish a central 'Learning Resource Hub' with curated resources for each subject accessible both offline and online.
- Offer short modules on exam strategies, time management, and stress reduction to help students cope better during assessments.
- Regularly rotate peer tutors and encourage reciprocal feedback to keep sessions dynamic and productive.
- Encourage faculty exchange within departments for diversified teaching approaches.
- Use mobile-based quizzes and feedback forms for frequent, low-stress knowledge checks.

3. Monitoring and Review

- Conduct monthly or bimonthly micro-reviews on ongoing interventions and make real-time adjustments.
- Include short reflective writing assignments for students' post-assessment to improve metacognition.

4. Conclusion

By focusing on early identification, tailored interventions, engaging pedagogies, and regular reflection, the institution can enhance academic excellence and holistic development. The existing initiatives show promise and can be scaled further for broader impact.

Certification

This report has been reviewed and submitted for internal quality assurance and academic planning.

Name	Designation	Signature with Date
Dr. S Monica Diana	Professor, Anatomy, 1st MBBS Class Teacher & IQAC Member	13/7/25
Dr. Mathew Joseph	Assistant Professor, Anatomy, 1st MBBS class in charge, IQAC Member & Evening Class Coordinator	
Dr. Deepti Ramakrishnan	Vice Principal & IQAC Coordinator	
Dr. Betsy Thomas	Principal & IQAC Chairman	

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