Process Manual for Slow Learners & Advanced Learners



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

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1. Criteria for Identifying Slow and Advanced Learners

The institute provides equal learning opportunities for every student at all levels of learning. Following each student's admission, an institute-level induction program will be held at the start of the academic year. In accordance with AICTE mandatory student induction program guidelines, an extensive induction program to enable all students to cope with engineering education will be provided.

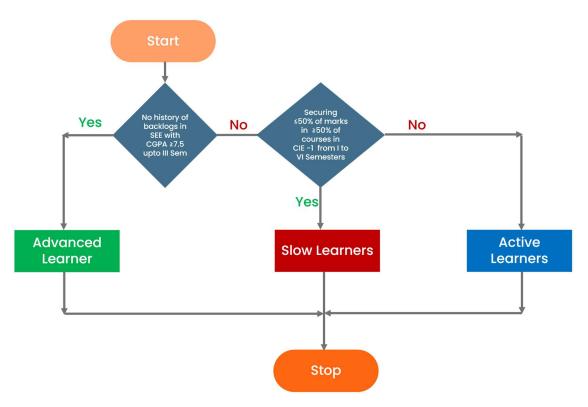


Figure 1 Process of identifying Slow, Active and Advanced Learners

Faculty must deal with a variety of students in the classroom; some are highly intelligent and learn quickly, some are relatively weak and learn slowly, and others are somewhere in the middle. As a result, determining the talents of the students in the class is essential. Based on their abilities, certain students require merely direction, while others the need hard effort and consistent attention, and still others require motivation.

Based on their preceding exam performance, current subject performance, and class observation, learning speed students can be classified in three groups namely advanced learners, active learners, and slow learners. Each type of students has different learning attitudes and learning habits. A faculty must adapt a teaching methodology such that he/she

may not lose the attention of the slow learners, continuously motivate the active learners and not turn off the advanced learners.

Objectives:

- 1. To determine what aspects are influencing the student's performance.
- 2. To implement an action plan for slow, active, and advanced learners with the purpose of improving academic performance and establishing career targets.
- 3. To provide a desired and harmonious solution for all types of learners to avoid prejudice, they must take an interest in eventually reaching a position where every student feels ``at par with each other.

2. Slow Learners

Individuals who struggle to learn at the same rate as their classmates are referred to as "slow learners." It is crucial to note that this does not necessarily imply that they are incapable of learning; rather, they may require extra assistance, resources, and/or time to completely comprehend and remember material. The process of identifying slow learners is as shown in the figure 1.

Special Programs for Slow Learners

Slow learners must be approached with patience, sensitivity, and understanding. Slow learners might benefit from additional support from the institution in both their academic and personal life. This may involve individualised instruction and tutoring, the use of visual aids or other teaching tactics, the cultivation of their interests and strengths, and the provision of emotional support and encouragement. Slow learners may attain success and realise their full potential with the correct strategy and tools.

- Remedial Classes: conducted for both theory and practical sessions.
- **Counselling Sessions**: Assist students in their weak areas of performance and suggest improvements.
- Personal attention: Providing special attention on non-academic parameters such as Communication Skill, Public Speaking, decide on Carrier Goals, and Managing Academics & Personality.
- Conducting target oriented intensive sessions at institute instead of traditional classroom teaching

- Providing short and specific direction to students to bring them to level of active learners.
- Skill Bridge Program: A specially designed courses for job guarantee are conducted.
- Activity tracking and monitoring through Akanksha portal on number of hours of watch on the e-learning materials.

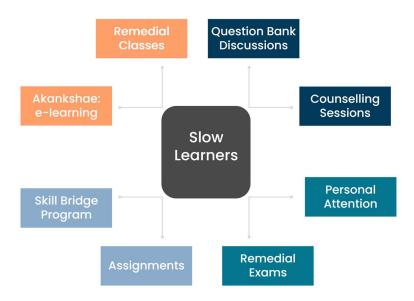


Figure 2 Slow Learners Activities

3. Advanced Learners

The term advanced learner refers to students who can participate in learning activities more efficiently and quickly than others in the class, achieving higher scores. They have more potential in terms of understanding, retention, memory, critical thinking, creativity, and contextualisation. They may also exhibit hardworking characteristics and typically outperform the majority of their classmates. These students are more gifted and talented than the rest of the class. These students are prepared to take on more advanced study and educational responsibilities. They may introduce new concepts and tactics, as well as take the lead in teaching and learning activities. The process of identifying advanced learners is as shown in the figure 1.

Special Programs for Advanced Learners

 Skill-Up Program: A specially designed employability course to achieve high impact jobs.

- Accelerator Courses: Students with CGPA of 7.5 or higher are encouraged to take
 up any one additional course of the next higher semester as decided by the Program
 head.
- A full semester internship leading to research publication.
- **GRE/GATE/Competitive exams**: Special counselling will be given, and classes will be held separately.
- Completion of MOOCs through NPTEL-Swayam.
- Encouraged to participate in co-curricular activities like symposia, workshop, and conferences, participate in activities of IARE's clubs and facilitated to organize technical events.
- Motivated to participate in national and international competitions like Codevita, HackwithInfy, SAE Supra, SAE Aero Design.
- Opportunities for availing international fellowship positions.

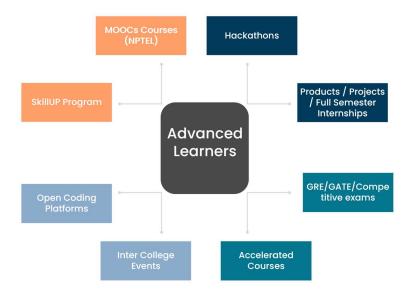


Figure 3 Advanced Learner Activities

4. Active learners

Active learners are students who do not satisfy the requirements of advanced and slow learners. They excel to the level of advanced learners while having minimal drive.

Special Programs for General Learners

- Motivating the students to participate in technical events.
- Grouping them with advanced learner for better interaction and development
- Mentoring mechanism for excellence
- Extra problem-solving practice.
- Increasing students' ambitions and hope
- Skill Bridge Program: A specially designed courses for job guarantee are conducted
- Encourage the students to participate in open coding platforms to improve the ratings in respective platforms.