

# Making Learning **Visible** to Students

Evidence  
of Impact



Al Yasmina Academy  
Abu Dhabi • United Arab Emirates



***Al Yasmina Academy, an international school in the United Arab Emirates, committed to making the process of learning “visible” to their students. The impact has been nothing short of amazing.***

Between meetings, deadlines, reports and lesson plans, teachers are busy people—so busy that sometimes they forget to ask themselves whether what they’re doing has any impact on student learning. And when you work in a school with a reputation for high achievement, it’s easy to think that you’ve already reached the pinnacle of excellence. What could there be to improve? Actually, plenty.

“Know thy impact” is a memorable way to express the idea of teachers continually assessing how well a given instructional practice is working for their students. Noted education researcher Professor John Hattie came up with the saying to help people remember that their own effectiveness as educators is, by far, the most important influence for a child’s learning.

Hattie’s research led to the development of a practical approach called Visible Learning<sup>plus</sup>, which helps schools all over the world improve their teaching strategies by making the process of learning visible to their students and showing them that there’s always room to improve—as one large school in the United Arab Emirates discovered. In just a year of making learning more visible to their students, teachers in the Primary school saw something they’d never had before: 90-plus percent progress across every year group. Secondary saw its best exam results ever.

## Visible Learning<sup>plus</sup> in a Nutshell

As education researcher John Hattie explained in his well-known study “Visible Learning,” anything you try in the classroom is probably going to have some kind of impact—usually positive—on student learning. But if that’s the case, why not work on those factors with the strongest outcomes? Currently, Hattie’s research examines and synthesizes over 1,500 meta-research projects covering over 90,000 studies to rank over 256 effects that influence learning outcomes. Those effect sizes greater than 0.4 accelerate student learning. In Visible Learning<sup>plus</sup>, teachers gain clarity about the impact they can make on student learning, and every student gains knowledge and skills that enable them to become teachers of their own.



## Al Yasmina's Introduction to Visible Learning

Al Yasmina Academy is one of seven schools and a nursery that make up Aldar Academies, a private school operator based in the Emirates. About 1,700 students attend Al Yasmina in Abu Dhabi, a high-rise haven in the Emirates. The Academy includes a Primary school (for ages three to 11) and a Secondary school (for ages 11 to 18). It follows the English National Curriculum, with a cultural awareness of the language, beliefs and religion of its host country.

Although several of the senior leadership team at Al Yasmina had heard of John Hattie and even used his education research for their own studies, they became intrigued when they heard him give a keynote at a conference in Dubai. They called in an education expert who specialized in Hattie's concept of "visible learning" and went on a "learning walk" with that consultant to see what she thought about their instructional practices. What she concluded was that students really didn't participate in the learning process to the extent that they could.

That was news to Kate Davies, Head of Primary and currently, Acting Co-principal of the Academy. "I must admit, we were expecting to get a glowing report, but in actual fact, we were baselined quite low in terms of learning being visible, and that really hurt!" Her reaction was understandable. After all, the school had been rated highly by the Abu Dhabi Department of Education and Knowledge (ADEK). And yet, here was an outsider saying something quite different.

Undeterred, the Academy chose to blaze ahead. A few months later, the consultant returned to deliver a "foundation day," a training session to help the entire staff learn about the basic concepts of Visible Learning<sup>plus</sup>. Based on what they'd heard from that learning walk, the leadership team formed an action plan that centered on the concept of the "effective learner."

"We weren't using a common language. We weren't looking at the same objectives and outcomes. We needed to come to some sort of consensus, because children were getting different experiences from their teachers," says Jennie Kellett, Assistant Principal for

Secondary. On top of those gaps, she adds, the team learned that they weren't using data as effectively as they could. "We needed to focus on how effective we were when giving feedback, receiving it, and also seeking it for ourselves for our own improvement."

