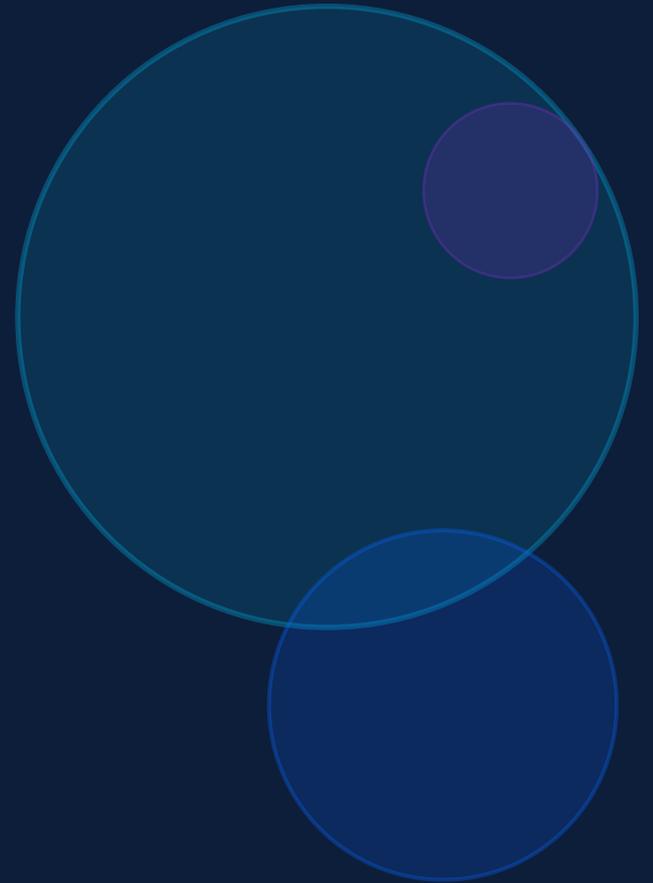META AI · EDUCATION EDITION

# Meta AI
## in Education

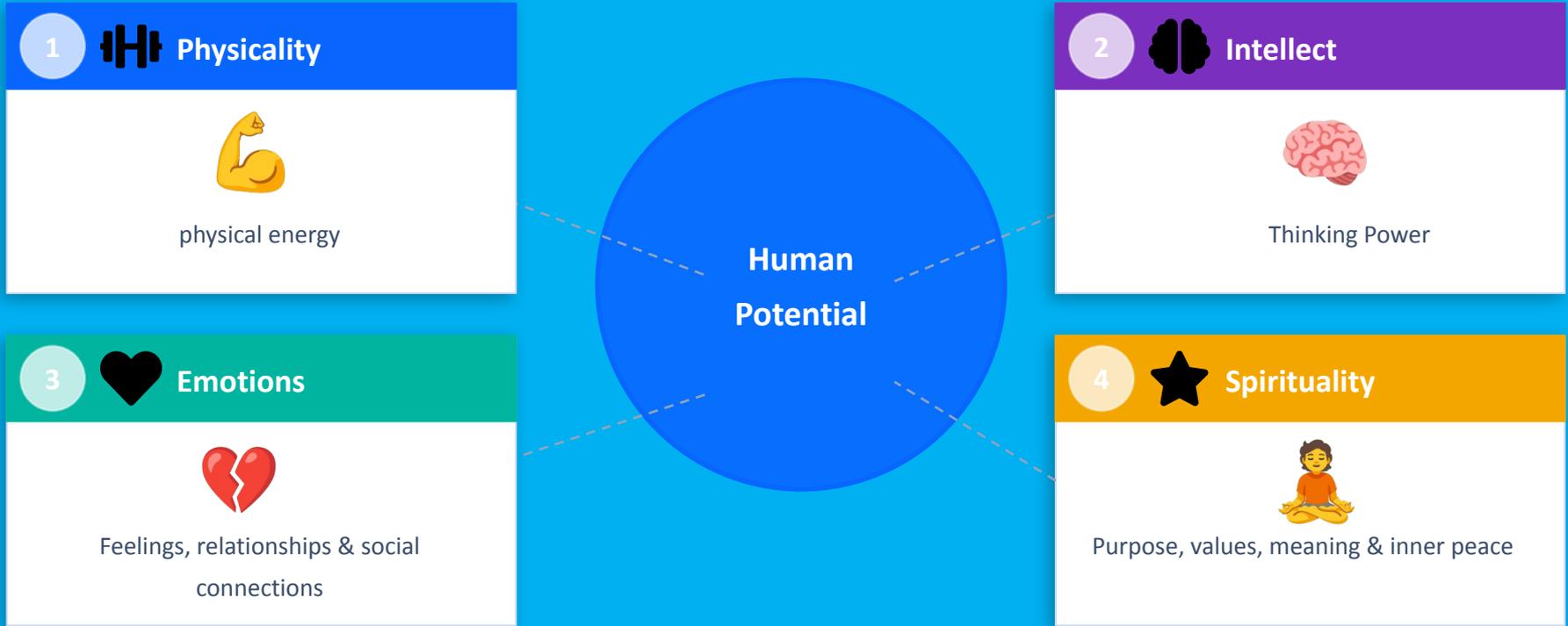Transforming Teaching & Learning
for the AI Generation

