



**Education Perfect**

Make a difference



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# Empowering and effective

How digital learning can support every learner to achieve their potential





Solving Linear Equations

Monitor Report

Message All Export table as csv

NAME	COMPLETION	ACCURACY	TIME	INFORMATION Optional	SKILLS
orce	82%	95%	8 min		
msworth	100%	56%	46 min		
eaving	100%	54%	32 min		
tyrne	100%	68%	31 min	Boze has mastered this optional section! Answers: ✓ 4	
Ledger	100%	83%	30 min		

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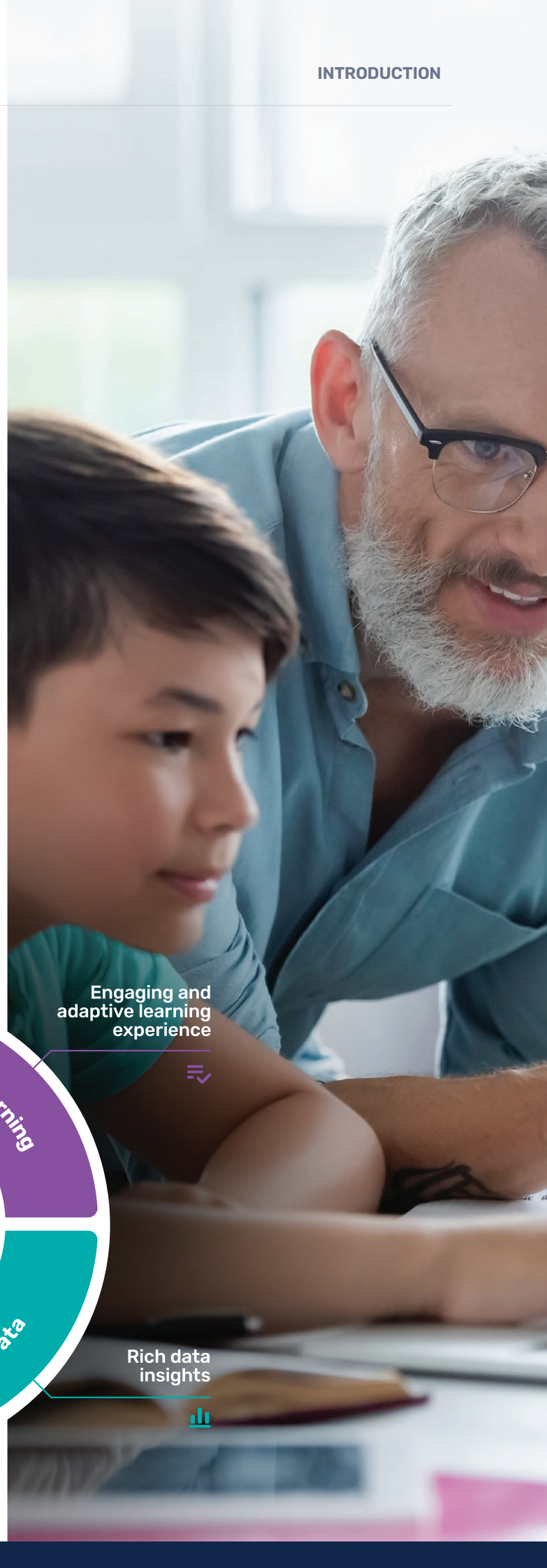
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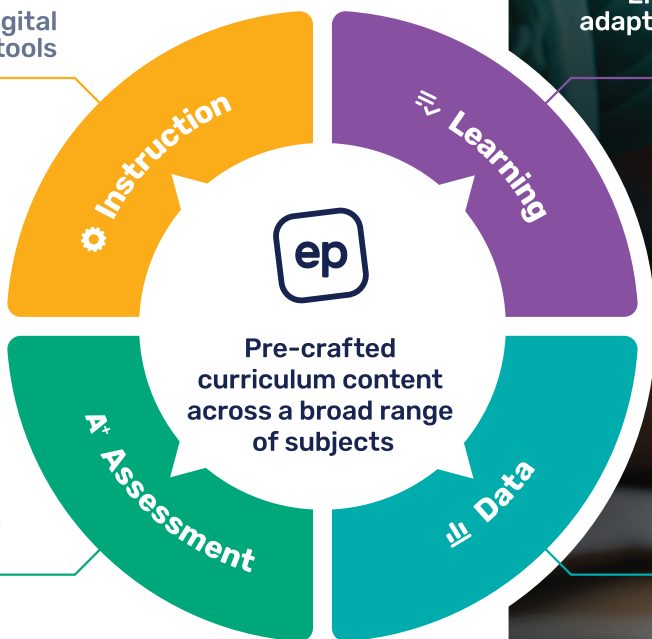
# Introduction

The education landscape has irrevocably changed for the better with the integration of digital learning tools into everyday instructional learning design. Teachers have discovered new pedagogical methods and are constantly developing their professional practice to integrate the most effective tools within their classrooms and make a difference in student outcomes.

Education Perfect (EP) is a leading digital learning platform with product and learning design drawn from evidence-based research into best practice and a user experience informed by teacher and student feedback. EP offers a comprehensive toolkit across a broad range of subjects, including pre-crafted curriculum content, extensive digital instruction tools, an engaging and adaptive learning experience, intelligent assessment tools, and rich data insights.



Extensive digital instruction tools



Engaging and adaptive learning experience



Intelligent assessment tools

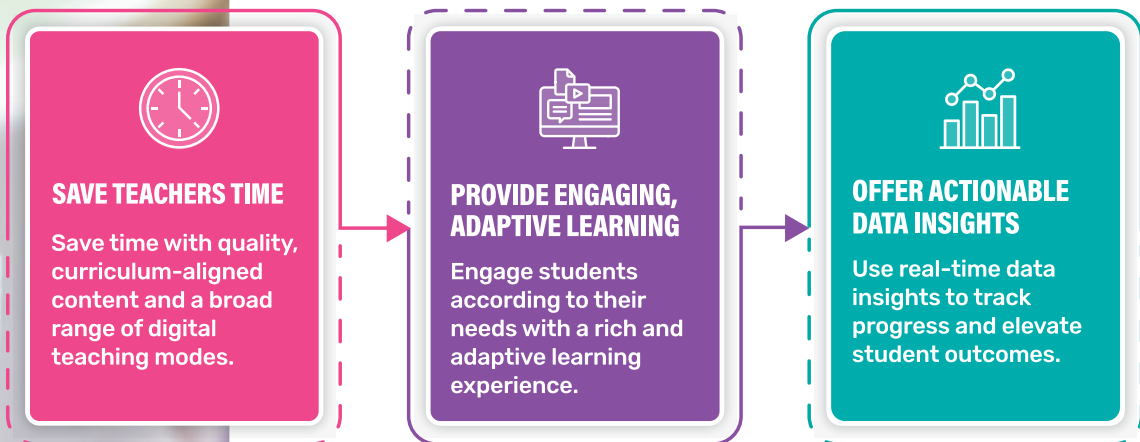


Rich data insights





We put our users first and have designed the platform for teachers and students alike, providing an engaging and effective learning experience that allows teachers to track and monitor student outcomes and have a measurable impact on student learning, progress, and achievement.



