

## 5. Methodology : Auro Cognitive Index (ACI)

Drawing on Howard Gardner's Multiple Intelligences and John Carroll's Three-Stratum Theory of Intelligence, the ACI Model builds upon these proven foundations to deliver a richer evaluation of nine distinct cognitive traits. By extending well beyond traditional IQ testing, it reveals how individuals naturally approach problem-solving and learning in real-world scenarios—providing deeper, more actionable insights for academic stream selection and career planning.

Enhancing Aptitude Assessment for Broader Learning, Academic Alignment, and Future Success –

Traditional IQ tests have long been the standard for measuring cognitive ability, but they often fail to provide a comprehensive view of a person's learning style and aptitude across various domains. The ACI Model expands beyond IQ by including a broader range of cognitive abilities, reflecting real-world applications:

- **Captures Multiple Modes of Learning:** Traditional IQ testing focuses on general intelligence but doesn't measure the variety of ways people approach tasks. ACI captures cognitive abilities across various dimensions like spatial, numerical, and verbal processing.
- **Maps Directly to Academic Subjects:** Each cognitive sub-factor in ACI is mapped to an academic subject (e.g., Mechanical → Engineering, Verbal → Humanities), ensuring the model is practical and useful for stream selection.
- **Reflects Future-Readiness:** The model emphasizes cognitive traits that are critical for success in emerging careers, such as AI, engineering, and data science.

### 1. Criteria for Selecting the Aptitude Sub-factors

These nine sub-factors were identified through a synthesis of leading cognitive theories and rigorous psychometric research. By drawing selectively on established theoretical insights rather than adopting any single framework wholesale, we have created a robust, real-world-oriented profile of abilities:

- **Broad Cognitive Coverage:** We incorporated diverse dimensions—spatial reasoning, verbal comprehension, numerical acuity, mechanical insight, and more—to ensure the assessment captures multiple modes of processing information.