Toward a New Educational Taxonomy

Learning, Understanding, and Wisdom in an Age of Information Access, Overload, and Artificial Intelligence

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Bloom's Taxonomy has served educators well for decades by helping teachers, trainers, and curriculum designers distinguish between basic recall and more complex forms of thinking. Yet the rise of search engines, digital databases, and generative artificial intelligence has changed the learning environment dramatically. Learners can now retrieve information instantly, summarize complex topics, categorize ideas, and even generate essays, sermons, lesson plans, images, presentations, and research outlines with minimal personal mastery.

This does not make Bloom's Taxonomy irrelevant. It does, however, expose one of its weaknesses when used too mechanically: it can imply that remembering and creating are the beginning and end of learning. In the AI age, a student may "create" before truly understanding. A learner may produce polished work without discernment. A ministry leader, student, or professional may appear competent because the artifact looks competent.

The central question is no longer simply, **"Can the learner produce something?"** The better question is, **"Does the learner understand, evaluate, apply, and steward knowledge faithfully and wisely?"**

This white paper argues that education now requires a revised taxonomy that places greater emphasis on **discernment, understanding, evaluation, application, integration, and responsible creation**. The goal is not to abandon Bloom but to adapt it for a world where information is abundant, production is easy, and wisdom is scarce.

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1. The Changing Educational Problem

For much of modern education, access to information was a major barrier. Learners had to locate books, attend lectures, memorize facts, and reproduce what they had learned. In that world, remembering was a necessary entry point. A student who could not recall basic information could not proceed very far.

Today, the problem is different. Information is not scarce; it is overwhelming. Learners face a flood of articles, videos, podcasts, posts, summaries, search results, and AI-generated answers. UNESCO's guidance on generative AI notes that education systems are having to respond rapidly to publicly available AI tools and emphasizes a human-centered approach to their use in education and research.

This shift creates several challenges:

1. **Access is not the same as understanding.**
   A learner can retrieve information without grasping its meaning.
2. **Speed is not the same as wisdom.**
   AI can generate content quickly, but quick production may bypass reflection.
3. **Creation is not always higher-order thinking.**
   A learner can produce a paper, lesson, graphic, or strategy with limited comprehension.
4. **Evaluation is now essential, not optional.**
   Since information can be inaccurate, biased, incomplete, outdated, or artificially generated, learners must develop strong habits of verification and discernment.
5. **Application must be tested in real contexts.**
   Knowledge that cannot be lived, practiced, taught, defended, or adapted remains shallow.

In short, education must now train people not merely to **find and produce**, but to **discern, understand, apply, and judge well**.

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2. Bloom's Taxonomy: Still Useful, But Not Sufficient

The revised Bloom's Taxonomy, commonly associated with Anderson and Krathwohl's 2001 revision, organizes cognitive learning around six categories: **remember, understand, apply, analyze, evaluate, and create**. This framework remains valuable because it reminds educators that not all learning is equal. Memorizing a definition is different from applying a concept. Summarizing a chapter is different from evaluating an argument. Producing an original work is different from merely repeating what one has heard.

However, the AI age complicates Bloom's hierarchy. Traditionally, "create" often appeared at the top of the taxonomy because creating required a learner to draw upon prior knowledge, analysis, evaluation, and synthesis. But generative AI can now assist with creation before the learner has developed those capacities. That means "create" can no longer automatically be treated as evidence of higher-order thinking.

A student may ask AI to write a paper on discipleship, generate a curriculum outline, summarize Bonhoeffer, compare theological traditions, or draft a church consulting report. The final product may look sophisticated. But the learner may not be able to explain, defend, revise, apply, or critique the work.

This is the educational danger of the present moment: **artifact without understanding**.

Bloom still helps, but educators must use it less like a ladder and more like a diagnostic map. The issue is not simply whether learners can move upward. The issue is whether they can demonstrate durable understanding, responsible judgment, and wise application in conditions where tools can do much of the surface work for them.

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3. The New Reality: Learners Can "Create" Without Knowing

Generative AI disrupts one of the assumptions often attached to Bloom's Taxonomy: that creation necessarily depends on mastery of the lower levels. In many cases, that assumption still holds. But with AI, learners can now bypass parts of the process.

They can create:

- essays without reading deeply;
- summaries without understanding the original;
- presentations without mastering the material;
- lesson plans without theological, educational, or contextual discernment;
- research outlines without knowing the field;
- images and media without understanding visual rhetoric;
- strategic plans without appreciating organizational realities.