In early days, if an Academy student were asked what a good learner was, he or she might respond, "It's somebody who raises a hand before speaking, sits still and does as he or she is told." But those kinds of things aren't about student learning, says Kellett. They describe behaviors. And learning itself wasn't an activity worth improving on so much as the process of racing through curriculum to cover as many topics as the standards demanded.

The target, the team decided, was to help the students learn how to know and talk competently about what they were learning and what their next



Asking students what they are learning helps them learn what they need to do to move forward.

steps were. As the learning process itself becomes visible to them, the students would be much clearer about what they needed to do to move forward.

You might think this would be obvious to students, but it's not, Kellett observes, "You can't assume that students know how to do something. Unless you teach them metacognition strategies and show them how to do some things so they can do it themselves, those children will constantly stay at the tactical approach level."

All four themes—the effective learner and the use of a common language, data and feedback—would permeate hallway conversations, teacher training and classroom activities from then on.

While the teachers across the entire Academy worked to develop a common language for describing the visible learner, the educators in Primary and

Secondary schools took separate routes for helping their students understand the concept for themselves.

## Challenging Learners in Primary

The Academy has gained a reputation for drawing high-performing students. That in itself poses a problem: Parents send their children with the expectation that they'll get a stream of high grades and maintain the label of "high achiever" or "gifted and talented." And the students themselves have come to believe that too. After all, says Callum Neil, Head of Year Six and an Associate Assistant Principal, many of these students have been told they're "clever" at math, clever at English or whatever the class. As a result, he notes, "They were absolutely terrified to admit that they were wrong or that they didn't know the answer." Faced with a new challenge that could stretch their learning, they would instead choose work that was simpler, "something they knew they could ace and get 100 percent on to still prove they were clever."

Now, as part of the effort to make learning visible, the teachers wanted to help their students become more aware of what type of learners they were and absorb how they could move from one stage to the next—as Neil put it, "to make sure we're constantly developing a deeper understanding with our students of the subject they're being taught."

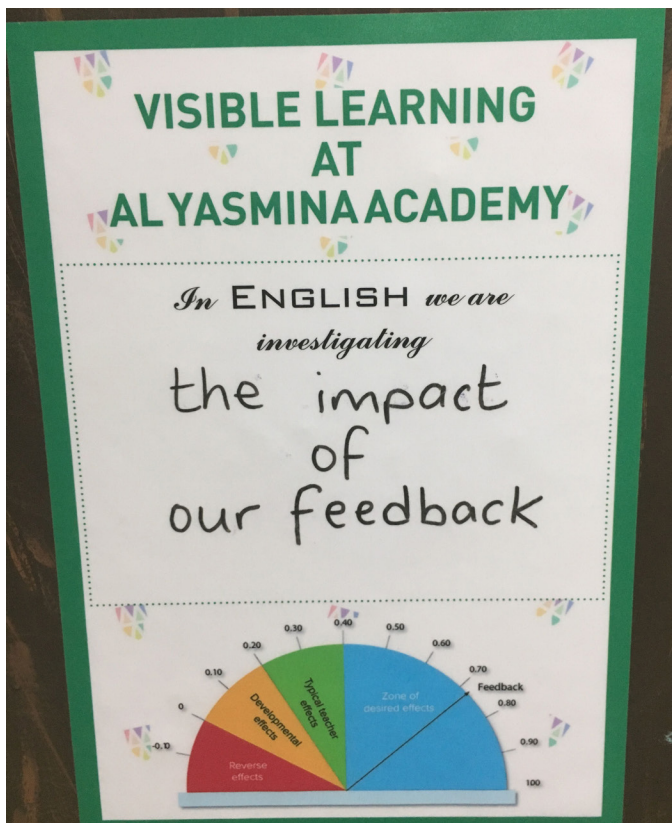
The concept of challenge turned into a theme for the Primary school. That was no accident. In the previous couple of whole-school inspections and department reviews, students were reporting that they didn't always believe they were being challenged in their work. That was something Neil seized on. "I thought we were working hard to challenge our students, but the information they were giving us was that they didn't feel that," he says.