By  Mr. Javeed Hassan Sofi
(National Resource Person, Bandipora J&K)

# Four Human Dimensions

From "The 7 Habits of Highly Effective People" by Stephen R. Covey

**1 Physicality**

physical energy

**2 Intellect**

Thinking Power

**3 Emotions**

Feelings, relationships & social connections

**4 Spirituality**

Purpose, values, meaning & inner peace

Human Potential

AI aims to embed these four dimensions — intellect, emotion, physicality & purpose — into machines

# Embedding Human Attributes in Machines

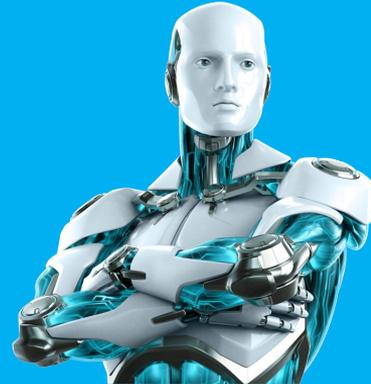**1** 🏋️ **Physicality**

**Physical energy**

**2** 🧠 **Intellect**

**Intellect**

# What is Meta AI?

- Meta AI is an artificial intelligence assistant developed by Meta (the parent company of Facebook, Instagram, WhatsApp).

- It works like an intelligent chatbot.

- It can understand natural language, answer questions, generate content, and support creative tasks.

**400M+**
Monthly Active Users

- **2023** Meta AI launched publicly

- **2024** Integrated into all Meta apps

- **2025** 400M+ users worldwide

# Key Features of Meta AI

**Smart Q&A**

Instant answers with step-by-step explanations

**Image Generation**

Type 'Imagine…' to create visuals for any topic

**Language Translation**

50+ languages — perfect for ESL & global learners

**Code Assistance**

Explain, debug, and write code in any language

**Summarisation**

Condense long texts, articles, and notes instantly

**Concept Simplifier**

Break complex ideas into easy, relatable steps

# Benefits for Students

## 24/7
Learning Support
Anytime, Anywhere

## 50+
Languages
for ESL Learners

## Free
Always Free
No Subscription Needed

- Supports self-paced, independent learning
- Promotes critical thinking & curiosity
- Provides instant help on any topic
- Enhances engagement and motivation and Improves access to educational resources

# Benefits for Teachers

## 24/7
**Learning Support
Anytime, Anywhere**

## 50+
**Languages
for ESL Learners**

## Free
**Always Free
No Subscription Needed**

- Saves significant lesson planning time
- Offers data-driven insights on student progress
- Helps identify learning gaps early
- Supports differentiated instruction easily and Generate visual infographic prompts

# Meta AI for STEM Education

## Science

- Simulate virtual lab experiments
- Explain DNA, cells & chemical reactions
- Connect theory to real-world phenomena
- Generate labelled scientific diagrams

## Math

- Walk through problems step-by-step
- Visualise geometry & algebra concepts
- Explain formula derivations clearly
- Generate practice problem sets

## Technology

- Debug code with plain-English explanations
- Explore algorithms, loops & logic
- Generate flowcharts & pseudo-code
- Learn cybersecurity fundamentals

