PRECISION TEACHING IN SCHOOL

A practical guide to its history, evidence and classroom use



Dr Ian Corban
Educational & Child Psychologist

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A practical guide to its history, evidence and classroom use

For teachers, SENCOs and teaching assistants

Dr Ian Corban

Educational & Child Psychologist
HCPC Registered
Associate Fellow of the British Psychological Society

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Introduction

A child reads the practice cards more quickly. Has the teaching worked? Perhaps. We also need to know whether errors have fallen, whether the words remain familiar later and whether reading a sentence has become easier. This book helps school staff move from a score to a useful teaching decision.

It is written for teachers, SENCOs and teaching assistants working mainly in primary schools in England. Start with the two-page session guide, then use the chapters on teaching, measurement and review as you need them. Chapter 11 answers common delivery questions; chapter 12 helps colleagues prepare and check a shared routine. The history and evidence chapters explain the thinking behind the approach. Paper records and the optional app are covered together near the end. Six reproducible sheets support planning, recording, review, error analysis, handover and staff preparation. The six forms can be copied from the back of the book and enlarged to A4. Digital readers also receive an A4 sheet pack; instructions for saving it appear in chapter 10. A glossary explains the technical terms.

What this book equips you to do

You will learn to choose a small curriculum-linked target, teach it explicitly, organise brief practice, record comparable performance and decide what to do next. The worked exchanges show the adult's part in that process. The forms help a teacher and TA agree the plan and review whether it is helping in ordinary lessons.

Precision Teaching has a specific technical tradition: a system of precise measurement and instructional decisions using the Standard Celeration Chart [1]. Frequency building uses timed repetition with performance feedback to build accurate responding. The two are often used together. This book presents a school adaptation informed by those ideas, using ordinary progress graphs. Its worked routines distinguish supported teaching and practice from an independent timed check; they are not identical to every researched frequency-building package. It does not teach the full charting system. Chapter 8 explains the distinction and where to go next.

My background in person-centred counselling shapes how I approach this work. The pupil needs to understand the purpose, feel able to ask for help and have a say in the review. Warmth and humour can make practice an ordinary shared activity. Careful measurement and a respectful relationship can support one another.

Ruby, Sam and all teaching conversations and results are fictional. Their target sets and numerical aims illustrate decisions; they are not norms. The practical routines are teaching examples, rather than research-tested scripts. The research chapter separates published findings from my judgement and explains the limits of the sources consulted. PrecisionTeaching.uk is my own free resource; the studies discussed do not evaluate it.

Dr Ian Corban

1 Your first session

Ruby usually reads five taught words accurately without a timer, but hesitates and sometimes confuses them. Her teacher wants those words to become easier in classroom text. This example shows the TA's part in a short session agreed with the teacher.

Prepare the task

Use the teacher's five cards: the, said, have, like and come. Have a 30-second timer, a tally sheet and a suitable sentence ready. Present one card at a time. Prepare varied orders, showing all five once before beginning another cycle; repeat complete cycles until time ends. The words illustrate Ruby's plan; choose a pupil's actual material from their teaching programme.

This example uses its own scoring convention. Start the response window when the card is fully visible. If Ruby remains silent for three seconds, say "next" and record a timeout. If she begins speaking or sounding out within three seconds, allow up to five seconds from card display to finish the whole word. Sounding out is not itself an incorrect answer. No completed word by that deadline is a timeout.

Score the first completed whole word once. A wrong word remains an error after a self-correction. Move on promptly after that first word. Total errors combine wrong words and timeouts; distinguish them in the notes. Use this same convention for comparable checks.

Explain and teach

TA: "We're helping these words come more easily in your story. We'll practise together, have a short check, then look at what helped. You can ask for a pause."

Ruby reads without timing. On said she says "sad". The TA draws attention to ai representing /e/ in this word, models /s/ /e/ /d/, said, and blends with her using the school's routine. After a familiar word, the TA returns to said for an independent attempt.

If she continues guessing or needs each answer supplied, continue teaching and postpone the timed check. Chapter 3 gives fuller teaching exchanges.

Begin the check

TA: "Now I'll see which you can read on your own for thirty seconds. I'll keep the count. You don't need to race."

Check she understands. Start the timer when the first card is fully visible. Tally correct responses and errors separately, without teaching during this sample. Stop at the signal. If she becomes upset, stop and support her.

Record and respond

Ruby makes 12 correct responses and 3 errors in thirty seconds: two wrong words and one timeout. Record those raw counts. Multiply each by two for rates per minute: 24 correct and 6 errors. This conversion does not show she sustained that performance for a whole minute.

Session field	Worked entry
Target	Five agreed words, See → Say
Complete timing	30 seconds
Raw counts	12 correct, 3 errors: 2 wrong, 1 timeout
Rates per minute	24 correct, 6 errors
Observation	Said confused with sad; hesitation on come
Pupil’s view	“I forget that one when it comes back.”
Next action	Revisit said; check come before the next probe

Return to teaching

TA: “You read like straight away. Said was harder when it came back. Let’s look at that one again.”

Give the explanation, practise with support and check an independent attempt. Read a suitable sentence together. Notice separately how Ruby reads the word there; the surrounding task differs from the cards.

Share the useful information

Tell the teacher which words were confused, how Ruby responded to teaching and how she found the work. One score is a starting observation. Further comparable checks help the teacher review the teaching and decide the next step.

Return to the same plan next session unless a change has been agreed. Chapter 4 explains measurement; chapter 5 follows Ruby’s record through to review. The completed plan at the back shows how the decisions fit together.

2 Choose a target that matters

Begin with an ordinary classroom difficulty and work back to a small skill that could make a difference. The best target is specific enough to teach and important enough to justify the time spent practising it.

Start with the task

Ask the pupil to attempt a manageable example without a timer. Listen to their explanation and watch where they stop. A calculation might be difficult because of number facts, place value, symbols, language or uncertainty about the procedure. Those are different starting points.

Look at recent work and ask the teacher what the pupil has already been taught. A brief check should help identify the next teaching step. Avoid turning target selection into a long assessment that delays obvious support.