This does not mean AI use is inherently shallow. Used well, AI can support learning, generate practice, assist brainstorming, provide feedback, and help learners compare ideas. But used poorly, it can become a shortcut around the very thinking education is supposed to cultivate.

The Association of College and Research Libraries' Framework for Information Literacy emphasizes that authority is contextual and that learners must evaluate sources with informed skepticism. That principle becomes even more important when AI-generated content can sound authoritative even when it is incomplete or wrong.

The National Academies' *How People Learn II* also reinforces that learning is shaped by context, prior knowledge, culture, and the structure of the learning environment. This matters because AI does not remove the need for learning design. It increases the need for better learning design.

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4. The Case for a New Educational Taxonomy

A new educational taxonomy should address four realities:

1. Information is abundant.

The learner's first challenge is not always remembering information. Often the first challenge is locating, filtering, and framing information.

2. Understanding is fragile.

Learners may recognize terms, repeat summaries, or manipulate content without deep comprehension.

3. Evaluation is now foundational.

In an age of misinformation, biased sources, synthetic media, and AI hallucinations, evaluation cannot remain near the top as a late-stage skill. It must be present throughout the learning process.

4. Creation must be accountable.

The ability to generate something is no longer sufficient proof of learning. Created work must be explainable, defensible, ethical, contextual, and useful.

Therefore, the question is not, “Should Bloom be discarded?” The better answer is: **Bloom should be reframed.** The taxonomy should be reorganized around the kinds of thinking that AI cannot responsibly replace: understanding, discernment, judgment, contextual application, ethical reasoning, and wisdom.

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5. A Proposed New Educational Taxonomy

The Discernment-Based Learning Taxonomy

The following model is proposed for education in the AI and information-overload era.

1. Access and Attend

The learner locates, gathers, observes, and pays attention to relevant information. In the past, access was often difficult. Today, access is easy but attention is hard. The learner must develop the discipline to focus amid abundance.

2. Comprehend and Explain

The learner demonstrates genuine understanding by restating, summarizing, interpreting, and explaining ideas in his or her own words. This level must be strengthened. A learner has not understood a concept merely because he can retrieve a definition or ask AI for a summary. Understanding should be tested by explanation.

3. Discern and Evaluate

The learner judges the reliability, accuracy, relevance, bias, context, and significance of information. This is one of the most important revisions. Evaluation should not wait until near the end of the learning process. In the AI age, discernment must begin early and continue throughout.

4. Connect and Analyze

The learner breaks ideas into parts, identifies relationships, compares perspectives, traces causes, and recognizes patterns. Analysis matters because AI often produces smooth summaries that can flatten complexity. Learners must be able to inspect the structure beneath the surface.

5. Apply and Transfer

The learner uses knowledge in real or realistic situations. Application should be treated as a higher-order act because it requires contextual judgment. It is one thing to define leadership, discipleship, communication, or biblical interpretation. It is another thing to apply those ideas in a church, classroom, family, workplace, or ministry setting.

6. Integrate and Form Judgment

The learner brings knowledge, values, experience, evidence, and context together to form mature judgment. This level goes beyond analysis. It asks learners to weigh competing goods, recognize consequences, make principled decisions, and explain why one course of action is better than another.

7. Create and Contribute Responsibly

The learner produces something new, useful, faithful, ethical, and accountable. Creation remains important, but it must be repositioned. In the AI age, creation should not be treated as automatically superior to evaluation or application. A created product is only educationally meaningful if the learner can explain and defend it.

6. Comparison: Bloom's Taxonomy and the Proposed Taxonomy

Bloom's Revised Taxonomy	Proposed Discernment-Based Taxonomy	Key Shift
Remember	Access and Attend	Information retrieval is no longer enough; attention matters.
Understand	Comprehend and Explain	Understanding must be demonstrated through clear explanation.
Apply	Apply and Transfer	Application becomes higher and more contextual.
Analyze	Connect and Analyze	Analysis includes pattern recognition and relationship mapping.
Evaluate	Discern and Evaluate / Integrate and Form Judgment	Evaluation moves earlier and also matures into judgment.
Create	Create and Contribute Responsibly	Creation must be accountable, ethical, and explainable.

The most significant change is that **evaluation, application, and judgment are elevated**. Creation remains important, but it is not the summit unless it is joined to understanding and discernment.

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7. Why Understanding, Evaluation, and Application Must Be Strengthened

Understanding must be strengthened because AI can imitate comprehension.

