



CHAPTER XIV

Kinds of Understanding

“The stage of romance is the stage of first apprehension. The subject-matter has the vividness of novelty.”

Alfred North Whitehead, “The Rhythm of Education”

🍷 Make It Fun

Hand a chef a pile of raw, unseasoned chicken and say, “Make it tasty.” No salt, no heat, no pans, no spices. She’ll show you the door.

We give that instruction to teachers, managers, and parents all the time, and to ourselves. A new hire can’t get the hang of the inventory software. A ten-year-old has stalled on fractions. You’re at the kitchen table at eleven at night with a Spanish grammar, getting nowhere. Someone says: make it fun. It sounds like advice. It names an outcome and hands over nothing to produce it with, and when the fun doesn’t come, it leaves you feeling you’ve failed at something simple.

This chapter hands over the kitchen. A learning object has to reach the learner in a form their mind can take hold of. Kieran Egan describes five **kinds of understanding**, somatic, mythic, romantic, philosophic, and ironic, each

arriving with its own cognitive tools, and each kept as the next one arrives. The kinds describe what a learner has become able to use. None of them is a gate the learner has to pass. Set against Inquiry and Practice, they give ten distinct engagement levers where the usual advice gives one.

The book has already put this lens to work in Chapters 3, 6, 7, 8, 11, and 12. This chapter is its home. Line depth and quadrant depth, the other two ways of shaping a learning object, belong to Chapter 13.¹ This chapter sets the **register** an object is delivered in.

🍷 Egan's Theory: Five Kinds of Understanding

The Thinker

Kieran Egan (1942–2022) taught at Simon Fraser University, where he directed the Imaginative Education Research Group. His central book, *The Educated Mind* (1997), argues that schooling has long tried to pursue three incompatible aims at once.

The oldest is **socializing** children: shaping the young to fit the society they're born into, its norms, its values, its shared stories. The second, which Egan traces to Plato, is bringing them to **academic truth**: the world as it actually is, reached by reason, whatever the village thinks. The third, which took hold with Rousseau, is letting each child **develop according to their nature**, protected from the adult world's demands.

Each aim works against the other two. Truth puts the society's comfortable stories under a microscope; Socrates was executed for corrupting the youth. Natural development has little patience for either conformity or the unnatural discipline of calculus. Ask one teacher to serve all three and she becomes the rope in a three-way tug of war. Follow a learner's curiosity and you're behind on the standards. Drill the standards and you're crushing the child's spirit. Egan proposed a fourth idea in their place.

The Idea

Each major tool of thought humanity invented, from the body through spoken language, writing, theory, and reflexive language, brought a new kind of understanding into the world. A child can acquire those same tools, roughly in the order the culture invented them, and each tool changes what the child can understand.

You may hear an echo of an old, discredited idea here: the embryo that passes through a fish stage, the toddler as a cave dweller. Egan's claim concerns cultural history: which tools a culture invented, and in what order. And the book uses the toolkits because they work with learners. Nothing here depends on whether a second grader really resembles a Bronze Age storyteller.

KIND	BUILT ON	ITS COGNITIVE TOOLS
Somatic	The body, before language	Bodily senses, emotional responses and attachments, rhythm and musicality, gesture
Mythic	Oral language	Story, metaphor, abstract binary opposites, rhyme and pattern, jokes and humor, mental images, a sense of mystery, games and play
Romantic	Literacy	The limits and extremes of reality, association with heroes, wonder, collections and hobbies, humanizing meaning, revolt and idealism
Philosophic	Theoretic use of language	The drive for generality, general schemes and their anomalies, the search for authority and truth, the lure of certainty
Ironic	Reflexive use of language	The limits of theory, reflexivity and identity, radical doubt about what can be known

The Five, Briefly

Somatic. Before words, the body. A baby learns gravity by dropping the spoon from the high chair, again and again, and watching it land. She learns rhythm from being rocked, and comfort from a familiar smell and voice. The somatic toolkit never leaves. An adult handed an unfamiliar power tool hefts it and feels its balance before switching it on.

Mythic. Spoken language brings story. Before writing, everything a people knew had to be carried in memory, so it was packed into forms memory holds:

stories, rhymes, stark opposites. Eat this berry and live, eat that one and die. Young children live in this world. Give a five-year-old a shaded account of right and wrong and it slides off her. Give her a brave knight and a dragon and she has it by bedtime.

Romantic. Literacy lets a mind reach past the village, across time and distance, to the edges of the known world. Egan's romantic learner wants those edges: the tallest building, the fastest animal, the deepest trench, the explorer who went first. This is why so many eight- to twelve-year-olds memorize the record books, collect every card in a set, or can recite the length of every dinosaur. They're mapping what's real and how far it goes. Adults do it too, with vintage camera lenses, or three evenings of reading about the lightest possible tent.