So that's where Neil started what he calls his "Visible Learning journey." As he explains, "Visible Learning encourages you to look at your own practice and run an 'impact cycle' whereby you introduce an idea or element to your classroom and measure the impact that it has based on evidence." Examining the concept of challenge became the focus for Neil's year group, a process that it worked on for the next year.

## Visible Learning Glossary

- **FEEDBACK.** Effective feedback closes the gap between where students are in their learning and where they need to be and touches on feedback among teachers, with students and within the community.
- **IMPACT CYCLE.** A period in which a new instructional strategy is tested out and the effect on learning measured.
- **KNOW THY IMPACT.** The main goal for teachers is to evaluate the impact of their instructional practice on the learning and to use evidence to let them know how they're doing and what needs to be tweaked.
- **VISIBLE LEARNERS.** When students are in tune with their own learning, they can express where they're going, how they'll get there and what comes next for them.





Al Yasmina's impact cycle.

Neil and the other teachers began referring to the learning pit in their classes and talking about it in their lessons. That was the starting point, he says, to making learning visible to the students. "If we were going to introduce a new math concept, for example, we would design a lesson whereby we would 'throw' our students into the pit—where we would make the learning extremely difficult for them." And rather than spending all of their time teaching content, they focused on teaching learning strategies, which students could apply to content in any of their classes

The strategies included wall posters depicting the pit and reminding students about sources of help: Work with peers, identify people in the class who are strong in the subject and get their advice, refer to notes they've written in their notebooks, share the problem with their parents or get onto Microsoft OneNote at home and talk it over with classmates. The idea was to get them to "see three before me," he explains. "Before you come to the teacher, you've got to have spoken to three of your peers."

Also, teachers stopped targeting their teaching "to the middle" and raised the overall difficulty level of their minimum requirements for the lessons. "We spent more time working on ways of getting students

The first step was coming up with a way to help the teachers get a baseline understanding about the students' "mindframe" or mindset around challenge—how they thought about it. That took surveying them: "Do you feel challenged in your work? None of the time, some of the time, most of the time, all of the time..." About 70 percent said they felt challenged some of the time. To tease out the details, students were asked to break it down further: "In the space of a week, what does 'Some of the time mean'? One lesson a week, two lessons, three lessons..."

During the course of reading about Visible Learning, Neil came across research from James Nottingham, an education expert, who came up with the idea of the "Learning Pit." The learning pit is a child-friendly metaphor for what happens in the learning challenge. When students are just beginning to learn a new concept and think they understand, they fall into the pit, realize they don't necessarily know what they thought they did, face frustration and eventually work to dig their way out again in the process of mastery.



An example of the Learning Pit in action in Primary.

to that minimum bar we had raised rather than accommodating for 'lesser' or 'better,'" Neil says.

They'd also "dip" into the curriculum from higher grades, including Secondary. "The emphasis of those lessons wasn't necessarily on getting the right answer," he asserts. "It was to see whether they could employ these strategies they were taught and whether they'd give up or keep going and trying."

The outcome was dramatic, says Neil. "What we saw over about 10 weeks was that there was an immediate impact, whereby students went from really not understanding what challenge meant to 130 students who had this confidence to attack anything we gave them, even though they knew things were too hard and they were going to get it wrong and they were going to make mistakes. The whole perception of what challenge was and what would happen if they got it wrong changed."

Now, students are "happy" to admit when they don't know something—"and they actually get excited about it," says Neil. They've also become more vocal about being able to move onto more challenging work at their own pace rather than when the teacher dictates it.

At the same time, it has "leveled the playing field" in an unexpected way. Instead of the students who are "very able" seeing themselves as clever and doing harder work than other students, the ethos within the class has evolved to one where everybody realizes they need to help each other. "If I'm slightly further ahead of you in my maths, it's a little bit of my responsibility to go and help you," says Neil. What's happened is that the lower-achieving students have made accelerated progress over the last year.