## Engineering

- Understand engineering principles
- Analyse real-world design case studies
- Research materials & properties
- Plan and evaluate project designs

# Meta AI in WhatsApp & other Messengers
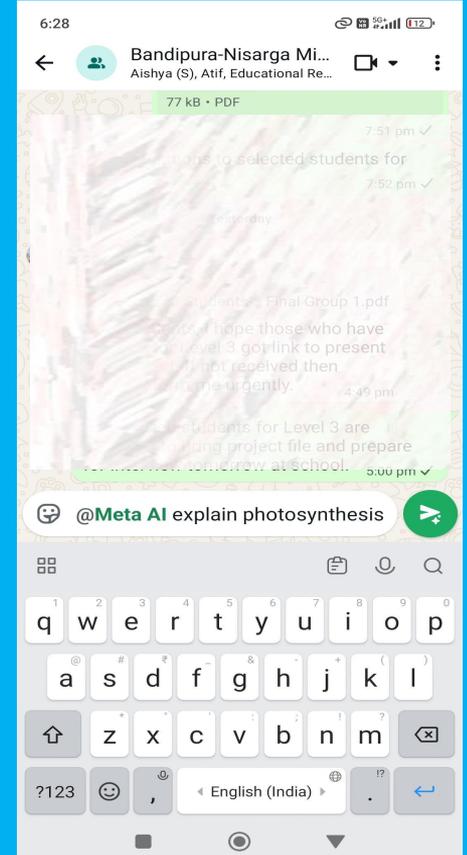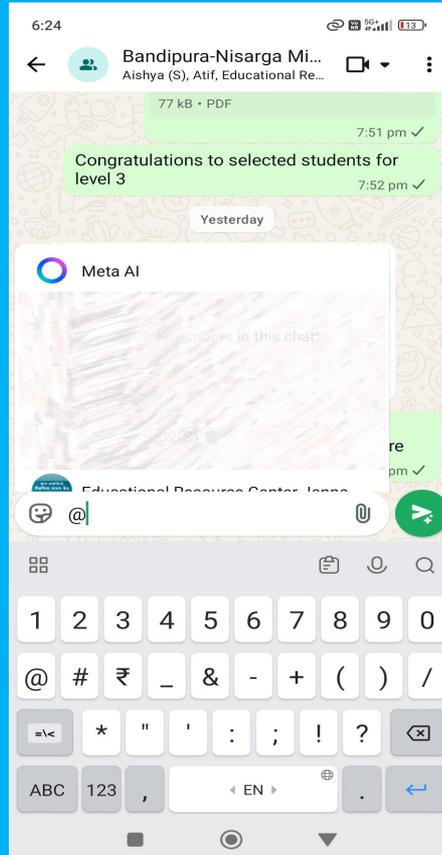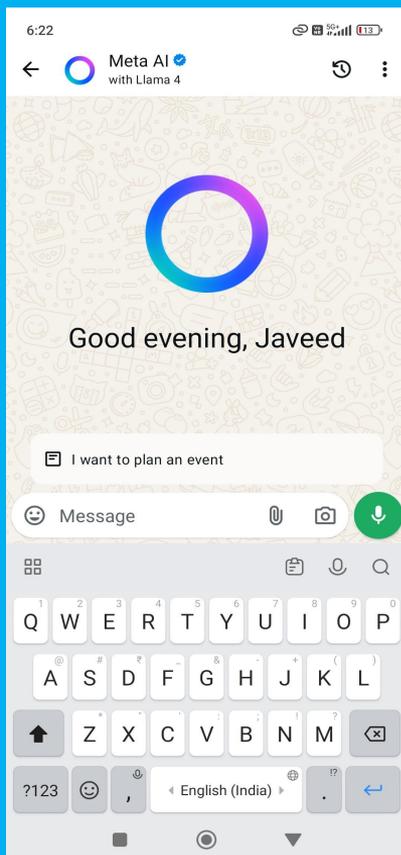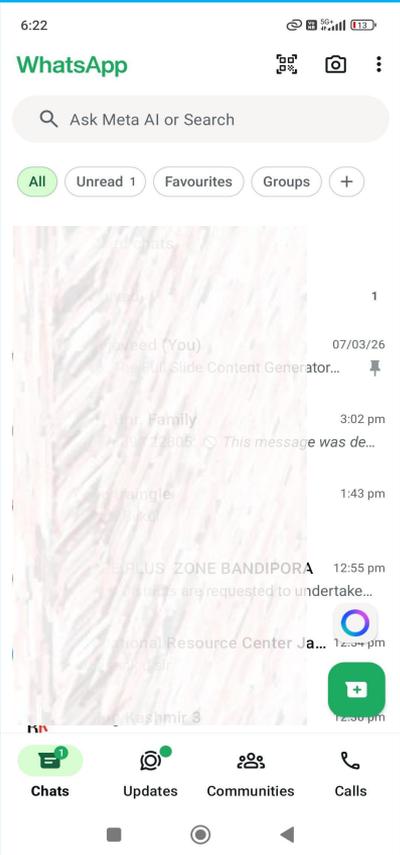
# Teaching Languages with Meta AI

