

HAKIKAT IPA



Kenapa harus IPA terpadu?





HAKIKAT IPA



- Sains sbg *scientific process, scientific attitudes and scientific product.*

- Sains sebagai cara untuk memahami fenomena alam sehingga akan menumbuhkan sifat menghayati Keagungan-Nya. Manusia dituntut untuk *Iqra'* (membaca, menghayati alam)



Science as a body of knowledge



Science as a way of investigating



Science as a way of thinking



*Science and its interaction
with technology and
society*



Menurut Carin dan Sund: *“science is the system of knowing about the universe through data collected by observation and controlled experimentation. As data are collected, theories are advances to explain and account for what has been observed”*.

Sedangkan menurut Sund dan Throwbridge *“science is both a body of knowledge and preocess”*.

Djohar (2004), *“pembelajaran sains hendaknya mengarah pada 5 pencapaian kompetensi yaitu; kompetensi metodologis, konseptual, pemahaman konsep, aplikasi dan nilai”*.

KOMPETENSI PENCAPAIAN PEMBELAJARAN SAINS

METODOLOGIS

KONSEPTUAL

**PEMAHAMAN
KONSEP**

APLIKASI

NILAI