## Going SOLO in Secondary

Catherine Chowdhary is Associate Assistant Principal for Secondary, but with an all-school emphasis on teaching and learning at Al Yasmina. As an English teacher, she has long struggled with the amount of student correction work she's had to do. "I've always wondered if there were a way of making this easier,

more manageable, because we seem to be spending hours marking books."

She and the others in Secondary chose "feedback" as the theme for their first impact cycle. The goal: to take the burden off teachers and hand it over as much as possible to the students.

Previously, when students would take on the job of reviewing each other's work, inevitably, Chowdhary would see remarks like, "I really like your handwriting," or "Your story is really interesting." That wasn't useful to improving anybody's writing, so she'd have to go into the notebooks and add her own comments.

She and the teachers adopted the SOLO taxonomy, to help students become more aware of their learning. SOLO—structure of the observed learning outcome—has been around for decades. What it describes is five levels of understanding.

## SOLO Taxonomy

### The five levels of understanding

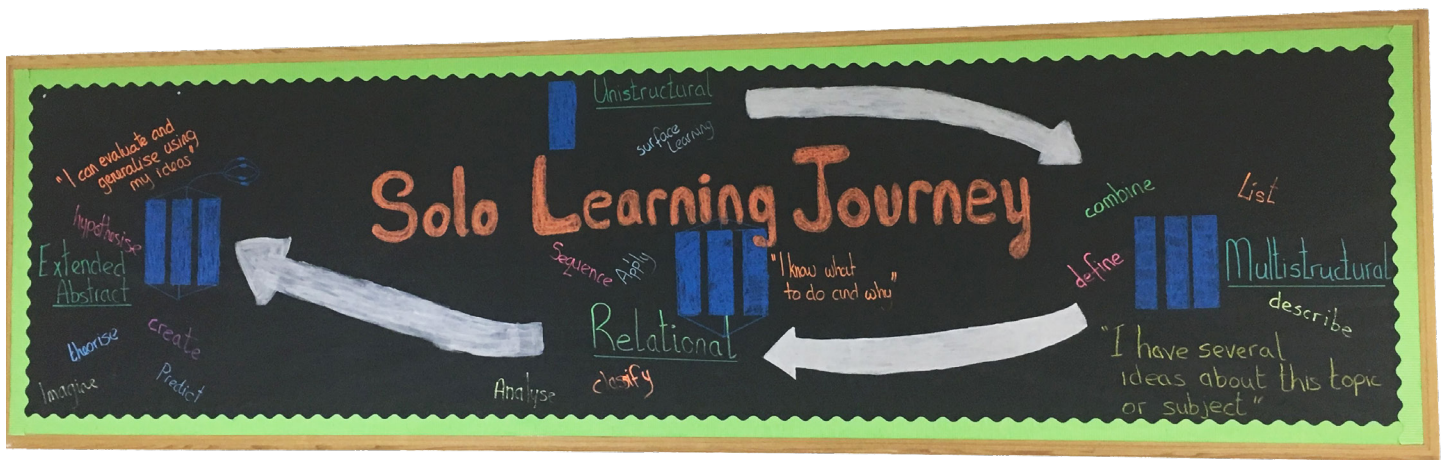
**Level 1** prestructural, the student doesn't know anything

**Level 2** unistructural, the student "can tell you one thing about a topic";

**Level 3** multistructural, the student can share multiple points about a subject

**Level 4** relational, the student can not only share multiple points but can also link them to a wider concept; and

**Level 5** extended abstract, the student "thinks outside the box" and extends understanding in new directions altogether



## The concept of the SOLO learning journey.

SOLO gave Chowdhary and her teaching colleagues a way to think about differentiating instruction and making sure every student “has a path to go down.”