We believe in evidence-based research, quantifiable data, and product design based on lived classroom experience and the latest educational research. Bloom, Rosenshine, Black and Wiliam, and Means et al. are renowned researchers whose work significantly influences our approach to creating a world-class online educational experience. This includes reviewing a meta-analysis of the effect size of interventions in the classroom and online learning practices. The following report provides an overview of our research base and how we have integrated the most effective strategies for teaching and learning into our platform.

To further reinforce the efficacy of Education Perfect, **Johns Hopkins University Center for Research and Reform in Education** has conducted an independent review of our research base.

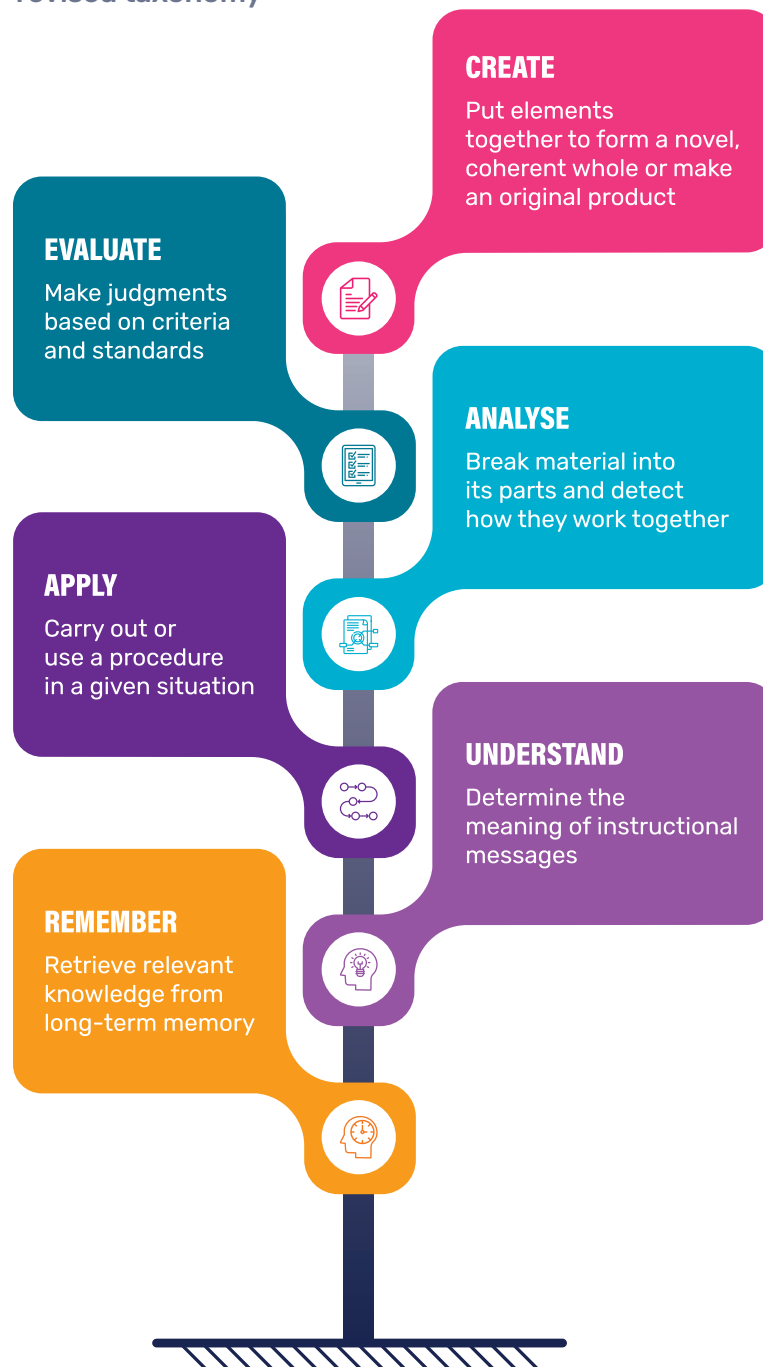
[Read their report here.](#)



# Bloom's Taxonomy

Bloom's Taxonomy guides the instructional design of EP's learning material. Using this framework, EP can create a learning design that understands the difference between knowledge and skills and develops both in a complementary manner.

The six levels of Bloom's revised taxonomy



EP lessons are carefully scaffolded to present new information in small chunks and ask questions to ensure concepts are understood before progressing. The 2001 revision<sup>1</sup> to Bloom et al’s original 1956 work<sup>2</sup> guides the general sequencing of EP lessons. Students work through activities that ask them to remember and understand, move on to application and analysis activities, and conclude with tasks that challenge their evaluative thinking and creative skills.

Small, carefully scaffolded chunks

[Placeholder]


[Placeholder]

Read the sentence below and use your knowledge on **particles and changing states** to answer the questions.

As the bonds between particles are broken, the substance begins to turn from a solid into a liquid. While the state change is occurring, the temperature of the substance does not increase.

The name of this process is...

This is because...



🕒 **Changing States**

---

📖 **Remembering Changing States**

---

✍️ **Applying: Changing States**

Questioning to ensure understanding

Integrating the revised taxonomy has allowed for the distinction between the types of knowledge used in cognition and allows teachers to plan and deliver appropriate instruction that is based on clear learning goals. As students progress through the cognitive processes, their ability can be assessed and tracked as they move on to the next stage. The important delineation between factual, conceptual, procedural, and metacognitive knowledge is used both within lessons themselves, and within overall lesson sequencing, to ensure that students are logically progressing through the skills.






1 Anderson, Lorin W. and David R Krathwohl. "A Revision of Bloom's Taxonomy: An Overview - University of Kentucky." Accessed September 14, 2022. <https://www.uky.edu/~rsand1/china2018/texts/Krathwohl%20-%20Blooms%20Taxonomy%20Revised.pdf>

2 BLOOM, Benjamin Samuel. Taxonomy of Educational Objectives, Etc. Edited by B.S. Bloom and Others. New York: Longmans, Green & Co, 1956.