Describe the response and conditions

A clear target names what is presented and what the pupil does. For example: “Hearing an addition fact from the agreed set within ten, Sam says its answer without an individual prompt.” The adult also needs the actual set, scoring rules and duration.

“Know number bonds” is too broad. “Recognise five written numerals” is more specific, but still needs a list and a response rule. Pointing to a named numeral and saying the name of a displayed numeral are different tasks. Either might be useful, depending on the classroom purpose.

Choose material from the school’s teaching sequence. For reading, align words with taught sound–spelling correspondences and appropriate instruction for any irregular elements. Keep word practice within the school’s phonics and reading teaching. The Department for Education’s reading framework links systematic phonics, fluency and comprehension; a card routine is only one possible part of that wider work [14].

Keep the set manageable

There is no universal correct number of targets. A small set allows repeated opportunities and detailed feedback, but an extremely narrow set can encourage memorising its order. Provide varied presentation and check that the pupil responds to each item rather than reciting a sequence.

Selecting a few known items alongside newer taught items can create a workable practice set. The balance should follow the learner’s performance, not a fixed rule applied to everyone. If the set changes substantially, mark the change and establish a new comparison.

Agree the purpose with the pupil

Ask what they want to become easier. Sam might say, “I lose where I am when I count it all.” The adult’s target can focus on a small group of facts while keeping that classroom concern visible. Explain what adults will teach and how you will find out whether it helped.

An accessible method for showing knowledge is part of target selection. If speech, handwriting or visual scanning prevents the pupil from demonstrating the skill, adapt the task or seek advice before interpreting a low rate as a learning deficit.

Match the input and response to the purpose

A learning channel names the input and response in a task. It is not a learning style or a label for the child.

Channel in the app	An example	What the task includes
See → Say	See a printed word and read it aloud	Reading plus the spoken response
See → Write	See a numeral and write it	Visual discrimination and written production
Hear → Say	Hear a fact question and say the answer	Listening, holding the question and speaking
Hear → Write	Hear a word and write its spelling	Hearing the word, spelling and handwriting

Choose for the educational purpose

If the aim is spelling from dictation, copying the word is a different task. If the aim is reading a written word, hearing an adult say it first supplies information the pupil is meant to obtain from print. Neither task is inherently wrong; they answer different questions.

Sam’s written mathematics performance might be slow because handwriting interrupts a fact he can retrieve orally. An oral check can help investigate that possibility. It does not demonstrate that written work is now fluent. Teach or accommodate the written demand where necessary.

Notice the adult’s contribution

In a Hear → Say check, an adult who reads questions slowly can limit the response rate. In a card task, slow card turning can do the same. For Ruby, expose each whole card and turn to the next promptly after the first completed word or the agreed timeout, without praise, explanation or an extra waiting period. Rehearse presenting and tallying before working with

her. Use the same prepared cycle method across probes and record changes in adult or presentation. A substantial recording delay compromises that comparison.

Sam's timer starts as the adult begins the first spoken question. Later questions begin promptly after each completed answer or the timeout specified in his plan. Use the same wording and response rule throughout. These adult-paced rates reflect both presentation and pupil responding; they are not pure measures of the pupil's maximum speed.

For writing tasks, agree what happens when the adult cannot see a response clearly. A second adult should be able to use the same rule. If the format makes accurate scoring impractical, redesign it before using the scores for decisions.

Adapt access honestly

Enlarging print, arranging a stable workspace or providing usual communication access may make the intended skill measurable. Describe the adaptation. Changing from handwriting to pointing, however, changes the response being measured; keep a separate record and interpret it as a different task.

The four app options do not cover every meaningful educational response. Do not force an unsuitable task into the nearest menu choice. Use a carefully specified paper routine or seek specialist support if that better represents the pupil's learning.

Accuracy fluency and the larger task

Accuracy concerns whether the response is correct. Frequency describes responses per unit of time. Fluency concerns performance that is accurate, easy enough for its purpose and useful beyond a single successful attempt. A quick answer with increasing errors is not the intended outcome.

Ask whether the pupil retains the skill after a gap and uses it in the task for which it was taught. A spoken fact, a written calculation and a word problem can draw on related knowledge while requiring different responses. Select the measurement that answers the teaching question, and keep other useful observations alongside it.

3 Teach the skill before building fluency

A helpful session gives the pupil a way to succeed, then enough supported practice to begin doing it with less help. A timed probe samples performance. Teaching changes what the pupil can do. Keep those purposes clear, even when both happen within a short session.

A word reading exchange

Here is a separate teaching illustration using ship and shop. The teacher has checked that the pupil knows the relevant sound–spelling correspondences, including sh, and has already taught blending. The pupil is confusing the middle vowel. These words should only be used when they fit the school's phonics sequence.

Adult, showing shop: "Read this one."

Pupil: "Ship."

Adult: "This middle spelling is o. Listen: /sh/ /o/ /p/, shop. Let's blend it together." The adult points to the graphemes as they blend, using the school's agreed pronunciation and routine.

Pupil and adult: "/sh/ /o/ /p/, shop."

Adult: "Now you try."

Pupil: "Shop."

The adult presents a familiar word, then returns to shop. This checks whether the pupil can use the explanation after a brief intervening item. When ship appears, the adult asks the pupil to attend to its middle vowel before blending. The adult is teaching the distinguishing information, rather than encouraging a guess from the first letter or a picture.

If the pupil still cannot distinguish the vowels or blend accurately, return to the relevant teaching step. Keep the task manageable. Once the pupil can read independently, short practice in varied order can help the words become easier. Include suitable phrases or sentences so practice remains connected to reading.

Teaching Ruby's words

Ruby's five-word set includes spellings that need the teacher's planned explanation. For said, her adult draws attention to ai representing /e/ in this word and blends with her, rather than asking her to remember its outline. For another word, use the correspondence or irregular element taught in her reading programme. Do not invent a conflicting phonics explanation to fit the cards.