As teachers shared the concept of SOLO with students in their classes, they attached “success criteria” to each level to emphasize the continual pursuit of doing better work. The idea was to make progress more visible to these older students.

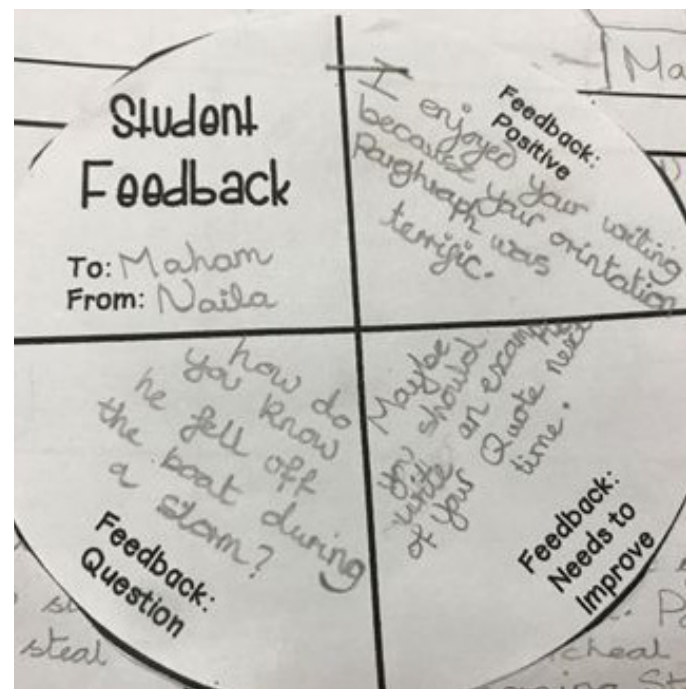
“Before, they would write something and all they were interested in was what grade you gave them. You could tell them, ‘You need to work on your spelling,’ or ‘You need to work on your punctuation,’ but then the next piece of work would be exactly the same. They weren’t taking in the feedback,” Chowdhary points out. “Now, they’re actively looking and improving their work on their own.”

Small failures have become a more accepted part of the learning process. “A lot of our students, in particular, are very cautious of mistakes,” she explains. “Even if you give them draft work, they want it to be perfect all the time. So, we have messages around the school saying that it’s OK to make mistakes and that practice doesn’t make perfect, it just makes better.”

One practical outcome has been that students have learned how to mark each other’s writing more meaningfully, “rather than [my] waiting until after they’ve done the piece of work and then having to go through all of their books,” says Chowdhary. “It’s nice for them because they feel like they’ve achieved something out of it. And their writing gets better

because they understand what the technical side of writing is. They now understand what they need to include,”

More importantly, however, is that student conversations have changed. “They can tell you where they are in their learning. They can tell you what they need to do to improve and what steps they need to do to get to that point, which is really good,” she marvels. “They’re becoming more aware of their own journey.”



Student-to-student feedback in action.



The new approach has also loosened up the teachers. Many are finally realizing that they're learners too. For example, Chowdhary is testing the use of Office 365 for giving live feedback to students as they're working on assignments. By doing so, it's possible that she'll find trends in the challenges students are having that can inform her lesson planning. "The students are very aware that we're trialing this. If it works, great; if it doesn't, fine. We'll go back to writing in our books again," she says. "We're all on this learning journey together."

## The Al Yasmina Journey

- **Feb. 2017:** John Hattie gives a keynote in Dubai, which the leadership team attends.
- **May 2017:** Visible Learning<sup>plus</sup> consultants head to the school and take the team on a "learning walk" to examine their teachers' instructional practices through the eyes of the student. From that evidence, the school develops a baseline on how well their students understand what being an "effective learner" means.
- **Sep. 2017:** Visible Learning<sup>plus</sup> consultants deliver a "Foundation Day" to the entire staff, to help them learn about the basic concepts of Visible Learning.
- **Jan. 2018:** The Academy kicks off its "language of learning" campaign. Primary chooses to focus on the Learning Pit and B.A.D., while Secondary chooses SOLO.
- **July 2018:** The staff comes back together to share the results of their Impact Cycles.
- **Sep. 2018:** The process begins over again for the new school year.