# Principles of Instruction

Rosenshine's Principles of Instruction strongly influence the learning, practice, and revision functionality within EP. Tom Sherrington's summary<sup>3</sup> of Rosenshine's principles<sup>4</sup> provides a clear blueprint for the core teaching and learning experiences in EP.

		
Present new material using small steps	Provide models	Provide scaffolds for difficult tasks

## 1. Sequencing concepts and modelling

Lessons are broken into small chunks, with text-based instructional material supported by images, videos, and worked examples.

	
Ask questions	Check for student understanding

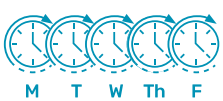

## 2. Questioning

Frequent checks for understanding are interspersed with instructional material, ensuring students grasp the material before introducing additional information or difficulty.

		
Guide student practice	Obtain a high success rate	Independent practice

## 3. Stages of practice

Every question has a model answer, and where possible, answers are automatically marked. Mistakes and misconceptions are uncovered immediately, and students progress only once mastery of a set of questions has been achieved.

	
Daily review	Weekly and monthly review

## 4. Reviewing material

The Dash revision game is unlocked once a lesson is completed and provides a gamified review of the material. Further Dash rewards are unlocked in a spaced manner in subsequent days and weeks, providing a pathway to ensure mastery is achieved.

The repetition inherent in Rosenshine's model works seamlessly with EP. Each lesson adapts to the student's answers and suggests an individual pathway based on areas of weakness. This presents new material integrated with familiar concepts, ensures differentiation, and guides students towards a higher level of success.

3 Sherrington, Tom. Rosenshine's Principles in Action. Suffolk: John Catt Educational Ltd, 2019.

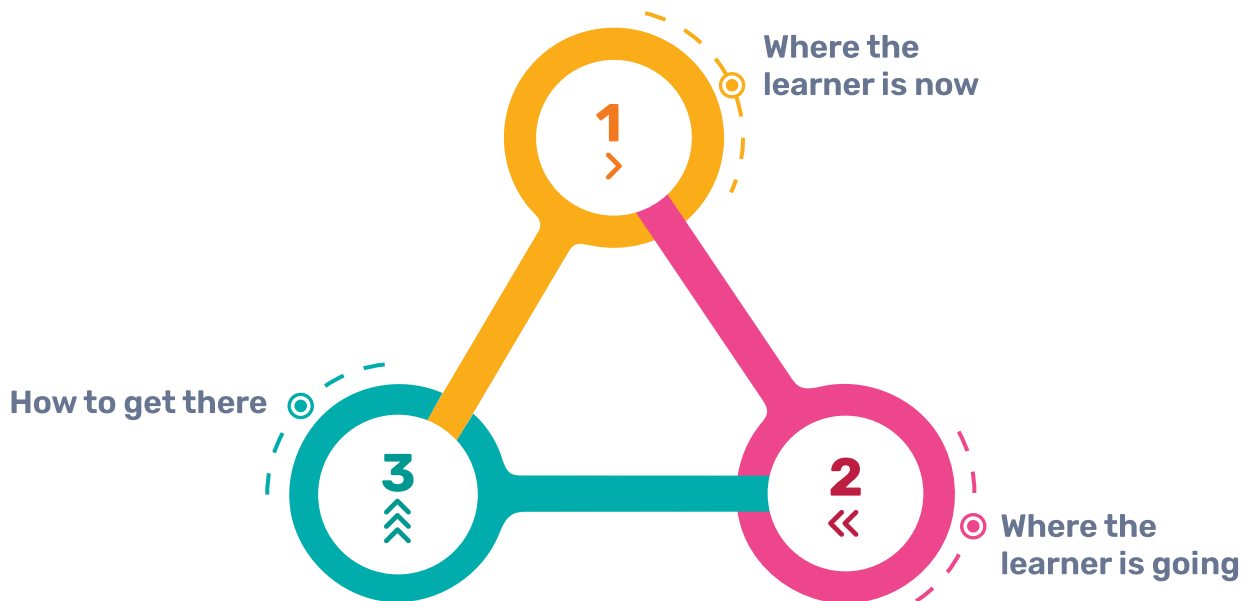
4 Principles of Instruction; Educational Practices Series; Vol.:21; 2010.\* Accessed September 16, 2022. [http://www.ibe.unesco.org/fileadmin/user\\_upload/Publications/Educational\\_Practices/EdPractices\\_21.pdf](http://www.ibe.unesco.org/fileadmin/user_upload/Publications/Educational_Practices/EdPractices_21.pdf)





# Assessment for Learning

Black and Wiliam's work on the power of formative assessment is a key driver for EP's feedback and assessment tools that provide actionable data insights.



Black and Wiliam's Inside the Black Box<sup>5</sup> article, based on their original 1998 paper<sup>6</sup> provides clear evidence and tangible methods for harnessing the power of formative feedback in raising student achievement. EP provides extensive feedback functionality, and the platform offers;

- Auto-marking and model answers
- Written and verbal teacher feedback
- Peer review
- Formative assessment quizzes
- Recommended next learning steps

Reading Black and Wiliam alongside Hattie, a clear rationale for the focus on formative assessment and constant feedback is provided. EP's core functionality is grounded in an understanding of these methodologies, and the awareness that effective learning design must offer not only the knowledge itself, but a clear way to measure learning, progress, and achievement against a benchmark.

5 Black, Paul, and Dylan Wiliam. "Inside the Black Box: Raising Standards through Classroom Assessment." *Phi Delta Kappan* 92, no. 1 (2010): 81–90. <https://doi.org/10.1177/003172171009200119>

6 Black, Paul, and Dylan Wiliam. "Assessment and Classroom Learning." *Assessment in Education: Principles, Policy & Practice* 5, no. 1 (1998): 7–74. <https://doi.org/10.1080/0969595980050102>



# Core functionality and Hattie's Visible Learning

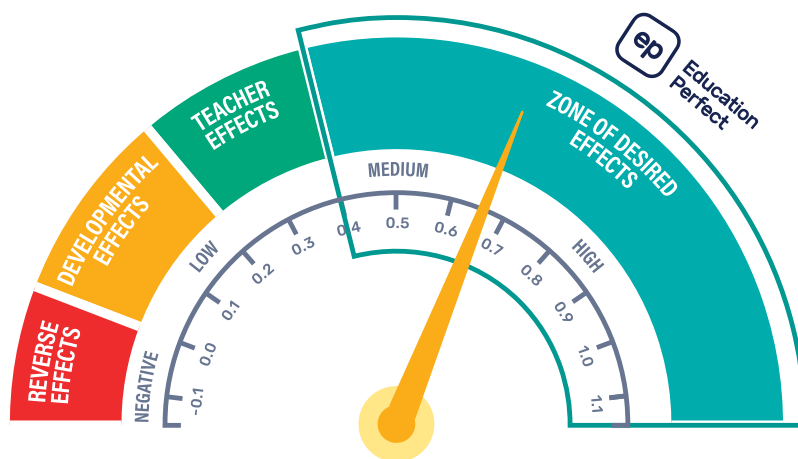
EP is a platform that is intentionally designed to leverage a range of proven pedagogical approaches that improve student outcomes. This multifaceted approach includes presenting engaging and adaptive resources to students alongside actionable data insights that create a solid basis for formative assessment.

