

# author

## Ten mindframes for Visible Learning



### **John Hattie (1950, New Zealand)**

is arguably the educational researcher whose work has had the greatest practical projection over the last two decades. Professor Emeritus at the Melbourne Education Research Institute (University of Melbourne) and former chair of the Australian Institute for Teaching and School Leadership, he has spent over twenty-five years synthesizing what research has uncovered about what works in the classroom. His synthesis, known as Visible Learning, currently rests on nearly 2,500 meta-analyses and data from 300 million students. His ambition is not to identify what works—practically everything works to some degree—but rather what works best and how to amplify its impact.

### **JOHN HATTIE MASTERCLASS**

by Impuls Educació

**R**ecently published in Spanish, this book captures one of the foundational theses of Hattie's work: teaching expertise transcends methodology. The decisive factor is not what a teacher teaches, but how they conceive their work and why they understand it as an activity with measurable impact. The work organizes this perspective into ten mindframes grouped into three dimensions—impact, change and challenge, and learning focus—and offers a common vocabulary to discuss the teaching profession with rigor. The masterclass Hattie

delivered at the 1st Impuls Educació Congress transfers this same architecture to the realm of educational leadership. If the book is a working tool for the classroom, the masterclass is its equivalent for school leadership. We recommend reading both materials as a practical prerequisite so that the author's mindframes can unfold simultaneously and coherently across both the administration and the faculty.

## Mental frameworks of leadership: thinking and acting with an evaluative mindset

John Hattie has redefined the concept of high-impact teaching. In this masterclass, addressed to school leadership teams, the New Zealand author transposes to the field of leadership the ten mental frameworks originally conceived for teaching staff. His premise is a demanding one: the first framework that any leadership team must internalise, before making any other decision, is «I evaluate my impact». Everything else — assessment, feedback, classroom culture and continuous improvement — is subordinate to this principle.

## The empirical framework: 2,500 meta-analyses and the 0.40 threshold

The conceptual framework rests on approximately 2,500 meta-analyses encompassing 300 million students. A meta-analysis synthesizes existing literature by determining an effect size and identifies moderators: variables that can alter said effect, such as geographic location or age. At the scale of 300 million students, however, significant moderators are difficult to find. What works in education essentially works equally well across the developed world: a school's uniqueness lies not in its student body, but in how it implements interventions and how its leadership thinks.

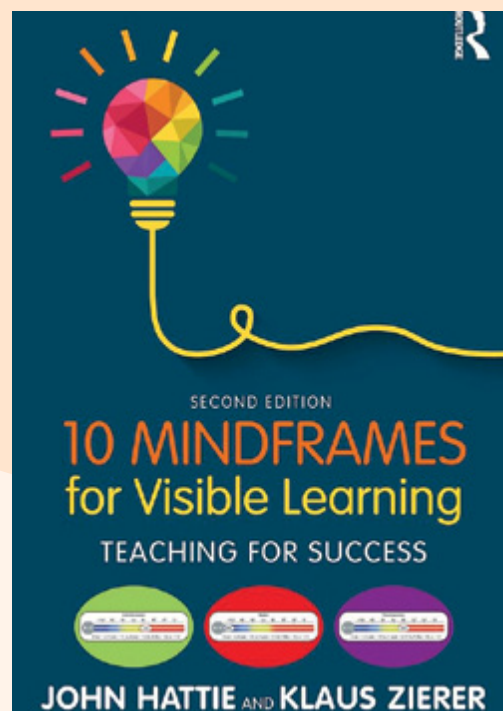
The average of all educational influences is an effect size of 0.40. This figure serves as a baseline to distinguish low-impact interventions from high-impact ones. The effect of the "summer slide" (summer learning loss) is -0.15. Interestingly, the effect of school closures caused by the COVID-19 pandemic was also -0.15. The pandemic presented an almost impossible situation, yet the overall negative effect remained relatively contained. The credit belongs to the teaching staff, who

reinvented schooling overnight. The goal is not to identify what works, but what works best and how to optimize its implementation.

## The key question of leadership is no longer what works, but what works best and how to optimise it

### The mental frameworks of impact: evaluating what is done

The most critical mindframe for any school leadership is singular: "I evaluate my impact." Every morning, those who lead an educational institution should enter it with that objective. Putting this into practice requires a clear and shared understanding of what impact means. Impact is not merely achieving high scores on standardized tests: it also encompasses ensuring that every classroom has a desirable climate and culture, that the school is a welcoming environment where every student feels a sense of belonging, and that the student body develops the confidence to take on challenges. Evaluative thinking materializes in three questions: What was taught well today and what was not? Who was taught well and who was not? How much growth occurred? The role of leadership is to ask the faculty for evidence to answer these questions. As Karl Popper noted, science advances by asking what evidence would prove us wrong. Finding evidence that confirms what we already believe is easy; the true challenge lies in seeking out areas where our impact is falling short. Leadership must utilize tools such



as the Lee Jenkins curve to measure student engagement. If a significant percentage of students do not want to be in school learning what is being taught, the system is failing. The most urgent issue in education is the variability of teacher impact within the same school. Leadership must identify which teachers systematically facilitate progress, which allow students to coast on cruise control, and which are indifferent; from there, they must prioritize the voices of highly effective faculty members to drive collective improvement. Linked to the first mindframe is a second: assessment as a tool to inform impact. If an assessment does not inform the teacher about what was taught well, who learned, and how much growth occurred, it is a waste of the students' time. The purpose of formative assessment is to dictate the next steps in teaching. In educational measurement, data quality matters, but interpretation is the decisive factor. The same applies to complex constructs like creativity or passion: they are assessed through expert observation,

interpretation, and collaborative critique. The ultimate goal is to develop students and teachers who are capable of evaluating their own learning, aware of their current level of understanding, able to seek feedback, and capable of recognizing when they have mastered a concept.