## How Meta AI Supports Language Learning

**Conversational Practice**
Chat in the target language — AI responds naturally & corrects gently

**Grammar & Spell Check**
Paste writing for instant grammar corrections with explanations

**Live Translation**
Translate 50+ languages — useful for ESL/EFL students

**Vocabulary Builder**
Generate word lists, example sentences & memory tricks

**Pronunciation Guide**
Ask how words are pronounced with phonetic breakdowns

## 50+
Languages Supported

Arabic · Urdu · French · Spanish

Chinese · Hindi · German · more

## SAMPLE PROMPT

"Teach me 10 common French phrases I would use at school, with pronunciation tips and example sentences."

# Teaching Mathematics with Meta AI

### Step-by-Step Solving
Breaks any problem into clear, numbered steps — from basic arithmetic to calculus

### Graph & Data Visuals
Describe a function and get a textual graph guide or data interpretation help

### Formula Explanations
Ask why a formula works — not just how to use it

### Practice Problem Sets
Generate unlimited practice questions at any difficulty level

### Error Analysis
Paste a wrong answer and Meta AI identifies exactly where the mistake is

### Exam Preparation
Create mock tests, timed quizzes and revision summaries on any math topic

# Teaching Science with Meta AI

## Biology
- Explain DNA, genetics & cell structure
- Walk through photosynthesis step-by-step
- Describe ecosystems & food webs
- Prepare for dissection with AI guides
- Summarize research papers in plain language

## Chemistry
- Balance chemical equations interactively
- Explain periodic table elements & trends
- Describe reactions, acids & bases clearly
- Generate lab report templates
- Simulate titrations & reactions textually

## Physics
- Solve force, motion & energy problems
- Explain electricity & magnetism concepts
- Walk through optics & waves step-by-step
- Relate theory to real-world applications
- Generate experiment design outlines

# Meta AI for Arts, English & Humanities

## English & Writing

- Generate essay outlines & story starters
- Grammar, style & tone feedback on drafts
- Analyse literary themes, metaphors & devices
- Compare writing styles of different authors

## Visual Arts

- Generate reference images with 'Imagine…'
- Research art movements & key artists
- Describe techniques in plain language
- Plan composition, colour & layout concepts

## Music

- Explain music theory: scales, chords, tempo
- Research composers, genres & musical eras
- Analyse song structure and lyric themes
- Suggest creative composition ideas

## Drama & Media

- Write scripts, dialogues & monologues
- Analyse film techniques & cinematography
- Research theatrical history & traditions
- Create storyboards for media projects

# Meta Quest · AR / VR in Education

## What is Meta Quest?

Meta Quest is a standalone VR/AR headset that places learners inside immersive 3D environments. Combined with Meta AI, it creates a next-generation classroom with no walls.