## Student Voice through Teacher Feedback

The bravest teachers are choosing to turn the feedback focus on themselves. Educators, like all humans, can be creatures of habit. If it's mostly working, why change it? That was the case for Chowdhary. Along with English, she also teaches media, and she'd get good ratings year in and year out, "so I never really thought about changing my style of teaching."

Visible Learning<sup>plus</sup> asks educators, however, to examine their own instructional practices, in order to understand the impact they're making on their students' learning. That means getting feedback from students too—giving them a voice.

"Students are going to be very honest—sometimes brutally honest," admits Chowdhary. "And they're the ones who see you day in and day out. But there's no point you talking at them for a whole lesson if they're not really taking anything in. Whereas if you ask them, 'Could I have made this better? How could I have made this easier for you?' they give you some really good responses."

That was an eye-opener for her. For example, with Year 11 students—those who are preparing to take their college entrance exams—a typical teacher response might be to try to cram as much as possible into the lessons. Now she advises slowing down and having a conversation with the class. You might find out, she explains, that they haven't understood a particular poem from a previous lesson. "Rather than rushing onto the next poem we have to cover, I'll say, 'OK, we have to spend the next 10 minutes of the next lesson going back over this poem to make sure you're really clear.'"

“People often teach to the middle, but they have to teach to every person in the class as often as possible.”



The Primary school uses a colour system when marking up student work: “Green to grow” means the student has understood, and “Pink to think” means something needs to be rethought. One teacher is trialing a sticky-note pink/green colour scheme for feedback from her students. If a student wants to give “constructive criticism,” says Davies, they write it on a pink slip and place it on her feedback wall. For example, she recalls, one student wrote, “You speak so fast, I find it a little bit hard to understand sometimes.” In a school of English-as-a-second-language learners, that was an important message. The teacher’s response: “Right, I’ve had a really lovely piece of constructive feedback. So, I’m going to try to speak more slowly, and I want you to let me know if it helps.” The response was a passel of green sticky notes: “Fantastic.” “It has really helped me understand.” “I’ve got it now.” As Davies explains, “That is the kind of feedback we need. The teacher has learned from that.”

Elsewhere, a Teaching Assistant gave her students a signal they could use to alert her to the fact that she was speaking too quickly. As Davies notes, “That was visible learning in practice.”

## Committing to Professional Development

Staff buy-in has been the biggest challenge at Al Yasmina, according to Davies. “Change can be difficult. But the established strategies “might be working with some students, but probably not for all. People often teach to the middle, but they have to teach to every person in the class as often as possible.”

The Academy has committed to ample professional development time to ensure that staff could get together to talk over their progress, discoveries and problems. Training takes place at the start of each term. When teachers are doing their impact cycles—those eight- or 10-week periods of trying something new to measure its effect on student success—scheduled “checkpoints” every two or three weeks

bring teams together to share results. Then, at the end of the academic year, in June or July, the whole school dedicates time for training days, in which mixed groups of educators sit together and share what they’ve learned. Then, during an induction week at the end of August, the Academy dedicates a four-day period to focusing on training specific to Visible Learning<sup>plus</sup>.

During this process, says Davies, it has been important to revisit what has already been covered. Even though it may seem that everybody understands the “language of learning” or the “characteristics of a visible learner,” in reality, when they revisit those basics, they come at it with new perspective.

## Measuring the Outcomes

Measuring the impact of the instructional changes is an important part of Visible Learning<sup>plus</sup>. Without that, there’s no understanding the “effect size” of the change. That can be done in any number of ways, as long as it’s quantitative and based on evidence.

