

探求学習 (inquiry-based learning) と深い学び (deep learning) の違い

質問

What is the difference between inquiry-based learning and deep learning?

ChatGPT の回答

Inquiry-based learning (IBL) and deep learning are both educational approaches that focus on student engagement and critical thinking, but they have different goals and processes:

### 1. Inquiry-Based Learning (IBL)

- **Focus:** IBL emphasizes the process of asking questions, investigating problems, and seeking out knowledge through exploration. It encourages curiosity, critical thinking, and self-directed learning.
- **Process:** In IBL, students often start with a question or problem and then explore various resources and methods to find answers or solutions. The teacher acts as a facilitator, guiding the inquiry process.
- **Goal:** The main goal is to develop independent problem-solving skills, curiosity, and a deeper understanding of content by engaging with it directly.
- **Example:** In a science class, students might investigate the effects of pollution on ecosystems by designing experiments and researching their findings, rather than just learning from a textbook.

### 2. Deep Learning

- **Focus:** Deep learning emphasizes mastering complex, interconnected knowledge, and applying it in meaningful ways. It involves understanding not just surface-level facts but the underlying concepts and relationships between ideas.
- **Process:** Deep learning often focuses on building strong cognitive connections, enabling students to apply their knowledge to new and varied situations. It encourages students to integrate and synthesize knowledge from multiple areas.

- **Goal:** The goal is to foster higher-order thinking, where students can transfer knowledge to unfamiliar situations, analyze and evaluate information critically, and solve complex, real-world problems.
- **Example:** In a history class, deep learning would involve not just memorizing dates and events, but understanding the causes and effects of historical movements and how they connect to present-day issues.

### Key Differences:

- **Inquiry-based learning** starts with student-driven questions and seeks to cultivate curiosity and exploration, whereas **deep learning** emphasizes gaining deep, interconnected knowledge and applying it in a meaningful way.
- **IBL** focuses more on the **process of learning**, while deep learning focuses on the **outcome of learning** and cognitive depth.

Let's dive into some specific examples for each approach:

#### 1. Inquiry-Based Learning (IBL) Example

Subject: Science (Environmental Studies)

Scenario: Students are asked to explore the impact of deforestation on local wildlife.

Process:

Step 1: The teacher poses an open-ended question: "How does deforestation affect the biodiversity of a forest ecosystem?"

Step 2: Students brainstorm what they already know and what they want to learn.

Step 3: Students conduct research through books, articles, interviews with experts, or fieldwork (such as visiting a forested area).

Step 4: Students design and conduct their own experiments or observations, such as measuring soil quality, tracking animal populations, or analyzing plant growth.

Step 5: The students present their findings, conclusions, and reflections on what they learned through a report, a presentation, or a creative project.

Objective: Students explore the problem, gather information independently, and draw their own conclusions. The emphasis is on the process of inquiry, not just the final answer.

#### 2. Deep Learning Example

Subject: History (American Civil Rights Movement)

Scenario: The goal is for students to deeply understand the causes, events, and impacts of the Civil Rights Movement and apply this knowledge to modern-day issues.

Process:

Step 1: The teacher provides key materials (articles, documentaries, speeches) on the Civil Rights Movement.

Step 2: Students are asked to identify the underlying causes of the movement, such as systemic racism, legal segregation, and economic inequality.

Step 3: Students engage in discussions about how the Civil Rights Movement relates to contemporary social justice movements, such as Black Lives Matter.

Step 4: They are asked to analyze and compare historical speeches (e.g., Martin Luther King Jr.'s "I Have a Dream" vs. a modern speech) and assess how the rhetoric and goals have evolved.

Step 5: Students write essays or create projects demonstrating how historical knowledge of the Civil Rights Movement can inform current social and political activism.

Objective: The focus is on developing a deep understanding of historical context, recognizing patterns, and applying that knowledge to contemporary issues.

Key Differences in Action:

Inquiry-Based Learning Example: The student might not know where their research on deforestation will take them; their learning is shaped by the questions they ask along the way. The emphasis is on the journey of discovering and learning.

Deep Learning Example: Students focus on understanding historical patterns and drawing deep connections. The emphasis is on mastering complex ideas and applying them to modern-day challenges, not just discovering new knowledge.

Does one of these examples resonate more with your current learning interests or contexts?

A Bing Chat の回答

Inquiry-based learning and deep learning are two distinct educational approaches, each with its own focus and methodology.

Inquiry-Based Learning

Inquiry-based learning is an educational approach that emphasizes the student's role in the learning process. Instead of being presented with facts and a clear path to knowledge, students

are encouraged to explore, ask questions, and discover new understandings on their own. Key characteristics include:

**Student-Centered:** Students take the lead in their learning journey, guided by their curiosity and questions.

**Exploratory:** Learning is driven by investigation and problem-solving<sup>1</sup>.

**Critical Thinking:** Students develop skills in asking questions, designing investigations, interpreting evidence, and forming explanations<sup>2</sup>.

**Real-World Context:** Often involves real-world problems and scenarios, making learning more relevant and engaging<sup>2</sup>.

### Deep Learning

Deep learning, in the context of education, refers to a comprehensive understanding of a subject that goes beyond surface-level memorization. It involves:

**Conceptual Understanding:** Students aim to understand the underlying principles and concepts rather than just facts.

**Integration of Knowledge:** Encourages connecting new information with existing knowledge to form a cohesive understanding.

**Application:** Students apply what they have learned to new and varied situations, demonstrating their understanding in different contexts.

**Critical Analysis:** Involves analyzing, synthesizing, and evaluating information to form well-rounded insights.

### Key Differences

**Approach:** Inquiry-based learning is more about the process of learning through exploration and questioning, while deep learning focuses on achieving a profound understanding of the material.

**Student Role:** In inquiry-based learning, students are active participants and often direct their own learning. In deep learning, students engage deeply with the material, often guided by structured teaching methods.

**Outcome:** Inquiry-based learning aims to develop skills in investigation and critical thinking, while deep learning aims for a deep, integrated understanding of the subject matter.

Both approaches are valuable and can complement each other in fostering a comprehensive and engaging learning experience. Do you have a preference for one over the other, or are you looking to integrate both into your learning or teaching strategy?