This table presents our eight impact areas alongside the relevant Hattie factors and effect sizes.

EP name	Relevant Hattie name	Effect size
Explicit instruction	<a href="#">Explicit teaching strategies</a>	0.57
Differentiation	<a href="#">Differentiation</a>	0.46
Adaptive practice	<a href="#">Deliberate practice</a>	0.79
Gamification	N/A	-
Timely and specific feedback	<a href="#">Feedback</a>	0.62
Mastery-based progression	<a href="#">Mastery learning</a>	0.61
Formative assessment	<a href="#">Teacher estimates of achievement</a>	1.46
Spaced repetition	<a href="#">Spaced vs. mass practice</a>	0.65

John Hattie's seminal work *Visible Learning*<sup>7</sup> presents a large-scale meta-analysis of over 100,000 studies in education and identifies which factors have the greatest effect on improving learning. Hattie's meta-analysis resulted in observable and measurable interventions that could be ranked according to their 'effect size', a quantifiable way to measure the impact of each approach on student outcomes.

EP's learner experience is designed to consider this research and offers a way to consistently, feasibly, and effectively improve learning across these eight areas.



Effect sizes greater than 0.4 accelerate student learning

7 Hattie, John. *Visible Learning for Teachers: Maximizing Impact on Learning*. London: Routledge, 2019.

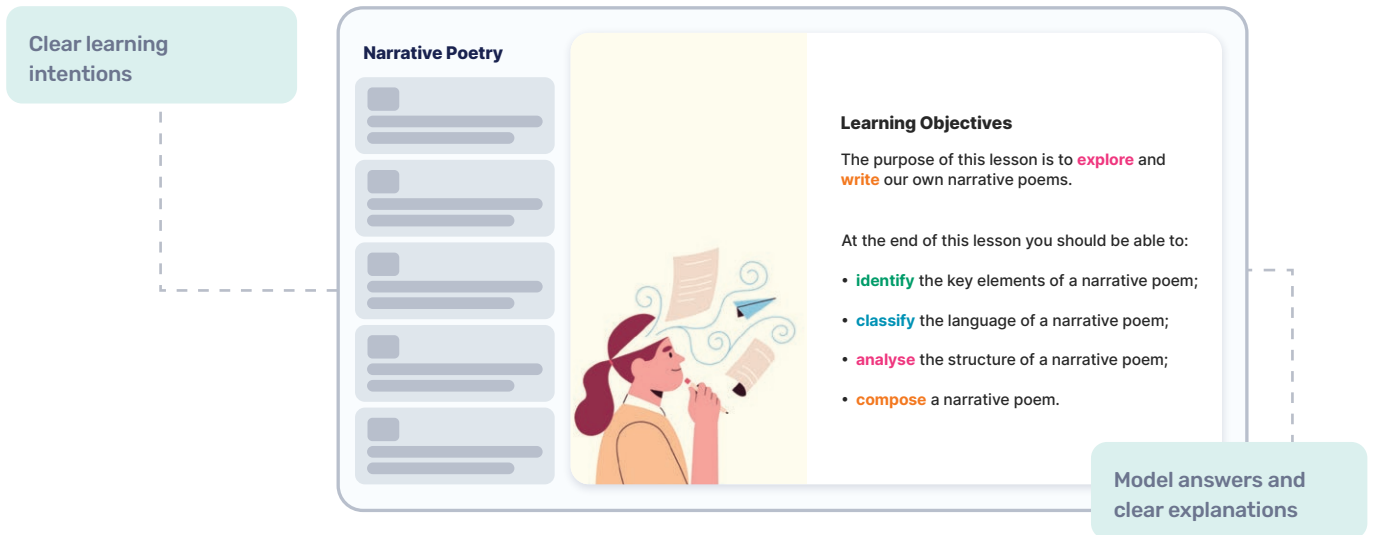


# 1

## Explicit instruction

Archer and Hughes’ work on explicit instruction describes a style of learning that is engaging, systemic, direct, and intended to be both practical and easy to implement. They define explicit instruction as being:

*[C]haracterised by a series of supports or scaffolds, whereby students are guided through the learning process with clear statements about the purpose and rationale for learning the new skill, clear explanations and demonstrations of the instructional target, and supported practice with feedback until independent mastery has been achieved.<sup>8</sup>*



EP lessons begin with a clear introduction and learning intentions to make clear to students what they will be learning and what they are expected to know by the end. New information is presented in small chunks, with supporting images, audio or videos to ensure it is presented using multiple representations. Worked examples are used extensively and are followed by carefully scaffolded questions for students to complete that are automatically graded and presented with model answers and clear explanations.

Once a set of information and questions has been mastered, new material is introduced and the process is repeated, with careful interleaving of information, examples, questioning and feedback throughout the lesson. By the end of a lesson, a student has progressed from carefully guided questioning to independent practice and the opportunity to apply their new knowledge and skills to extended thinking tasks. Finally, lessons conclude with a review of what has been learned and a recap of the original learning intentions.

8 Archer, Anita L., and Charles A. Hughes. *Explicit Instruction: Effective and Efficient Teaching*. New York: Guilford Press, 2011.



## 2

## Differentiation

In any given classroom, “[t]he variation in students’ current attainment levels is often large, [and] this can require teachers to teach across five or more curriculum grade levels in a single classroom.”<sup>9</sup> The requirement to differentiate to such an extent places a huge demand on teachers’ time to plan, implement, and evaluate the efficacy of different programmes and differentiation strategies.

The clear message from educators is that they struggle to have enough time to appropriately tailor resources to meet the diverse needs of their students and to ensure those students are engaged and appropriately challenged. This is supported by a 2021 survey by the Grattan Institute that found that 92% of teachers ‘always’ or ‘frequently’ do not have enough time to prepare for effective teaching.<sup>10</sup> Resource preparation and differentiation enablement are some of the most significant areas where EP can save teachers time by providing a personalised learning resource that caters to each student.