A useful teaching note is specific: "Said read as sad; pointed to ai, modelled /s/ /e/ /d/, practised together, then checked again among familiar words." Another adult can act on that. "More practice needed" gives far less help.

A number fact exchange

Sam's teacher selects 5 + 2, 5 + 3 and 5 + 4 because he understands these combinations with objects but repeatedly starts counting from one. The teacher wants him to connect the known group of five with the additional quantity, then build easier recall. These facts are illustrative; selection follows the pupil's mathematics teaching.

Adult puts five counters together and two separately: "Here are five and two more. We know this group is five. Start at five and count on two."

Sam: "Six, seven. Seven."

Adult: "Yes. Five and two make seven." The adult shows how the groups fit the school's familiar representation, then asks Sam to explain what he did.

When Sam can explain and answer with the representation, the adult asks the spoken question with the counters available as support. Later, the same question is tried without them. If he says eight, the adult brings back the representation, checks the count-on step and invites a supported and then an independent answer. The response is taught, rather than repeatedly tested while he guesses.

The teacher decides when retrieval practice is appropriate. Oral answering may reveal a different starting point from written work. Sam's recorded task is Hear → Say throughout: the adult speaks the question and Sam answers orally. Keep the wording consistent and document his own response and pause rules. A later written calculation is a separate classroom application check, not another score in that oral series.

Maya practises spelling from dictation

Maya can read words containing sh and ch but sometimes substitutes one spelling for the other when writing. Her teacher selects ship, shop, chin, chop and fish from the correspondences she has been taught. The classroom purpose is to write these spellings in short dictated phrases and use the same knowledge in her own writing. Reading the words on cards would measure a different response.

The recorded task is Hear → Write. Prepare varied cycles containing each of the five words once; after a cycle, begin the next, so a check can contain more than five responses. Start the timer as the adult begins saying the first word. Say each word clearly without segmenting it. One identical repetition is allowed if Maya requests it, within the running time; it remains one opportunity. The adult waits for her written response before presenting the next word. Before collecting a record, the teacher checks that Maya understands the word and can hear and segment its sounds. A speech or hearing difficulty would need consideration before interpreting a written error.

Adult: "The word is chip. Say it."

Maya: "Chip."

Adult: "Let's segment it using our usual routine."

Maya identifies /ch/ /i/ /p/. When she writes ship, the adult points out that sh represents a different first sound. They revisit ch using the school's taught material, then Maya says the sounds and writes chip with support. The adult covers the model, presents a familiar item and later asks for chip again.

Chip is a teaching-only contrast, excluded from the recorded five-word set. Record teaching material separately from probe material.

The teacher checks whether the error concerns choosing ch, forming the letters or holding the dictated word in mind. Repeating a whole spelling list would not necessarily teach the part Maya needs. The adult can ask Maya to explain which spelling she chose and why, while keeping the explanation appropriate to what she has been taught.

Set a fair written scoring rule

For Maya's plan, a whole word is completed when she lifts her pen and says "finished". Erasing or correcting before that signal is allowed within the running time. Score that completed spelling once; later changes do not alter its score. All letters must be present in the correct order. Agreed examples define acceptable handwriting: a recognisable reversal that changes a letter is incorrect, while a recognisable but untidy correct letter is accepted. An ambiguous letter makes the word incorrect and is noted for teaching.

If Maya does not begin writing within five seconds of the end of the first spoken word, or has not signalled completion within fifteen seconds of that point, say "next" and record a timeout separately. A requested repeat uses part of the same window. These are illustrative limits for her plan, not writing-speed standards. If they prevent meaningful responding, revise the format or use untimed teaching and begin a new comparison.

The adult presents the next word after the previous response is complete. Because presentation and handwriting affect the measured rate, the same wording, layout and delivery routine are kept across checks. If Maya needs an access adjustment, agree it first and describe what the measure includes. Counting individual letters in one session and whole words in the next would create a misleading comparison.

An item started before the end signal but completed afterwards is marked unfinished and excluded under this plan's rule. Keep partial spellings as teaching information. Maya's total errors combine incorrect completed words and timeouts, with the components noted separately.

Read Maya's record

Across three complete one-minute checks, Maya writes 4, 5 and 5 words correctly, with 3, 1 and 0 incorrect completed words and no timeouts. The total number of completed responses changes from seven to six to five. Accuracy among completed words improves from 4/7 to 5/6 to 5/5; correct-word frequency does not rise beyond five. The incomplete final opportunity, if any, is not included in those fractions. That can be useful progress: fewer

spellings are wrong. The next question is whether handwriting, adult pacing or careful checking explains the slower total output.

Maya says, “I say the sounds before I write now.” Her adult does not ask her to drop a useful strategy simply to make the graph rise. The teacher observes the selected spellings in a short phrase and later checks an appropriately chosen untaught example drawing on the same correspondences. Those observations are recorded separately.

If she writes the practised words accurately but continues to confuse sh and ch in other suitable words, the teacher broadens supported teaching and checks the contrast. A successful repeated set has answered a narrow question; it has not established that spelling generally is secure.

Teaching practice and the recorded check

Teaching provides explanation and support. Practice offers further responses with feedback and may be untimed or follow a specified timed-practice protocol. A probe is a separate sample under the agreed measurement conditions. The worked routines here use supported practice followed by an independent timed probe, with feedback afterwards. Do not describe this entire arrangement as the same intervention used in every frequency-building study.

Organise practice between checks

Mix the taught responses in a manageable order. Give a clear correction, a supported success and another independent opportunity. Notice recurring errors and change the explanation when it is not helping. A pile of completed cards tells us little if the pupil is repeatedly rehearsing the wrong response.

Choose the amount of practice for the pupil and the learning purpose. A plan might include a few brief teaching and practice opportunities and one recorded check. The length is a delivery choice to review, not a guarantee that a fixed number of minutes will work.

Warmth and welcome humour help keep an error manageable. Avoid teasing about a slow response or turning practice into a race.