Philosophic. Collect enough facts and you want the system behind them. The romantic learner knows every dinosaur. The philosophic learner wants the theory of evolution that explains why they looked the way they did. This is the age of the master key, often met in late adolescence: the ideology or framework that seems to explain everything, and the pleasure of certainty that comes with it. Its best tool is the anomaly, the case the scheme can't explain.

Irony. Then the frameworks turn out to be frameworks. The ironic learner sees theories as lenses, asks who framed a question and what the framing leaves out, and holds even her own answers loosely.

The Toolkits Are the Practical Content

Egan's contribution for a teacher is less the stage names than the tools. A mythic learner is reached through story and opposites. A romantic learner is reached through the extreme, the heroic, and the real. A philosophic learner is reached through the general scheme and the fact that breaks it. Each tool is a way to put an object into a form the learner's mind can grip.²

Ages

Common summaries place the kinds roughly at birth to 2, 3 to 7, 8 to 14, 15 to 20, and 21 on.³ Egan's own point is that the kinds don't arrive by age alone.

They arrive when the learner acquires the tools, so the lens has to be read off the learner, and the birth certificate won't help.

🔪 Stages as Availability

The Kinds Accumulate

Each new kind adds tools and takes none of the earlier ones away. The Imaginative Education Research Group puts it directly: all five kinds “make a distinctive contribution to one’s understanding and they work best if they can be combined.” An adult still thinks in stories and still feels rhythm in the body. A cynical thirty-year-old can be caught by a mystery as easily as a six-year-old. Chapter 7 made the same point for worth: no form of mattering is ever left behind.⁴

Think of a toolbox. Buying a laser level doesn’t make you throw out the hammer.



Figure 14.1 · the kinds accumulate (schematic)

The dashed line marks one learner in one domain. Everything to its left stays in reach; the next kind hasn’t arrived yet.

What a Kind Tells the Adult

The newest kind a learner holds says what has just become available, and usually what engages most. It sets no requirement the learner must meet before moving on, and it forbids none of the earlier tools.

Stage theories that picture development as a staircase invite the opposite conclusion: you're in high school now, so you're done with stories and games, and you get the abstract version. That conclusion is expensive. It throws away the oldest and most reliable tools for making things stick.

How This Fits Fischer's Web

The book's position, argued most fully in Chapter 13, is that development has no fixed sequence: skills grow unevenly, domain by domain.⁵ Egan's kinds fit that position when they're read as availability. A child can use romantic tools in a subject she loves and mythic tools in one that is new to her. An adult who reads novels with ironic sophistication walks into her first salsa class and has nothing to work with but the somatic kit: feel the beat, watch the feet, copy, stumble, copy again. The kinds describe toolkits a learner owns, and a learner may reach for different ones in different lines.

The Practical Rule

Read the learner. Aim at the newest kind the learner shows in this domain, and keep every earlier kind in play.

• The Two Systems Across the Five Kinds

Each kind of understanding offers a different way into Practice and a different way into Inquiry. Five kinds by two systems gives ten engagement levers, each more precise than “make it fun.”

KIND	PRACTICE LOOKS LIKE	INQUIRY LOOKS LIKE
Somatic	Repetition in the body: stacking the cups again, the clapping game, the bedtime routine	Exploration through the senses: dropping the spoon to see what happens, tasting, pouring

KIND	PRACTICE LOOKS LIKE	INQUIRY LOOKS LIKE
Mythic	Drill carried by rhythm and story: the counting song, the hero who must say the rhyme to pass	Wonder given a story's tension: why does the moon follow the car?
Romantic	The pursuit of being exceptional: the record, the full collection, the next level	Fascination with the extreme and the real: the deepest trench, the fastest animal, the person who did it first
Philosophic	Rehearsal inside a system of rules: the method understood, practiced to fluency	The search for the law beneath the cases, and the anomaly that breaks it
Ironic	Deliberate work against one's own habits: practicing the weakness, choosing the harder drill	Questioning the question: who framed it, what it leaves out, what another frame would show

The skateboarder who falls two hundred times trying to land a kickflip is doing more than somatic repetition. He wants to be someone who can do that trick, which puts him in the romantic row. The programmer hunting the one line that breaks her model of the system is in the philosophic row, on the Inquiry side.

Reading the Table

A learner usually engages most at the newest kind they hold, but earlier rows stay open. A teenager deep in philosophic Inquiry about economics, hunting for the law under supply and demand, may still be carried through three hours of memorizing definitions by romantic tools: a timer, a personal record for flashcards in a minute, an economist she admires.