EP provides several efficient methods for targeting learning material to individual student needs. Teachers can assign lessons to different groups or individuals within a class and can easily assign specific sections of lessons to target specific skills or difficulty levels better. Teachers can also customise resources or create their own using EP’s integrated content editing features, providing further tailoring to meet the unique needs of their students. An additional benefit for students is that by all using the same platform, those achieving at lower levels do not feel self-conscious and are able to learn at a more rapid rate.

Easy customisation  
of EP resources

The screenshot displays the EP content editor interface. At the top, there's a navigation bar with 'Back', a clock icon, the title 'Spanish vocabulary - classroom objects', and buttons for 'Discard changes' and 'Save Slide'. Below this is a 'Classroom Vocabulary' slide. On the left, a 'Components' sidebar is open, showing 'Information & Media' options: Text, Image, Video, Annotated text, Audio, PDF, Embed, and YouTube, along with a 'ClickView' button. The main slide area contains a text box with the instruction: 'In the classroom image below you will learn the Spanish vocabulary for different object. Click on the tags to hear the pronunciation of each word.' Below the text is an image of a classroom with a whiteboard and desks. A 'ClickView' button is overlaid on the image. A callout box on the right says 'Assign specific sections or to individuals'.

<sup>9</sup> Hunter, Jordanna, Julia Sonnemann, and Rebecca Joiner. “Making Time for Great Teaching: How Better Government Policy Can Help - Grattan Institute Report.” Grattan Institute, February 15, 2022. <https://grattan.edu.au/report/making-time-for-great-teaching-how-better-government-policy-can-help/>

<sup>10</sup> *ibid.*



In addition to tailoring and targeting learning material, teachers can use EP's assessment functionality to identify student strengths and weaknesses, and automatically generate recommended next steps to create a unique learning pathway for each student. This is explored further in the formative assessment section later in this document.

# 3

## Adaptive practice

Students need extensive, successful, independent practice for skills and knowledge to become automatic. The optimal success rate for this practice is about 80%.<sup>11</sup> Repetition gets results.

EP lessons include many questions, initially simple recall and comprehension of newly presented material through scaffolded practice and extensive independent practice. These are adaptive to student responses, with automatic grading where possible, clear model answers and repetition with dynamic question variants until a student has demonstrated mastery.

Further revision is enabled through EP's Quiz tool, delivering targeted practice questions that are responsive to student answers without the surrounding instructional material. This functionality can be used to allow sufficient practice for students to build confidence and fluency in the target topic.

Question accuracy levels are fine-tuned during lesson design and testing. As part of our ongoing quality control processes, we identify, assess and amend any that are outside the desired accuracy bounds.

The diagram illustrates the adaptive practice process. On the left, a box labeled "Extensive scaffolded and independent practice" points to a series of question cards. The first card is highlighted with a purple icon and the text "Expanding with more terms". The main part of the diagram shows a question interface for "Expand and simplify this expression:  $4(x-5)$ ". It compares "Our working" and "Your working".

Our working	Your working	Result
$4(x-5) = 4 \times x - 4 \times 5$	$4 \times x + 4 \times -5$	✓
$4(x-5) = 4x - 20$	$4x + 20$	✗

Below the table, an "Explanation:" states: "To expand we multiply everything inside the brackets by the number on the outside. We keep the signs the same. We are taking away 4 lots of 5." It also includes a reminder: "Remember to simplify by carrying out these multiplications:" followed by the correct steps:  $4(x-5) = 4 \times x - 4 \times 5 = 4x - 20$ .

On the right, a box labeled "Automatic grading and model answers" points to the interface.

<sup>11</sup> Rosenshine, Barak. "Principles of Instruction." American Federation of Teachers, September 10, 2020. <https://www.aft.org/periodical/american-educator/spring-2012/principles-instruction>

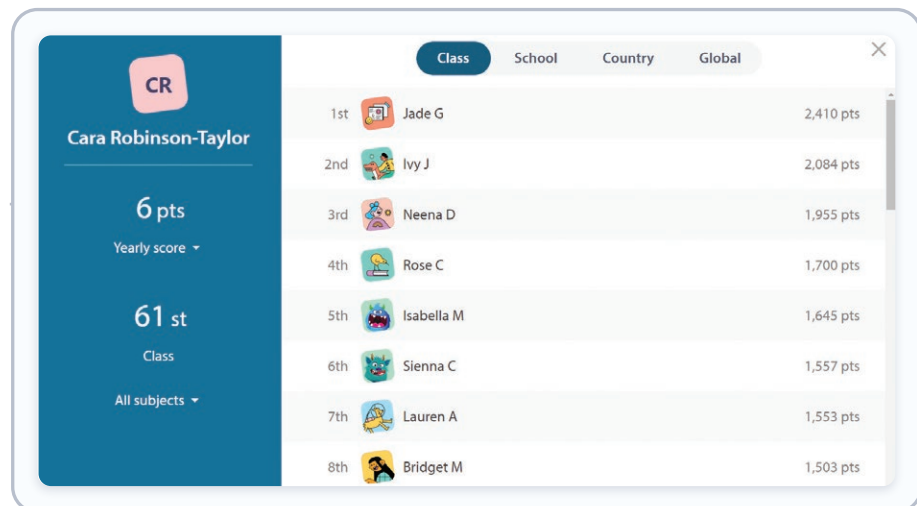


## 4

## Gamification

Students learn differently, according to their disposition, preference, and pre-existing knowledge. Gamification is a methodology that offers the ability to optimise student learning and provide repetition in an engaging environment. Smiderle et al's research into the effect of gamification on students showed a "significant improvement in the accuracy of students with personality traits of low agreeableness, low openness, and introverts".<sup>12</sup> This suggests that in a classroom setting, those students who are least likely to engage with group work, or direct instruction, will gain a significant benefit from gamification elements in their education.