When Sam tries to beat the timer

In four one-minute probes, correct responses are 8, 10, 12 and 13; errors are 1, 2, 4 and 5. Sam is answering more questions, but an increasing proportion are wrong. He says he is trying to answer before the adult finishes speaking because he wants to beat the timer.

The adult stops treating the higher correct count as sufficient success. The teacher revisits the fact relationships and slows the practice exchange outside the probe. They agree that a careful answer is welcome and that no public comparison will be made. Sam helps choose a calm practice routine. If the timing remains unhelpful, an untimed format will be used and recorded separately.

Chapter 5 shows why Sam’s correct responses and errors must be considered together.

4 Measure performance fairly

A baseline is a description of performance before the particular change you want to review. In school practice it helps us avoid relying on impressions such as “much quicker now”. It does not need to delay necessary teaching or access support.

Make an ordinary first check

Confirm that the pupil understands the activity and can make the response. Explain the timing and scoring in a calm way. Use the planned material, channel and duration. Prepare enough items or repeated opportunities so the pupil does not run out before time ends.

A first attempt can be affected by novelty. Where practical, collect several comparable starting checks across ordinary opportunities. Ruby’s worked record uses three starting checks.

If teaching is already taking place, describe the baseline as performance under current support. Do not withdraw useful teaching or adjustments to make a comparison look cleaner. Record what help was available.

Write down more than the total

Keep the date, actual duration, correct count, error count and relevant notes. Record the item set and presentation rule in the plan. A note such as “fire alarm interrupted after fifteen seconds” can explain why a score should not join the main comparison.

If a check stops early, do not enter the counts as though the full planned duration elapsed. If a suitable system allows the actual time to be recorded, calculate the rate and flag the interruption. In this app, the paper-result entry uses the intervention’s selected duration; do not enter an interrupted check there as an ordinary complete result.

A probe is the brief sample used for comparison. Keep the response, material and conditions dependable enough to interpret it.

Before the timing

Check the target set, channel, duration and scoring rule. Keep a record of the material so a colleague can reproduce the task. For paper tasks, use equivalent layouts and demands. Randomising order can reduce sequence learning, but adding harder items changes more than the order.

Agree how to score errors, skips and self-corrections before beginning. One workable rule for a particular oral-reading task is to score the first complete answer to each presentation, counting it once. Other protocols may use a different convention. Use the rule appropriate to the plan and do not change it silently midway through the record.

Decide how a prolonged pause is handled. A pupil should not be left stuck indefinitely. If the adult moves on after an agreed pause, record and score that event consistently. In the app,

mark once for each presentation; do not record both an error and a correct response to the same item merely because you supplied the answer afterwards.

During the timing

Present the material as agreed and count correct responses and errors separately. Keep prompts and teaching out of a probe intended to sample unprompted responding. If a prompt becomes necessary, give the help, but flag the result as a different or interrupted opportunity rather than silently counting a prompted answer as independent.

Do not pause the timer to explain an item, add an extra few seconds at the end or count work completed after time. Those changes can make the graph misleading. For written work, have a clear stopping signal and a consistent marking method.

After the timing

Return to teaching and feedback. Ask how the child found the activity and note anything that affected the sample. Check the result before saving it. Correct a recording error transparently using the school's agreed process; retain enough information to understand the correction.

Occasionally ask a second adult to score the same practice example independently. Differences can reveal an unclear rule. This can be done with fictional materials during staff preparation without creating extra recordings of pupils.

If timing causes distress or compromises a meaningful response, stop and reconsider the format. Review the teaching conditions before arranging another check.

Rehearse scoring with a colleague

Before recording a pupil, agree how the rule works in ordinary awkward moments. Use Ruby's rule: the first completed whole word counts once. Silence for three seconds is a timeout; speaking or sounding out begun within that period can continue up to five seconds from card display. No word completed by that deadline is a timeout. Explanations wait until after the probe. These are decisions for this plan, rather than universal rules for all Precision Teaching protocols.

Read the six events and decide how you would score them. The answers follow so staff can discuss differences before practising with a pupil.

Event during the recorded check	Your decision
1 Ruby sees like and says “like” immediately	
2 She sees said and says “sad”, then “said”	
3 She sees have, remains silent for three seconds and the adult moves on	
4 She sees come and reads it accurately without help	
5 The adult accidentally supplies the first sound before she answers	
6 The timer sounds before a completed word or the applicable response deadline	

Under the stated rule, event 1 is one correct response; event 2 is one error; event 3 is one timeout, included in the total error count; and event 4 is one correct response. Event 5 is prompted and cannot be counted as an independent response. Flag the procedural error; do not silently mix that check into an unprompted comparison. In event 6 there is no completed response or defined timeout within time, so the unfinished opportunity is excluded.

Do not create a six-item accuracy percentage from these events. Two are not comparable scored responses, and the prompted event compromises the check. The purpose of this rehearsal is agreement about the rule and its limits, not manufacturing another pupil score.

If colleagues disagree, identify the exact wording that needs changing. Rehearse again using new sample events. Staff can do this without recording a child’s voice or video. A short written rule with worked examples is more dependable than assuming everyone interprets “correct” in the same way.

Record a change as a new phase

Suppose Ruby’s teacher replaces the five-word set with ten longer words. A lower rate might reflect the new task rather than lost learning. Keep the earlier record, note when and why the set changed, and establish a starting picture for the new material. A single continuous line without the change marked would suggest a comparison the record cannot support.

Use the same approach when moving from oral responses to writing, changing the duration or adding a substantive prompt. Minor adjustments also deserve a note if they could affect performance. Where the app cannot label the change clearly, keep a linked written record or use a separate intervention with a clear name.

Counts and rates

Correct responses per minute = correct count × 60 ÷ seconds observed.

Errors per minute = error count × 60 ÷ seconds observed.

Where this plan includes timeouts, total errors = wrong responses + timeouts. Keep those components separate in the notes. A partial final opportunity that has not reached a scoring deadline is excluded. An accuracy percentage must state its denominator; rates and percentages answer different questions.