Adults forget the lower rows most often. Picture an adult learning Spanish. She can analyze the grammar like a linguist, so she tries to think her way to fluency, staring at conjugation tables. Fluency asks for rhythm, sound, and muscle memory, which are somatic and mythic tools, and the counting song feels beneath her dignity. Now watch someone who has learned six languages: a rhyme for the irregular verbs (mythic), an obsession with one director's films (romantic), the grammar worked out as a system (philosophic), and her mouth shaping the vowels in a mirror until her jaw aches (somatic). All four at once.

✿ Applying the Lens to a Learning Object

The lens comes after the object is chosen, whether it was found along one line or at a crossing of several.¹

1. **Read the learner in this domain.** Which kind do they show here, and which tools do they reach for unprompted? A child who collects facts about sharks is showing romantic tools, whatever their age. A new hire who keeps asking why the system is built the way it is, and ignores your list of button clicks, is showing philosophic ones.
2. **Choose the system.** Inquiry or Practice, read from who is steering at the moment.⁶
3. **Pick the lever.** Find the row in the table above for this kind and this system.
4. **Choose two or three tools.** Egan's planning question for the mythic register was "What's the story on this?" Each kind has its own version. What is the binary opposite at the heart of this? What is the most extreme case of it? What is the general law beneath it? What does this way of framing it leave out?
5. **Keep the earlier kinds in play.** Put the body and a story under even the most abstract object. The philosophic learner still remembers the example better than the principle.
6. **Read engagement and adjust.** If engagement drops, try another tool or an earlier kind. If the learner reaches for a newer tool on their own, follow them there.

The planning questions work on dry material too, and that's where they earn their keep. Training a team on new accounting software, "what's the binary opposite?" has an answer: order against chaos. The software stops being a list of buttons and becomes the thing that ends the end-of-month scramble for lost invoices. It sounds dramatic said aloud. It's also something a mind can grip, which a feature list isn't. Chapter 8 maps the same tools onto ownership:

a story that casts the learner as the one on the quest, a record she chose to chase, a collection that's hers to complete.²

Generate Broad, Deliver Narrow

An AI tool can write the same object in all five registers at almost no cost, as it can for the quadrants and the lines.⁷ Think of it as a wardrobe with every outfit in it. The adult's job becomes choosing which one this learner wears today.

If a tool can write the romantic version on request, does the adult still need the theory? Yes, because the version is only a guess until the learner meets it. Say the tool writes a fine romantic lesson about the moon's deepest craters, and the eight-year-old across the table stares out the window and asks why the moon glows. She has slipped back into mythic wonder for the day. The tool can't see that. An adult who knows what the registers are for can, and can follow her there.

 Worked Examples

One Object Through Five Kinds: The Moon

KIND	THE MOON, DELIVERED
Somatic	Carried to the window each night to find it; the goodnight-moon ritual, the same words each time
Mythic	The moon that follows the car: a story, with the opposites of day and night, light and dark, at its heart
Romantic	The astronauts who walked there, the footprints that may last for ages in the still dust, the far side no one saw until spacecraft went around it
Philosophic	The geometry that explains the phases, tested with a lamp and a ball; then the anomaly: why do we always see the same face?
Ironic	How other cultures read the same moon, what the orbital model leaves out, and why the question “what is the moon?” has more than one good answer

The object is the same in every row. The tools change, and with them the way in. The lamp and the ball from Chapter 5 sit in the philosophic row, and the

same child, a year later, can carry the anomaly of the moon’s one visible face into the idea of tidal locking.

Practice's Two Mechanisms Through the Kinds

Chapter 12’s mastery gate and spacing schedule keep their structure at every kind. The form they take changes with the learner’s register.⁸

KIND	THE GATE LOOKS LIKE	THE SCHEDULE LOOKS LIKE
Somatic	The tower stands. Success is physical and self-evident.	Daily routines and rituals bring skills back; the rhythm of the day is the schedule.
Mythic	A story’s challenge: the hero cannot pass until the rhyme is known. Can and cannot-yet as a clear opposition.	Songs, chants, and retold stories return material at intervals; the refrain is a spaced review.
Romantic	Records, collections, and levels. Mastery as joining the ranks of the exceptional.	Completing the set, and returning to beat one’s own record.
Philosophic	Knowing the rule the skill follows; mastery defined by a general standard.	Understanding why spacing works, and using the forgetting curve as a law.
Ironic	Self-set standards and deliberate work on one’s own weaknesses, knowing any standard is partial.	Designing one’s own schedule, recognizing the fluency trap, and choosing the harder review.

At the youngest kinds the adult carries both mechanisms, hidden inside rhythm, ritual, and story, and the child never notices she’s being gated or reviewed. By the ironic kind the learner carries both. The movement between is the handover of ownership from Chapter 8.⁶

 Where the Book Already Uses the Lens

Earlier chapters apply Egan to their own subjects. This chapter is the home they point back to.