## If data is not interpreted, it is better to stop collecting it: nobody will read it

Applying this mindframe to the faculty requires building an environment where obtaining evidence of one's own impact is the norm. Peer observation must be normalized, but observing another teacher solely to criticize their style is counterproductive. The goal of observation is to help teachers see their impact. As Graham Nuthall demonstrated, 80% of what happens in a classroom goes unnoticed by the teacher themselves. Video analysis—playing the recording without sound and asking the teacher to explain the learning that is taking place—shifts the dialogue away from justifying methods and toward analyzing the actual impact on the student body.

### The mental frameworks of change and challenge

Teachers are agents of change. The effects of expectations are enormous: teachers with high expectations for all their students double the rate of learning, yielding an effect size of 0.42. At the opposite end of the spectrum, teachers with low expectations achieve a negligible effect of 0.03. Christine Rubie-Davies's research shows that low-expectation teachers rely heavily on static

differentiation and ability grouping. As Carol Ann Tomlinson argues, rigid or semi-permanent grouping is detrimental: it offers easier tasks to lower-ability students and, consequently, widens the achievement gap. True differentiation consists of providing different timeframes and different pathways so that all students can reach the same high success criteria. Recent studies show that a student needs between five and seven opportunities to learn a concept; an effective teacher ensures that these opportunities exist. The teaching profession must also claim credit for its success. In 1900, only 14% of the world was literate and numerate; by 2000, that figure had reached 86%. This shift was not due to textbooks or infrastructure: it was due to teachers. The role of leadership is to ensure that every teacher recognizes and celebrates the magnitude of that impact.

## High teacher expectations double the pace of learning (0.42); low expectations nullify it (0.03)

Learning also requires the active pursuit of challenge. The science of teaching rests, in this regard, on the Goldilocks principle: the task must not be too difficult, too easy, or too boring. Video games illustrate this paradigm well: they assess prior performance, adjust to the optimal challenge, and provide deliberate practice in which failure is an expected part of the process. Schools should embrace this and welcome errors as an essential step in the journey, not as a source of shame.

It is important to distinguish between expectations and aspirations. If a family demands a specific aspiration, a negative effect usually occurs due to excessive pressure. High general expectations have, conversely, a positive effect. The school should not extinguish family expectations, but rather channel them toward a general love for learning and the development of resilience.

### The mental frameworks of focusing on learning

Feedback is one of the most powerful engines of learning. But a third of the feedback provided has an effect ranging from zero to negative. Its major problem is variability. To be effective, it must be heard, understood, and translated into action. And praise dilutes it: if a teacher mixes praise with critical feedback on a task, the student will only remember the praise. Teacher performance evaluation operates on the same principle. Traditional evaluations that merely list past successes and failures are ineffective. Just like the student body, the faculty values feed-forward: proactive guidance that clearly identifies problems and provides actionable steps for future improvement.

The classroom also suffers from a severe imbalance between monologue and dialogue. Based on 20,000 hours of observation, it is known that teachers speak 89% of the time. Teacher talk is necessary during the initial acquisition phase of surface knowledge, but it becomes detrimental during the consolidation phase. Consolidation requires student discourse, self-questioning, and thinking aloud. Memorization during the acquisition phase has an effect size of 0.03; during the consolidation phase—through retrieval and deliberate practice—it reaches 0.96. Schools must transition from being



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places where teachers perform to environments where students consolidate what they have learned through dialogue and problem-solving. Showing students—and teachers—what success looks like beforehand markedly increases the probability of achieving it. 63% of students who do not know the success criteria become bored in class; engagement completely reverses when those criteria are transparent. Relational

trust, the foundation of any learning environment, rests on all of this. Trust ensures that mistakes are welcomed and that teachers can bring the problems of their practice to the faculty without fear of judgment.

### Leading transformation: AI, diagnosis, and de-implementation

If computers took fifty years to cross the 0.40 effect threshold—because they were used to gain efficiency, not to improve teaching—artificial intelligence will force a much faster pedagogical shift. Today, in a typical school day, teachers ask between 80 and 120 questions; students ask an average of two non-procedural questions. Such a dynamic is completely useless in the age of AI. The fastest-

## Teachers speak 89% of the time. Memorisation during consolidation reaches an effect size of 0.96

growing jobs in the tech industry are those of prompt engineers: students must be taught to ask the right questions, to formulate follow-up questions, and to exercise evaluative thinking to discern whether what an AI produces is reliable and accurate. For those stepping into a leadership role with the mission of leading a transformation, Hattie's recipe is clear: do not implement new programs immediately. Begin with a





rigorous diagnosis—an assessment of the institution's capacities—that determines whether the school is a true learning environment, whether students and faculty feel supported, and whether there is collaborative critique focused on impact. Standardized tests, classroom assessments, and interviews combine to build a complete picture. A new administration must be perceived, above all, as a listener and a collaborative problem solver. We should stop looking solely to foreign jurisdictions for answers. Every region has its own history and context. The focus must be on identifying and reliably scaling the excellence that already exists in local schools. The greatest global challenge is the lack of

social prestige associated with the teaching profession: if teaching expertise is not publicly recognized and celebrated, a crisis in recruiting future teachers and leaders is guaranteed.

High-impact leadership requires a transparent implementation model, such as the DIIO model (Diagnosis, Intervention, Implementation, Evaluation). But its counterpart is equally important: de-implementation. Having the courage to stop doing what adds no value in order to create space for practices that actually impact student learning. Adopting these evaluative mindframes allows for the transformation of the culture, the dialogue, and the outcomes of the entire institution.

**Just as important  
as implementing is  
de-implementing:  
ceasing to do what  
does not contribute  
to learning**