Actual complete timing	Raw correct	Raw errors	Correct per minute	Errors per minute
30 seconds	10	2	20	4
60 seconds	23	1	23	1
120 seconds	42	4	21	2

These are invented calculations. The 30-second example shows the pupil made ten correct responses; it does not mean they actually sustained twenty responses for a whole minute. Converting rates puts the counts on a common unit, but does not make short and long timings educationally identical. Fatigue, hesitation and opportunity can differ. Keep the timing length constant within a comparison where possible.

Keep the record interpretable

Record dates and identify changes in material, teaching, timing or presentation. A missing session is not a zero. A completed check with no errors is a genuine zero-error count. An interruption needs a note and usually sits outside the comparable series.

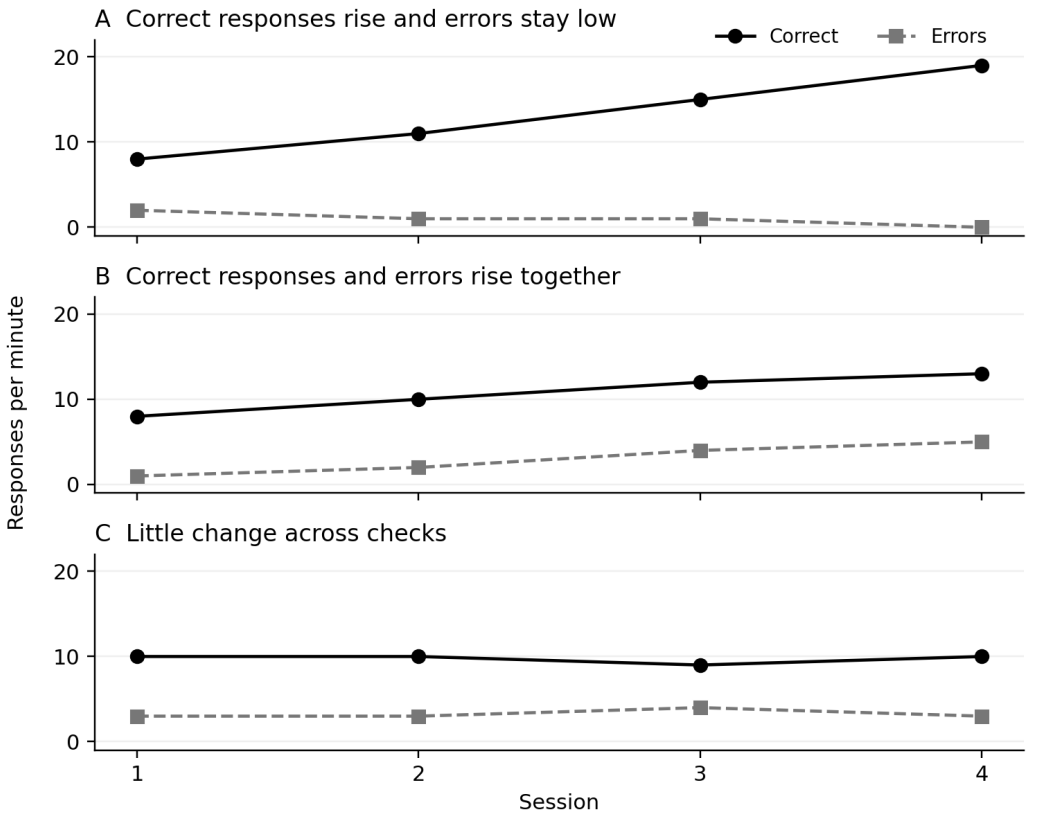
For ordinary classroom review, keep correct and error rates visible together on a clearly labelled graph. Keep its scale consistent across the period being discussed. The technical distinction between this graph and a Standard Celeration Chart is explained in chapter 8.

5 Read the record and decide

The value of recording is the next decision. Look at the pattern, ask what teaching actually happened and listen to the pupil. A higher correct count can accompany improving accuracy, increasing guessing or a change in task. Those patterns call for different responses.

Three patterns to recognise

The following small graphs use invented one-minute checks. Each has the same scale. They are ordinary linear graphs, with correct responses and errors shown separately. The headings identify patterns to investigate rather than automatic decision rules.



Fictional one-minute checks. The same axes are used in all three panels; correct responses and errors are separate series.

When correct responses rise and errors stay low

In pattern A, accurate responding becomes easier across repeated checks. Continue the useful teaching, then check whether it survives a gap and supports classroom work. “More cards” is only one possible next step. The educational purpose may now call for sentences, a calculation or a different use of the skill.

When correct responses and errors rise together

Pattern B resembles Sam's experience. The pupil is producing more correct answers, but the errors are rising too. Ask which items are wrong and whether the timing has encouraged rushing. Reteach the difficulty outside the probe and review the routine with the pupil before pressing for a higher rate.

When the record remains flat

Pattern C suggests little change in the measured response. First check whether the sessions happened as planned. If delivery was dependable, examine the target, instruction, access demands and opportunities to practise. Choose a specific change and record the reason. A flat graph does not explain itself.

Wide variation also needs explanation. Compare materials, adults, setting and the pupil's circumstances. Do not smooth away a meaningful pattern through an average. Changing one feature can make a review easier to interpret, but several necessary adjustments can be made together; record them honestly.

Ruby follows a reading target

Ruby wants to read a short classroom text without repeatedly stopping to work out the same words. Her teacher checks that she has been taught the words selected for practice and usually reads them accurately without a timer, with occasional confusions. The immediate question is whether practice will make that set easier to read and whether the change will appear in connected text.