### Virtual Labs
Conduct chemistry & biology experiments safely

### History Field Trips
Walk through ancient Rome or the moon landing

### Geography Explorer
Visit any country, ecosystem or ocean depth

### Human Anatomy
Explore the body in interactive 3D models

### AI + VR Tutor
Meta AI guides you through VR lessons live

### Collaborative VR
Students learn together from different locations

# Meta AI Canvas · meta.ai

## 🌐 meta.ai — The Full-Featured AI Canvas Web Application

### 💬 Chat & Research

- Full-screen chat with memory
- Ask complex multi-part questions
- Upload images for analysis
- Web-connected answers & citations

### ✏️ Canvas Editor

- Write & edit long documents
- Collaborative canvas workspace
- Real-time AI writing assistant
- Format essays, reports & notes

### 🖼️ Image Studio

- Generate images with 'Imagine…'
- Edit & refine AI-generated art
- Create diagrams, posters & slides
- Multiple styles & resolutions

# Getting Started — 5 Easy Steps

**1** **Visit meta.ai**
Open a browser and go to meta.ai — no app download needed to start.

**2** **Create a Meta Account**
Sign up free or log in with Facebook or Instagram credentials.

**3** **Start Your First Chat**
Type a question or say "Help me understand photosynthesis" to begin.

**4** **Try Image Generation**
Type "Imagine a diagram of the water cycle" to create a visual aid.

**5** **Use on WhatsApp**
Open WhatsApp, tap the Meta AI button in chat — use it on your phone.

# Search Meta.ai

# Meta AI URL

# Landing Page of  Meta AI

# Write a Prompt

# Image Generation

# Animated Image

# Extend Video

# Sample video (21 Second)

# Vibes Available

# Ethical Use & Responsible AI in School

| ✅ DO | ❌ DON'T |
|---|---|
| Use AI to understand & explore concepts | Submit AI-generated text as your own work |
| Cite AI assistance in your submitted work | Use AI during closed-book exams or tests |
| Fact-check AI outputs with trusted sources | Share confidential exam questions with AI |
| Use AI to improve your drafts & thinking | Replace deep thinking with AI shortcuts |
| Follow your school's AI use guidelines | Trust all AI output without verification |

# Writing Better Prompts — The Formula

**[Role]  +  [Task]  +  [Context]  +  [Format]  +  [Level]**

## 1 Role

Tell the AI **what role it should act as**.
Examples:
• Teacher
• Scientist
• Historian
• Mathematics tutor

## 2 Task

Tell the AI **what you want it to do**.
Examples:
• Explain
• Summarize
• Create questions
• Write a lesson plan

## 3 Context

Give **background information** about the topic.
Examples:
• Subject
• Chapter name
• Student age
• Classroom situation

## 4 Format

Tell the AI **how you want the answer**.
Examples:
• Bullet points
• Table
• Short paragraph
• PowerPoint slides

## 5 Level

Tell the AI **the difficulty level**.
Examples:
• Class 3
• Class 8
• Beginner
• Advanced

**Complete Prompt:**  *Act as a science teacher. Explain the concept of photosynthesis for Class 6 students in 5 simple bullet points.*

# Writing Better Prompts — Weak/Strong

| | | |
|---|---|---|
| 👩‍🏫 **TEACHER** | ❌ **WEAK** | *"Make a quiz on photosynthesis"* |
| | ✅ **STRONG** | *"Create a 10-question multiple-choice quiz for Grade 8 on photosynthesis. Include 4 options per question, vary difficulty, and provide an answer key at the end."* |
| 👨‍🎓 **STUDENT** | ❌ **WEAK** | *"Explain the French Revolution"* |
| | ✅ **STRONG** | *"Explain the 3 main causes of the French Revolution in simple language for a 9th grader. Use bullet points and include 2 key facts I should remember for my exam."* |
| 🔬 **SCIENCE** | ❌ **WEAK** | *"Tell me about atoms"* |
| | ✅ **STRONG** | *"Explain how atoms bond to form molecules, with a simple analogy a 10-year-old would understand. Then give me 3 practice questions to test my understanding."* |

# Key Takeaways

- ✔ Meta AI is free, powerful and available on WhatsApp, Instagram, Messenger and meta.ai

- ✔ Teachers save time on planning, assessment & communication — Meta AI handles the admin

- ✔ Students get 24/7 personalised support across every subject — from Math to Languages

- ✔ Meta Quest VR transforms abstract learning into immersive, unforgettable experiences

- ✔ Use AI ethically: it should support your thinking, not replace it

# Meta AI
## in Education

# Thank You

By  Mr. Javeed Hassan Sofi
(National Resource Person, Bandipora J&K)