At Al Yasmina surveys are a popular format for understanding the change. As an example, says Kellett, the Secondary school sought input on feedback and how well students thought the work was progressing on that. What the teachers learned was that they “were very good at giving written feedback, but the use of verbal feedback wasn’t as good as it could have been.” So, teachers will get more training on effective strategies for the use of feedback and the impact cycle will begin all over again at the start of the new school year.

Sometimes the findings don’t go the way you might expect. Before their training had really taken hold, staff were surveyed about the concept of mindframes to gauge the level of understanding. A year later, staff took the same survey and the results “actually got worse,” Kellett recalls. “We were really shocked, thinking that shouldn’t have happened.” When a Corwin consultant came on site for follow-up training, the leadership team expressed its disbelief at the survey results, but she wasn’t surprised at all. The trainer’s explanation: “When you start Visible Learning, people think they know what it means, so

they answer on the positive. Then when they read about Visible Learning<sup>plus</sup> and find out what it really is, they grade themselves lower because they realize they didn't understand it as well as they thought they did."

Besides that 90-plus percent progress across every single school year in the Primary school and those higher-than-ever exam results for Secondary, an annual inspection completed on international schools in the Emirates every year shifted many of Al Yasmina Academy's ratings upward. In the category of "Teaching & Learning," specifically, the school's focus on the use of research to develop quality teaching and quality learning generated an "outstanding" assessment.

"I can't put hand on heart and say we owe that to Visible Learning<sup>plus</sup>; but I think a lot of it has come down to having this different attitude to learning and putting more onus on the children," says Davies. "It's a great reason to do less 'chalk and talk' and more student-led learning. That's the key."

Visible Learning<sup>plus</sup>, says Kellett, has "created a much clearer learning culture within the school. It's not just about attainment. It's about progress. And there is no ceiling to what anybody in this Academy can do."

## Lessons Learned

**Let teachers work as groups.** The Academy has five teachers for each year's group and several classroom assistants, and they may choose to work together on a particular strategy, but then share with each other the variations they've tried within their own classrooms and the impacts they've seen.

**Be patient and give staff time.** When Al Yasmina hosted its first foundation day, the external consultant advised the leadership team to do nothing more at that point. The idea: to allow teachers to read about Visible Learning<sup>plus</sup> without having to change anything in the classroom. Then, when the consultant returned in January, the educators had had time to think ahead and were ready to begin making changes in their practices. "It really is a three- or four-year journey," explains Acting Co-principal Kate Davies.

**On the other hand, also set expectations.** Al Yasmina's professional development efforts include "checkpoints." A recent one required presentations of action research, "to give a purpose and an audience to the research," says Davies.

**Learn to love research.** Teachers need to know what the research says before implementing a strategy and then to monitor the impact it has. "I think people think, this is right and that is wrong. That's not what it's about," says Assistant Principal Jennie Kellett. "If it's not having the impact you want, then you may want to tweak it. It's about trying different things and seeing what works—and what works for one student doesn't necessarily work for another."

**Drip-feed information to parents.** When the Academy held an event to introduce families to Visible Learning, out of a school of 1,700 students, 10 parents showed up. So, the school decided to "drip feed" information to them "through everything we do," says Kellett. That means the language in letters, social media and any other communications reinforces the Visible Learning journey. "We talk about learners and their learning to encourage them to talk to their children in the same language."





# What does it take to create schools where all students are learning—not by chance, but by design?

Professional learning is successful if—and only if—it has a measurable impact on student learning. **Corwin's Visible Learning<sup>plus</sup> School Impact Process** approaches professional learning with a focus on evidence-based practices and implementation support for long-term success for all learners.



## Understand what works

Build a common understanding and language of learning across school around what works (and what doesn't) to accelerate learning and monitor progress.

## Collect and analyze your evidence

Understand where you are now in implementing high-impact practices so you can chart where you want to go and how to get there.



## Develop your PD plan with experts

Bring in the leading minds to help you formulate a PD plan for long-term, measurable growth and collaboration amongst team members.



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