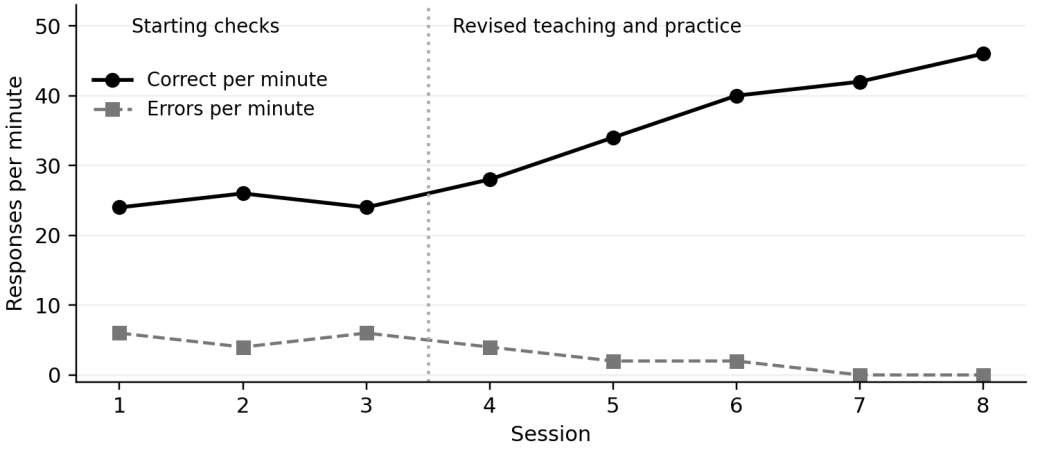
Ruby's plan

The set remains the, said, have, like and come, selected from Ruby's taught reading work. The channel is See → Say and every complete probe lasts thirty seconds. Each complete cycle presents all five words once in a prepared varied order, with the same scoring and presentation rules. Complete cycles repeat as needed. Adults count the first complete response to each presentation once.

Sessions 1–3 follow the existing brief teaching-and-check routine illustrated in chapter 1. From session 4, the teacher adds two guided retrieval rounds before the recorded probe, separated by a one-minute familiar classroom activity. Each added round starts with a varied cycle of all five words; correction and extra attempts on confused items are added as needed during this untimed practice. Ordinary phonics teaching continues. The measured set, response rule, presentation method and thirty-second duration remain unchanged. This is a change to a teaching package, not a test of one isolated ingredient. Her provisional review aim is forty correct responses per minute with no more than two errors per minute, including timeouts. Repeated presentations mean that a rate of 46 concerns responses to the same five words, not 46 different words.

Raw errors show total (W+P): wrong words plus timeouts. Each timing is thirty seconds.

Session	Phase	Raw correct in 30 s	Raw errors total (W+P)	Correct per minute	Errors per minute
1	Starting picture	12	3 (2+1)	24	6
2	Starting picture	13	2 (1+1)	26	4
3	Starting picture	12	3 (2+1)	24	6
4	Revised teaching	14	2 (1+1)	28	4
5	Revised teaching	17	1 (1+0)	34	2
6	Revised teaching	20	1 (0+1)	40	2
7	Revised teaching	21	0 (0+0)	42	0
8	Revised teaching	23	0 (0+0)	46	0



Ruby's results for repeated presentations of five words. Each check lasts 30 seconds; values are rates per minute. Errors include wrong words and timeouts. Ordinary linear graph.

Ruby's review

The recorded performance improves during the revised teaching phase. Ruby reaches the provisional aim on the sixth session and maintains that level across the following two checks. Her errors decrease. The pattern supports reviewing the next step while considering what else may have contributed to the change.

The teacher separately observes Ruby reading the words in a short, suitable text. Ruby still hesitates on two of them. The plan adds supported sentence practice. The teacher records a first reading of suitable connected text on the next attended school day, noting independent word reading and help needed. Seven calendar days after session 8, the adult checks the same cards before any targeted rehearsal that day. If Ruby is absent, use the next attended day and record the actual interval. Ordinary reading continues; note relevant practice during the gap. Staff do not combine the sentence observations with card scores as though they were the same measurement.

Ruby says, “The cards are easier. The story’s still harder.” That is useful review information. The teacher retains appropriate reading instruction and uses the practice as one part of it. The completed plan at the back shows the resulting record.

When a carefully delivered plan still does not help

A teacher and TA review a pupil’s word practice after the agreed opportunities. The sessions happened, the material was consistent and repeated checks show little change. The pupil says, “I just try to remember which comes next.” The adults check the words in a new order without timing and find the pupil cannot reliably use the taught sound–spelling information.

The response is to revisit the prerequisite teaching and the way the set was presented. They reduce the set, teach the relevant correspondences and check blending before resuming the earlier fluency question. They keep the original results as a record of a plan that was not yet helping, rather than delete them and report only the later successful points.

A different pupil may show the same flat graph for another reason: repeated absence, inaccessible print, difficulty hearing the adult or a target that does not address the classroom task. Start with the evidence available. A graph can identify a question; an observation, teaching check or conversation helps answer it.

Set a review point that leads to a decision

Agree the review point when planning, based on the learning question, delivery opportunities and the pupil’s needs. “Review after the next five planned sessions” is a workable example when those sessions can happen consistently. It is not an evidence-based rule that every pupil must receive five sessions before anything changes.

Name reasons for an earlier review, such as repeated confusion, distress, a mismatch between the chosen task and classroom need or an inability to deliver the plan. At review, compare what was intended with what occurred. Then record the action, the responsible adult and the next observation that will tell you whether the change helped.

From review to action

Record the observation, action and next check. Ruby’s adults will teach the two words that still interrupt sentence reading and review the support she needs in text.

6 Keep the child involved

A pupil can complete a task while feeling confused, embarrassed or afraid of disappointing the adult. Ask about the experience throughout delivery. The child's account helps us understand both the score and the routine producing it.

Agree a purpose the pupil understands

"We are practising these words so they are easier in your story" gives a reason for the activity. Ask whether that purpose matches the pupil's difficulty. A child who says "I know those; it is the long sentences I lose" may be telling us the target needs another look.

Offer real choices about suitable materials, position or the order of practice. The adult remains responsible for appropriate teaching. Describe a fixed decision honestly instead of presenting a choice whose answer will be ignored.

Listen without making the pupil defend a score

After a check, try "Which bit needed more help?" or "What changed today?" Some pupils prefer pointing, drawing, showing a card or choosing a word. An anxiety scale can open a conversation if the pupil understands it. Their behaviour and account still matter; a number is not permission to continue regardless.