Points system to promote engagement



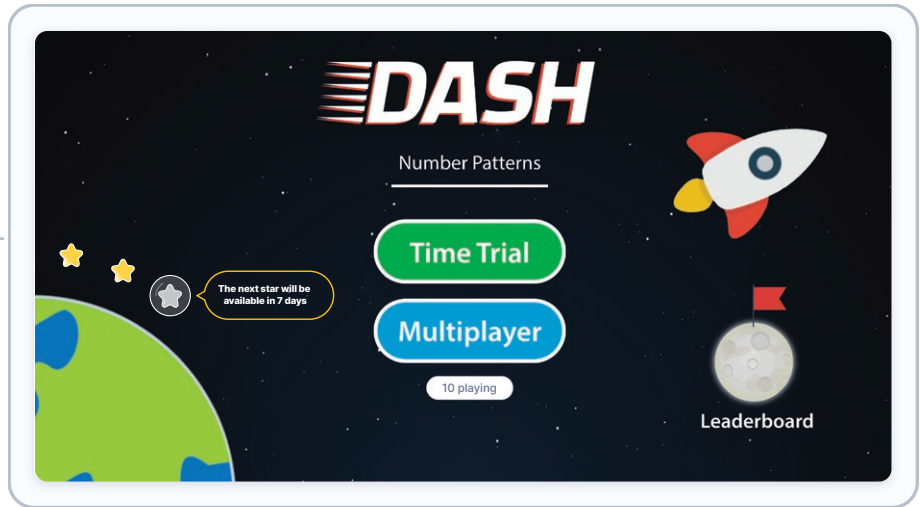
EP has a variety of gamification elements that are designed to enhance student engagement and persistence. Every question answered correctly earns students a point, contributing to their annual score and placing them on a scoreboard alongside their classmates and school. These points are directly tied to effort rather than performance, giving students of all ability levels a chance to engage actively. The points system is further utilised in annual competitions for each subject, where students compete with other students worldwide to earn certificates, badges and other prizes.



<sup>12</sup> Rodrigo Smiderle et al., "The Impact of Gamification on Students' Learning, Engagement and Behavior Based on Their Personality Traits," *Smart Learning Environments* 7, no. 1 (September 2020), <https://doi.org/10.1186/s40561-019-0098-x>



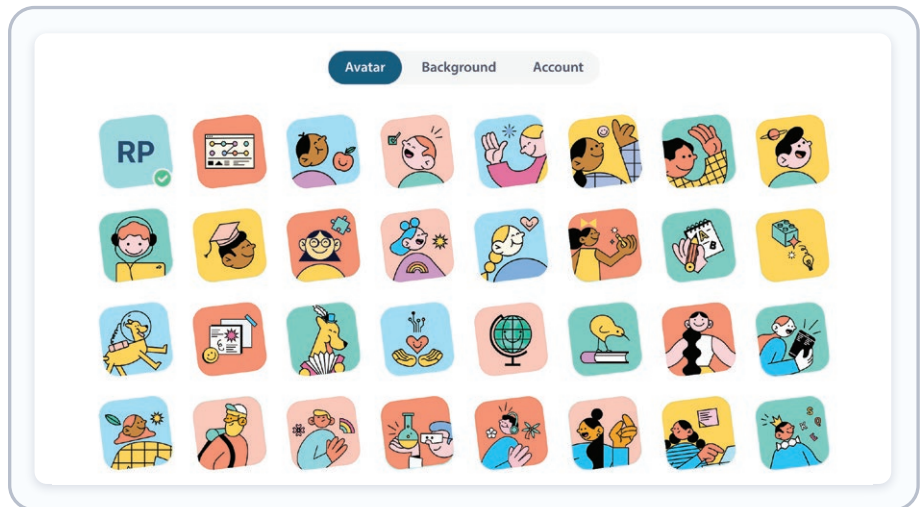
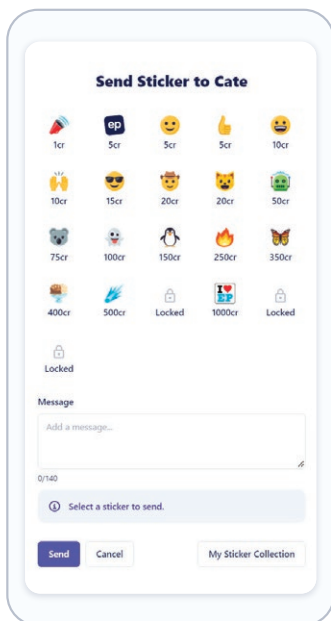
Fast-paced review of lesson material



The Dash game is unlocked once a lesson is completed and provides a fast-paced, competitive review of the material in the lesson. This harnesses a number of gamified elements including peer competition, time-trials, high scores and leaderboards. A balance of speed and accuracy are rewarded, leading to both an engaging but also highly effective tool for consolidating learning.

Students can earn a range of stickers of varying rarity by completing EP lessons. These stickers can be collected in their sticker collection and sent to other students as encouragement. Teachers can award additional stickers to students to reward or motivate reasonable effort.

In addition to the points, Dash and stickers features, EP utilises engaging avatars and backgrounds to enable students to personalise their learning experience.



Stickers, avatars and backgrounds



# 5

## Timely and specific feedback

Hattie's research has empirically demonstrated that feedback is one of the most powerful tools available to educators. However, to be effective, it must be both specific, and timely. William's research demonstrated significantly higher results were observed when students received feedback with notes rather than a simple numeric mark.<sup>13</sup> This feedback needs to be close enough to the task to be relevant and applicable, but not instant so that failure, and thus learning, does not occur.

The EP platform provides ongoing and actionable feedback to students in various ways. As students progress through a lesson, many questions are automatically graded with model answers provided, allowing for continuous feedback as they move through the learning. This ensures students progress to mastery at a pace and level of guidance that suits each individual.

Example answers and grading criteria

The screenshot displays a user interface for providing feedback. On the left, a text box contains a 'Student Answer' about Santa Fe's liveability, with key terms like 'culture', 'social', 'history', and 'festivals' highlighted. Below it is an 'Example Model Answer' and a list of 'Keywords' (culture, social, festivals, history, traditional) each with a green checkmark. On the right, a 'Leave your feedback' form includes a text input field, a star rating (4 stars), a 'Start recording' button, and checkboxes for 'Require submission' and 'Go to next question'. A 'Send feedback' button is also present. Below the form, a feedback entry from 'Nicole Kidman Teacher' is shown with a timestamp and a 5-star rating.

Multi-modal teacher feedback

Lessons also contain extended response questions that require more involved student answers and which are not automatically marked. Example answers and grading criteria are provided, and students self-review their responses and can improve on them. Teachers can view and provide feedback on these extended response questions via text or recorded verbal feedback. Additionally, these feedback features are available for use in peer review, an anonymous, teacher-mediated student-to-student feedback tool.

13 William, Dylan. Embedded Formative Assessment. Bloomington, IN: Solution Tree Press, 2018.





# 6

## Mastery-based progression

Bloom’s work is both inspirational and aspirational. Teachers can be assured that providing specificity of both the desired learning outcome, and the methodology for reaching that outcome, will result in student learning. Bloom determined that;

*Most students (perhaps over 90 per cent) can master what we teach. Our basic instructional task is to define what we mean by mastery of a subject and to discover methods and materials to help the largest proportion of our students reach it.<sup>14</sup>*

EP lessons are carefully scaffolded, chunked and paced to allow all students to experience success. Instructional material is interwoven with questioning, with students provided with instant and targeted feedback. If a student answers incorrectly, then the question and feedback cycle continues until mastery is established.