A learner can produce a correct-sounding answer without knowing why it is correct. Therefore, educators should require learners to explain concepts orally, teach them to others, identify misunderstandings, and answer follow-up questions.

Evaluation must be strengthened because information environments are unstable.

AI-generated material, algorithmic search results, social media, and digital publishing have blurred the line between expert knowledge, popular opinion, marketing, propaganda, and synthetic content. Learners must know how to test claims.

Application must be strengthened because knowledge without use is incomplete.

A learner who can define a concept but cannot use it in practice has limited mastery. Application reveals whether understanding is durable.

Judgment must be strengthened because learners face complex decisions.

The highest need is not merely more content. The highest need is the ability to decide what is true, what matters, what should be done, and what kind of person one is becoming through the learning process.

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8. Implications for Teaching and Curriculum Design

A new taxonomy requires new instructional habits.

1. Design assignments that require explanation, not just production.

Instead of only asking students to submit a paper, require them to explain the argument, defend the sources, identify weaknesses, and describe what they learned.

2. Use AI transparently as a learning partner, not a substitute learner.

Students should be taught when AI may be used for brainstorming, comparison, feedback, and revision—and when it short-circuits learning.

3. Assess process, not only product.

Educators should evaluate outlines, source notes, decision logs, revisions, oral defenses, peer critique, and reflection.

4. Require source evaluation.

Every research-based assignment should include questions such as:

- Why is this source credible?
- What perspective does it represent?
- What might it omit?
- How does it compare with other sources?
- How did AI assist or distort the process?

5. Build in contextual application.

Learners should be asked to apply ideas to real situations: case studies, ministry scenarios, ethical dilemmas, leadership challenges, teaching settings, or community needs.

6. Recover wisdom as an educational aim.

Education should not merely produce competent workers or efficient content creators. It should form people who can think truthfully, act responsibly, and contribute meaningfully.

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9. Sample Learning Objectives Using the New Taxonomy

Access and Attend

Learners will identify relevant sources on a topic and distinguish primary from secondary information.

Comprehend and Explain

Learners will explain a concept in their own words and illustrate it with an example.

Discern and Evaluate

Learners will evaluate the credibility, assumptions, and limitations of three sources, including one AI-generated summary.

Connect and Analyze

Learners will compare multiple perspectives and identify key agreements, disagreements, and implications.

Apply and Transfer

Learners will apply a principle to a realistic case study and explain how context affects the decision.

Integrate and Form Judgment

Learners will defend a reasoned conclusion that accounts for evidence, values, consequences, and limitations.

Create and Contribute Responsibly

Learners will produce a final project and explain the research, reasoning, ethical choices, and revisions behind it.

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10. Special Importance for Christian Education

For Christian educators, the conversation is even larger than information literacy. The biblical vision of learning is not merely the accumulation of knowledge. Scripture consistently connects knowledge with wisdom, obedience, discernment, humility, and faithfulness.

A Christian educational taxonomy should ask:

- Does the learner understand truth?
- Can the learner discern error?
- Can the learner apply wisdom in life and ministry?
- Is the learner being formed in character?
- Can the learner serve others through what has been learned?
- Does the learner recognize the difference between knowledge and wisdom?

In this sense, the AI age may force Christian education to recover something it should never have lost: the goal of education is not merely to know more or produce more, but to become wiser, more faithful, and more useful in service to God and others.

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11. Conclusion: Bloom Is Not Dead, But It Needs a Companion

Bloom’s Taxonomy is not obsolete. It remains a helpful framework for distinguishing levels of cognitive engagement. But it was not designed for a world in which learners carry instant access to global information and AI-generated production tools in their pockets.

The educational challenge has changed. Learners no longer need help only with remembering and producing. They need help attending, understanding, discerning, applying, judging, and contributing responsibly.

The proposed Discernment-Based Learning Taxonomy keeps the best insight of Bloom: learning involves different kinds of cognitive work. But it rearranges the emphasis for the present age. It treats understanding, evaluation, application, and judgment as central rather than secondary. It recognizes that creation can be shallow when detached from comprehension. It insists that education must produce not merely artifacts, but formed thinkers.

In an age of information overload and artificial intelligence, the future of education belongs not to those who can retrieve the most information or generate the fastest product, but to those who can understand deeply, evaluate wisely, apply faithfully, and create responsibly.