Ruby says, "I forget that one when it comes back." Her adult can investigate the interval between successful attempts. Sam says, "I'm trying to beat it." His adult can change a routine that has made speed the main purpose. These comments explain something the totals alone do not show.

Make feedback specific

"You noticed the middle vowel" names a useful strategy. "You could do it if you tried" turns an unclear teaching problem into a judgement about the child.

When a result falls, check what made the task harder before assuming learning has changed.

Protect dignity and respond to distress

Keep individual results private. Avoid rankings, public comparisons and rewards that encourage guessing or make a pupil dread the next session. Essential support and participation in ordinary school life should never depend on a target rate. A child may enjoy noticing progress without wanting their graph displayed.

If the pupil becomes distressed, stop the timing and provide support. Review the task, explanation, access and relationship before trying again. A quieter setting, another response format or untimed teaching may be a better next step. Record the change so future comparisons make sense.

Ask about enjoyment and pressure directly, as the research in chapter 9 illustrates.

7 Make learning useful in class

Practice performance is a starting point for checking wider learning. Transfer needs attention in the teaching plan, rather than a hopeful question at the end.

Arrange a bridge to classroom use

For Ruby, use the practised words in meaningful sentences and suitable text. For Sam, include the selected facts in short calculations where their use makes sense. The class teacher needs to know what has been practised and what help remains necessary.

Watch what changes in context. A pupil may recognise a word on a card but miss it in a crowded paragraph, or answer an oral fact but not recognise it in a written problem. Teach the additional demand rather than concluding the practice was pointless or the child is choosing not to use it.

Check after a gap

Once performance looks secure, arrange a later opportunity without immediate rehearsal. Record what was retained, what needed reminding and whether the conditions were similar. Choose the interval and task for the educational purpose. A single later correct response is encouraging but provides limited information about durability.

Necessary access support can remain. Retention with an enlarged text, usual communication system or agreed equipment is still useful information. Explain the conditions so that “independent” is not confused with “without any tools”.

Decide when to move on

A higher-level target may be appropriate when accuracy, ease and relevant application are secure enough for the next learning demand. A brief maintenance check can help staff notice whether an earlier skill needs revisiting. Avoid indefinitely practising a narrow set at the expense of new learning.

If gains appear only on the repeated items, check new examples that draw on the same taught knowledge. Do not present completely new material and call failure a lack of generalisation. The comparison must be fair.

Know when to seek another perspective

Seek further advice when a carefully delivered plan remains ineffective, the difficulty has substantial impact or the explanation is unclear. Share the target, teaching, actual delivery, work samples, results and the pupil’s account. A focused question is more useful than sending a graph with no explanation of what was measured.

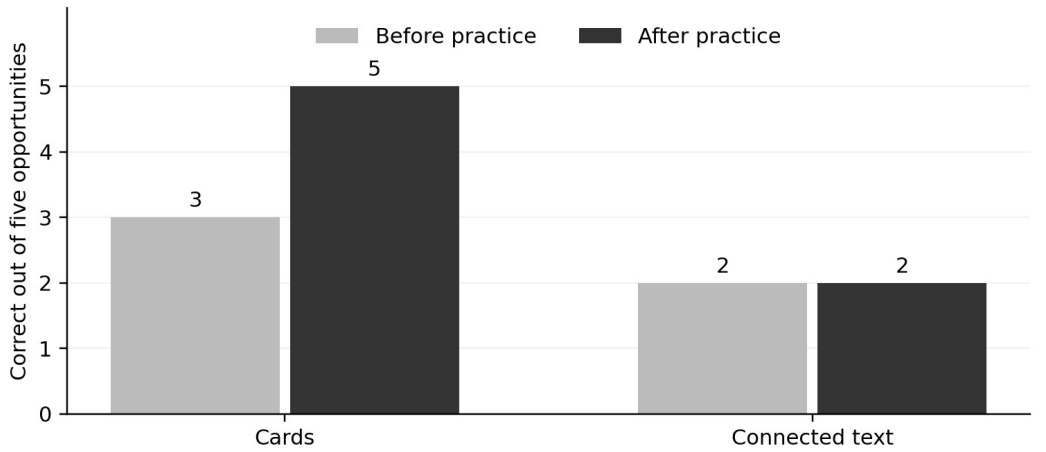
Precision Teaching routines can inform discussion with an EP or other relevant professional. They do not replace assessment of language, literacy, mathematics, sensory access or other needs where those questions remain.

Plan a transfer check before practice begins

Name a small piece of ordinary work in which the skill should help. For Ruby, the teacher chooses a suitable short text containing the practised words. The teacher notes which words interrupt reading and what help she needs. This is recorded separately from the timed card check because the surrounding task is different.

For Sam, use a short calculation in which the selected facts are relevant. Notice whether he retrieves the fact, recognises when to use it and keeps track of the calculation. A child may be quicker orally but still need a written layout or equipment. Keep that support available while investigating the next demand.

Separate practice gains from classroom gains



Separate fictional example. Each task has five opportunities; these counts are not rates or Ruby's session data.

This separate fictional example compares correct responses out of five opportunities within each task, before and after practice. It is not a comparison of rates: a card check and connected-text reading have different demands. Card accuracy improves from three to five, while the classroom observation remains at two. The appropriate response is to teach and check the bridge into text, rather than conclude that the reading difficulty has resolved.

Make the review decision visible

A brief record is enough: what has changed, what remains difficult, what teaching will continue and who will check it. Explain the decision to the pupil. "The words are easier on cards; now we're helping them stay familiar in your story" connects the practice to its purpose.

8 The history and the EP rationale

Precision Teaching grew from an effort to make learning and instructional decisions more visible. Its history explains the attention to observable responses, repeated measurement and changing what adults do when a pupil is not progressing.

From laboratory measurement to classrooms

Ogden Lindsley worked with B. F. Skinner at Harvard, studying response frequency. In 1965 he moved to special education teacher training at the University of Kansas. He and colleagues developed the Standard Celeration Chart as a shared way to display change [1, 2]. Lindsley's 1992 paper provides historical further reading [3].