Supporting this focus on mastery, completing an EP lesson requires a student to answer every question correctly eventually. Alongside the student completion measures, our learning analytics monitors time spent and records student responses, including specific errors or areas of difficulty. This enables the teacher to provide targeted support to students that need it, further enabling mastery of the learning material by every student.

Feedback and repetition until mastery achieved

**Solving Linear Equations**

Monitor Report

**Students' Progress** Message All Export table as csv

FIRST NAME	LAST NAME	COMPLETION	ACCURACY	TIME	INFORMATION <small>Optional</small>	SKILLS
Guy	Pearce	82% <span>🕒</span>	95%	8 min	<div style="width: 82%;"></div>	<div style="width: 95%;"></div>
Luke	Hemsworth	100%	56%	46 min	<div style="width: 100%;"></div>	<div style="width: 56%;"></div>
Hugo	Weaving	100%	54%	32 min	<div style="width: 100%;"></div>	<div style="width: 54%;"></div>
Rose	Byrne	100%	68%	31 min	Rose has mastered this optional section! Answers: <span style="color: green;">✔</span> 4	<div style="width: 68%;"></div>
Heath	Ledger	100%	83%	30 min	<div style="width: 100%;"></div>	<div style="width: 83%;"></div>

Real-time learning analytics

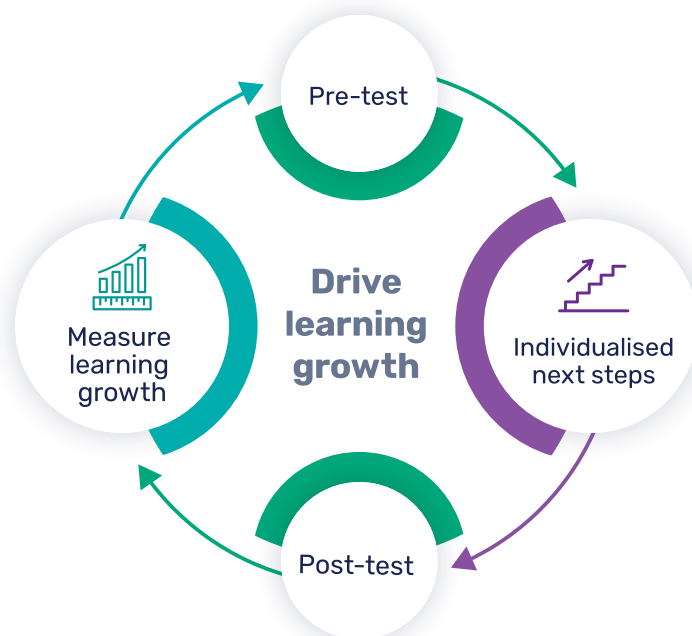
<sup>14</sup> Bloom, B. S. (1971). Mastery learning. In J. H. Block (Ed.), *Mastery learning: Theory and practice* (pp. 47–63). New York: Holt, Rinehart and Winston



## 7

## Formative assessment

The word 'assessment' is often synonymous with testing, with qualifications, and with formal structures that seek to measure student learning progression. However, as teachers are well aware, some of the most powerful and 'significant learning gains'<sup>15</sup> are found within the realms of formative assessment, the day-to-day effective classroom practice that can take many forms including learning conversations, exit slips, peer review activities, student self-reflection, checks for understanding, and quick quizzes. It is the regularity and frequency of formative assessment that makes it so powerful.



Black and Wiliam's work on this notes that '...[t]he gains in achievement appear to be quite considerable ... amongst the largest ever reported for educational interventions.'<sup>16</sup> EP offers teachers another method of formative assessment that is sustainable, regular, and helps to guide their informed understanding of student learning, progression, and achievement.

<sup>15</sup> Black, Paul, and Dylan Wiliam. "Assessment and Classroom Learning." *Assessment in Education: Principles, Policy & Practice* 5, no. 1 (1998): 7-74. <https://doi.org/10.1080/0969595980050102>

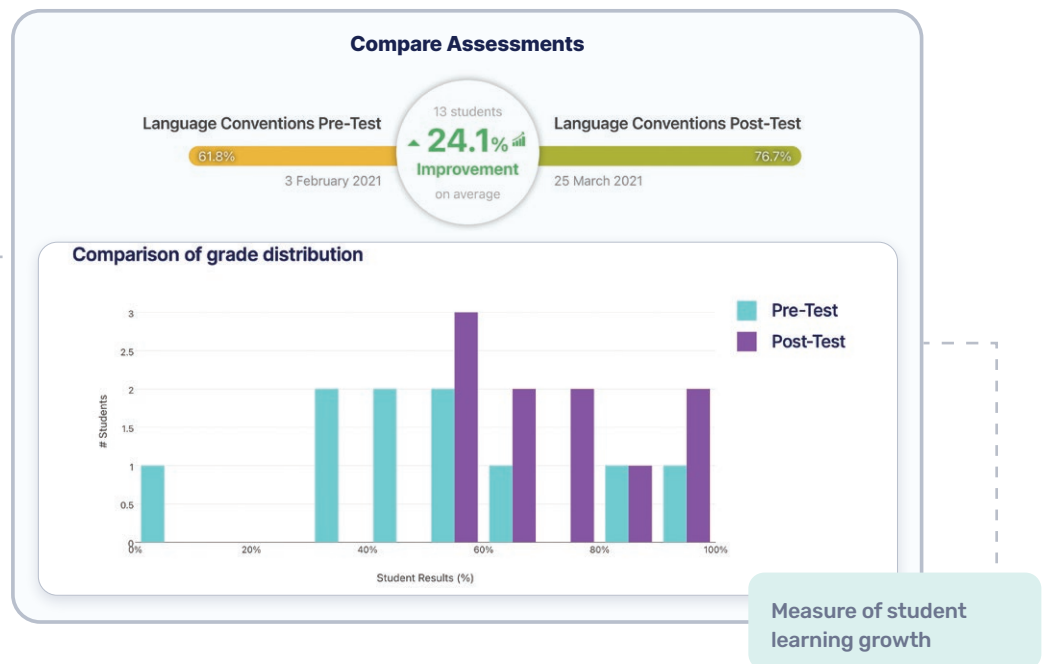
<sup>16</sup> *ibid.*



In addition to the various methods of formative feedback already mentioned in this document, EP has an explicit formative assessment cycle that helps to drive student learning growth.<sup>17</sup> This involves:

- **Pre-testing to diagnose the current knowledge of each student.**
- **Automated and individualised next steps for each learner, based on their pre-test results.**
- **Post-task testing to gain an updated measure of student knowledge.**
- **Analysis and actionable insights into student learning growth based on progression between pre and post-task tests.**

Individualised next steps



These assessments can be selected from EP's existing range of assessments, or teachers can quickly create their own using our quiz feature. This allows them to feed in any combination of lessons, with a formative assessment automatically generated based on the lessons inputted. Teachers can clearly see where students are making progress, where gaps in knowledge are being filled, and determine future pathways based on clear and actionable data. This is a huge asset when having learning conversations, and offering personal feedback to individual students. EP integrates seamlessly into classroom instruction and is a valuable tool for teachers.