Proposed Taxonomy Summary

The Discernment-Based Learning Taxonomy

1. **Access and Attend** — Locate information and focus attention.
2. **Comprehend and Explain** — Understand and communicate meaning.
3. **Discern and Evaluate** — Test truthfulness, reliability, and significance.
4. **Connect and Analyze** — Identify relationships, patterns, and implications.
5. **Apply and Transfer** — Use knowledge wisely in real contexts.
6. **Integrate and Form Judgment** — Weigh evidence, values, and consequences.
7. **Create and Contribute Responsibly** — Produce work that is explainable, ethical, useful, and accountable.

A Proposed New Educational Taxonomy

The Discernment-Based Learning Taxonomy

The following model is proposed for education in the AI and information-overload era.

1. Access and Attend

The learner locates, gathers, observes, and pays attention to relevant information.

This includes the ability to:

- find information;
- identify key sources;
- notice important details;
- ask initial questions;
- recognize what is known and unknown;
- distinguish the topic from surrounding noise.

In the past, access was often difficult. Today, access is easy but attention is hard. The learner must develop the discipline to focus amid abundance.

Key question:
What information is available, and what deserves my attention?

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2. Comprehend and Explain

The learner demonstrates genuine understanding by restating, summarizing, interpreting, and explaining ideas in his or her own words.

This level must be strengthened. A learner has not understood a concept merely because he can retrieve a definition or ask AI for a summary. Understanding should be tested by explanation.

The learner should be able to answer:

- What does this mean?
- What is the main idea?
- How would I explain this to someone else?
- What assumptions are beneath this claim?
- What would be misunderstood if this were oversimplified?

Key question:
Can I explain this clearly without hiding behind borrowed language?

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3. Discern and Evaluate

The learner judges the reliability, accuracy, relevance, bias, context, and significance of information.

This is one of the most important revisions. Evaluation should not wait until near the end of the learning process. In the AI age, discernment must begin early and continue throughout.

The learner evaluates:

- source credibility;
- evidence quality;
- logical consistency;
- theological, ethical, or philosophical assumptions;
- context and intended audience;
- strengths and weaknesses;
- possible errors or distortions;
- AI-generated claims.

This level is where education must recover intellectual humility. The learner must ask not only, "Can I find an answer?" but "Is this answer true, trustworthy, and properly understood?"

Key question:
Should this information be trusted, and why?

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4. Connect and Analyze

The learner breaks ideas into parts, identifies relationships, compares perspectives, traces causes, and recognizes patterns.

This includes the ability to:

- compare and contrast viewpoints;
- identify categories;
- detect contradictions;
- trace arguments;
- distinguish major claims from supporting details;
- connect new learning to prior knowledge;
- recognize implications.

Analysis matters because AI often produces smooth summaries that can flatten complexity. Learners must be able to inspect the structure beneath the surface.

Key question:
How do the parts relate, and what patterns or tensions emerge?

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5. Apply and Transfer

The learner uses knowledge in real or realistic situations.

Application should be treated as a higher-order act because it requires contextual judgment. It is one thing to define leadership, discipleship, communication, or biblical interpretation. It is another thing to apply those ideas in a church, classroom, family, workplace, or ministry setting.

Application includes:

- solving problems;
- making decisions;
- adapting principles to context;
- practicing skills;
- testing ideas in real situations;
- revising action based on feedback.

Transfer is especially important. A learner has deeper understanding when he can use knowledge beyond the original setting in which it was taught.

Key question:
Can I use this wisely in a real context?

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6. Integrate and Form Judgment

The learner brings knowledge, values, experience, evidence, and context together to form mature judgment.

This level goes beyond analysis. It asks learners to weigh competing goods, recognize consequences, make principled decisions, and explain why one course of action is better than another.

For Christian education, this is also where biblical wisdom, moral formation, and spiritual discernment become central. The goal is not merely intellectual sophistication. The goal is faithful judgment.

Integration includes:

- weighing alternatives;
- resolving tensions;
- forming convictions;
- making ethical judgments;
- aligning knowledge with truth, character, and purpose;
- recognizing limits and uncertainties.

Key question:
What is the wisest and most faithful conclusion or course of action?

7. Create and Contribute Responsibly

The learner produces something new, useful, faithful, ethical, and accountable.

Creation remains important, but it must be repositioned. In the AI age, creation should not be treated as automatically superior to evaluation or application. A created product is only educationally meaningful if the learner can explain and defend it.

Responsible creation includes:

- designing;
- writing;
- teaching;
- proposing;
- building;
- revising;
- communicating;
- contributing to a community or field.

The learner should be able to disclose process, cite sources, explain decisions, evaluate limitations, and receive critique.