CHAPTER	HOW IT USES THE LENS
3. Reinforcement	Abstraction has a developmental timetable, but young children handle abstractions readily in story form, so the abstract disciplines need not wait
6. Fidelity	Young children's strongest tools are the body and story; a bead standing for a place value is a formal symbol that draws on tools that come later
7. Worth	What counts as mattering changes across the kinds, from a face lighting up to self-authored work
8. Ownership	Egan's tools mapped onto ways of seeding ownership
11. Stories and Scoreboards	Story drivers point to the tools for making material the learner's own
12. Mechanisms Within Practice	The mastery gate and the spacing schedule change form across the kinds, as above

📖 Limits of the Theory

Argued, and untested. Egan built his theory from cultural history, philosophy, and long teaching experience. He didn't build it from experiments. Like Girard in Chapter 10, he offers a lens with a strong argument behind it, and the book treats it that way.⁹

Little outcome evidence. Evaluation of imaginative education has been mostly qualitative. One study argued that imaginative work resists conventional outcome measures, and proposed judgment by practitioners instead (*International Journal of Education & the Arts*, 2006). Wear the ironic hat for a moment and that reads a little like a convenient exemption. It may also be true. Either way, it leaves the claim unproven.

The historical parallel. Egan's claim that a child acquires the culture's tools in roughly the order the culture invented them is an argument about history. The book uses the toolkits and doesn't depend on the parallel.

The ages are loose. Kinds arrive with the tools, and birthdays don't bring them. A learner can hold different kinds in different domains.

Why the Book Uses It Anyway

The kinds are a practical map, as the lines are in Chapter 13. Think of a sailing chart from the 1500s: coastlines a little off, a sea serpent drawn in the margin. It's still far better than guessing at the wind. And the model can test the map for each learner. If delivering an object in a given register doesn't raise engagement, the register was wrong for this learner today, whatever the stage label says.¹⁰ You don't need a longitudinal study to see that a story about the body's defenders against invading germs holds a five-year-old better than a lecture on cell biology. You can watch it happen.

The Feed

Egan's tools grip because they fit the way minds take hold of things, and that works whoever is holding them. A social media feed is built from the same kit: the most extreme clip, heroes and villains, us against them, the outrage that ends in a cliffhanger. Those are romantic and mythic tools, refined by machines that measure what holds attention. The philosophic and ironic tools, the general scheme, the anomaly, the question about who framed the question, rarely turn up in a feed. They don't hold a thumb still.

We've been handed the spices. A lot of what gets cooked with them is junk food. The same tools, in the hands of an adult who reads the learner, can cook a meal.

Open Questions

- How can an adult, or a tool, read which kind a learner holds in a given domain?
- Does delivery in the newest kind always engage most, or does it depend on the object?
- Is somatic understanding a stage, or a base layer under every other kind?
- Does ironic understanding need to be taught, or does it arrive with maturity and experience?

- Can versions written by an AI tool in each register match what a skilled teacher would make?
- Does register-matched delivery raise engagement measurably, object by object?

The ironic question is the one I'd most like to hear about. If you've watched someone move past philosophic certainty, I'd like to know what moved them.

📖 Notes

1. See Chapter 13, “Cross-Line Depth,” “Quadrant Depth,” and “The Grid.”
2. See Chapter 8, “Seeding Ownership.”
3. The ages follow a common summary; see Sources.
4. See Chapter 7, “Worth Through Egan’s Stages.”
5. See Chapter 13, “Why Each Line Must Be Raised on Purpose.”
6. See Chapter 8.
7. See Chapter 13, “Navigating the Grid.”
8. See Chapter 12.
9. See Chapter 10, “The Triangle.”
10. See Chapter 4.

📖 Sources

SOURCE	USE
Kieran Egan, <i>The Educated Mind</i> (1997)	The five kinds of understanding; the three incompatible aims of schooling
Kieran Egan (1942–2022)	Life and work
Imaginative Education Research Group, brief guide	The cognitive tools of each kind; the kinds work best combined
CIRCE, Simon Fraser University: cognitive tools	Tools of oral, written, and theoretical language

SOURCE	USE
Kieran Egan, <i>Teaching as Story Telling</i> (1986)	“What’s the story on this?”
Cognitive tools theory summary	Approximate ages of the kinds
“Evaluating the Imaginative,” <i>International Journal of Education & the Arts</i> (2006)	How imaginative education has been evaluated
Alfred North Whitehead, “The Rhythm of Education,” in <i>The Aims of Education and Other Essays</i> (1929)	Epigraph

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