<sup>17</sup> Black, Paul, and Dylan William. "Inside the Black Box: Raising Standards through Classroom Assessment." *Phi Delta Kappan* 92, no. 1 (2010): 81–90. <https://doi.org/10.1177/003172171009200119>



## 8

## Spaced repetition

Rosenshine's work on spaced repetition reinforces the need for continuous practice to develop not only skills, but also a knowledge base. Knowledge must be continually rehearsed, summarised, accessed, and applied – and that is a process that must take place over time. He argues;

*The more one rehearses and reviews information, the stronger the interconnections between the materials become. The review also helps students develop their new knowledge into patterns, and helps them acquire the ability to recall past learning automatically.<sup>18</sup>*

EP has a range of features that encourage the spaced review of learning material. Points are awarded for each correct answer to lessons, with an additional point per question available at the following intervals:

- One day
- One week
- One month
- Three months
- Six months

In addition to the points system for all learning material, the Dash revision game and our vocabulary and spelling lists have a star-based rewards system, further encouraging students to revisit and revise the material. This helps to build student retention and fluency with the information and skills, providing them with the necessary building blocks for further learning.<sup>19</sup>

Daily, weekly,  
monthly review

The screenshot shows a 'Reading' lesson in 'Learning Mode'. The lesson title is 'Spoken Māori to English Text'. Below the title are options for 'Listening', 'Dictation', 'Writing', and 'Speaking'. The main content is a table with three columns: 'Maori', 'English', and 'Progress'. The table lists various Maori words and phrases with their English translations and progress indicators (green, yellow, or red).

Maori	English	Progress
au	I; me	•
hiakai	hungry	•
hiamoe	sleepy	•
ia	he; she	•
kei te hiakai ia	she is hungry; he is hungry	•
kei te hiamoe au	I am sleepy; I'm sleepy	•
kei te koa au	I am happy; I'm happy	•
kei te koa ia	she is happy; he is happy	•
kei te pai au	I am good; I'm good; I am fine; I'm fine	•
kei te pai ia	he is well; she is well	•
kei te pehea koe?	how are you?	•
kei te pehea to hoa?	how is your friend?; how's your friend?	•
kei te pehea to tungane?	how is your brother?; how's your brother? (of a female)	•

At the bottom of the table, there is a legend for the progress indicators: a green square for 'Learnt!', a yellow square for 'Almost there', and a red square for 'Needs practise'.

<sup>18</sup> "Principles of Instruction; Educational Practices Series; Vol.:21; 2010." Accessed September 16, 2022. [http://www.ibe.unesco.org/fileadmin/user\\_upload/Publications/Educational\\_Practices/EdPractices\\_21.pdf](http://www.ibe.unesco.org/fileadmin/user_upload/Publications/Educational_Practices/EdPractices_21.pdf)

<sup>19</sup> Hood, Nina. "Spaced Practice." THE EDUCATION HUB, November 30, 2019. <https://theeducationhub.org.nz/spaced-practice/>



# Evidence-based practices in online learning

Online learning is one of the greatest revolutions in the history of education, and effective ed-tech allows students and teachers to harness the power of this medium to create better student outcomes. Research conducted by Means<sup>20</sup> et al. for the US Department of Education and Center for Technology in Learning has conducted a meta-analysis of the effects of online instruction. It provides fascinating insights into the benefits of technology when used as a part of a cohesive and planned whole classroom approach.

The research determined that “online learning can be enhanced by giving learners control of their interactions with media and prompting learner reflection.”<sup>21</sup> EP has integrated scaffolding and allows for responsive and self-directed tasks that build on each student’s knowledge and learning journey. The elements discussed in the Assessment for Learning section above confirm and reinforce the nature of this personalised approach.

## The teacher’s role

One of the key concerns that are often articulated is that online learning may replace the teacher, and depersonalise the learning experience. However, the meta-analysis showed that “instruction combining online and face-to-face elements had a larger advantage relative to purely face-to-face instruction than did purely online instruction.”<sup>22</sup> EP is a tool designed by teachers, and for teachers. Providing curriculum-aligned resources enhances the teacher’s efficacy, and the benefits of online learning and direct teaching pedagogies are combined, creating superior outcomes than either alone. Means et al further argue;

*One common conjecture is that learning a complex body of knowledge effectively requires a community of learners (Bransford, Brown and Cocking 1999; Riel and Polin 2004; Schwen and Hara 2004; Vrasidas and Glass 2004) and that online technologies can be used to expand and support such communities. Another conjecture is that asynchronous discourse is inherently self-reflective and therefore more conducive to deep learning than is synchronous discourse (Harlen and Doubler 2004; Hiltz and Goldman 2005; Jaffee et al. 2006).*

The discourse around the enhancement, expansion, and support that online learning offers clearly indicates an enriched learning experience results from blended learning, and supports the inclusion of EP into regular classroom planning.

20 Means, Barbara, Yukie Toyama, Robert Murphy, Marianne Bakia, and Karla Jones. “Evaluation of Evidence-Based Practices in Online Learning.” Accessed September 16, 2022. <https://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf>

21 *ibid.*

22 *ibid.*



# Summary

**In a twenty-first-century world, the most effective teachers benefit hugely from access to the most up-to-date resources – namely, an online platform that seamlessly integrates a blended learning approach and provides evidence-based learning design to support direct instruction pedagogy.**

Education Perfect resources are written by local teachers for local curricula, have been rigorously tested in the classroom, and our experienced instructional design team are constantly reviewing and updating materials to ensure they are relevant and up-to-date. EP is an intuitive online platform that sequences curriculum-aligned resources, integrates a modern approach for assessment to learning, and offers a seamless toolkit for teachers to integrate into their classrooms.

**Our mission is clear; we believe in making a difference.**



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