The chart made records comparable in a way that a collection of differently scaled graphs could not. Athabasca University's historical account introduces this development [2]. The wider teaching tradition also includes specialist books by Kubina and Yurich and by Johnson and Street [10, 11].

The system and the practice within it

Precision Teaching provides a measurement and decision-making system; it is not a single instructional method [1]. A teacher still needs to select effective instruction. Frequency building is a practice approach often used within that system. A worksheet and timer alone do not tell us what was taught or how the adult responded to the results.

In UK schools, the name is also used for simplified routines of focused teaching, brief timed checks and progress graphs. This handbook supports that school workflow. Its ordinary graphs make correct and error rates visible, but they do not implement the full technical charting system.

Why the Standard Celeration Chart is different

A linear graph gives equal vertical distances to equal additions: ten to twenty has the same vertical size as fifty to sixty. A Standard Celeration Chart uses a standard ratio scale and proportions, so equal multiplicative changes, such as ten to twenty and fifty to one hundred, occupy equal vertical distances. Celeration describes multiplicative change over a specified period [13].

Formal charting has conventions for timing, record floors and zero counts. Seek specialist instruction rather than transferring ordinary graph rules to a logarithmic chart. In particular, do not calculate a logarithm of zero or read SCC angles from the app's linear graph. The specialist books listed in the references provide a route into fuller study.

Why an EP might recommend focused fluency work

An important component skill may remain effortful despite appropriate instruction. When each familiar word requires a long pause or each understood fact requires recounting, the larger classroom task can become harder to manage. An EP may recommend targeted practice to investigate whether easier access to that skill helps.

Specific targets also make review more useful. “Improve literacy” leaves a TA to invent the work. “Read this agreed set of taught words with less hesitation, then use them in suitable text” identifies something teachable and a way to check its value. Repeated comparable observations can help adults decide whether to continue or change the approach.

The choice should follow an understanding of the pupil’s difficulty and the wider curriculum. A diagnosis or low score does not automatically identify a suitable target. The class teacher retains responsibility for teaching and provision within the school’s assess, plan, do and review arrangements [12].

What a useful recommendation includes

A recommendation needs a deliverable plan, including teaching, measurement, review and a route for the TA to seek help.

A slow score may include speech, scanning, handwriting or language demands. The recommendation should address the relevant barrier. This work can contribute information to wider assessment and consultation, while a coherent reading or mathematics programme continues.

An example of an EP recommendation in practice

Suppose a teacher reports that a pupil understands addition when using equipment, but loses track of a longer calculation while recounting familiar facts. An EP might suggest a short trial of focused fact practice, while the teacher continues conceptual mathematics and provides a helpful written layout.

The recommendation could read: “Select a small set of addition facts the pupil can explain and answer accurately with the agreed strategy. Teach that strategy explicitly, then provide brief supported retrieval practice. Use a consistent spoken question and oral response to examine retrieval separately from handwriting. Record correct responses and errors under comparable conditions. Review the pattern alongside the pupil’s account and a short classroom calculation.”

At consultation, the teacher and TA would make that plan deliverable by naming the exact facts, routine, scoring, duration, review point and backup arrangement. If errors rise, they would revisit teaching before asking for faster responses. If oral performance improves but written calculations remain difficult, they would investigate the additional demands of the written task.

9 What the evidence can tell us

The literature gives reasons to consider targeted fluency work with repeated measurement and instructional review. Its findings apply to particular learners, teaching packages and outcomes. Schools should choose a plausible approach, check its delivery and judge its value through the individual pupil's learning and experience.

Four useful pieces of evidence

The table summarises different kinds of evidence. Read across each row: a favourable finding and its limitation belong together. The sources do not all answer the same question, and their results should not be pooled informally into a single claim.

Study	Participants and approach	Reported findings	What limits the claim
Gist and Bulla [4]	Review of 11 studies; 235 participants overall, 170 receiving the intervention; frequency building with Precision Teaching	Benefits across academic skills; effects varied from small to large	Combined procedures; quality-filtered inclusion and possible publication bias. Full article consulted
McTiernan and colleagues [6]	Randomised trial; 28 boys aged 9–11; a frequency-building mathematics curriculum versus usual teaching	Advantages on fluency, endurance, stability and one standardised mathematics subtest	Small, male-only sample; package-specific results. Publisher abstract consulted
Hayes and colleagues [7]	Ten UK schools offered a web-based blending and segmenting programme; seven implemented; complete impact data for 34 pupils	Decoding and sight-word gains, maintained at two months	Volunteering schools, incomplete outcome data, no randomised comparison; full accepted manuscript consulted
Diffley and colleagues [8]	Focus groups with 81 pupils in Irish disadvantaged primary schools after teacher-led mathematics work	Generally positive accounts of agency and progress; some concerns about pressure and rewards	Experience rather than comparative effectiveness; self-selection and peer influence; full article consulted

Read the mathematics result as a package

The controlled trial supports the curriculum and frequency-building arrangement studied with that sample [6]. It does not show that any list of facts produces the same outcomes. Nor does an improvement in a component-skill measure establish improvement in all mathematical reasoning. A school needs to connect the chosen practice to its own curriculum purpose.

What the UK reading study adds

The Hayes study included a usual-teaching period before the programme and a later follow-up. Its implementation records help distinguish access to an intervention from actual use. Staffing changes and illness prevented three schools completing it; incomplete assessments narrowed the impact sample. Electronic task records could not establish exactly how adults delivered each task [7].

These are useful implementation lessons. A website can reduce some recording work while staffing, materials and instructional quality remain relevant. The study investigated a different programme from PrecisionTeaching.uk and cannot validate this app.

Hear the positive and difficult experiences

The 2026 pupil-perspective study suggests that ownership, visible progress and encouragement can be valued. Some accounts also raised pressure or difficulties with how rewards operated. The authors discuss self-selection and the influence of peers in focus groups [8]. Listening to pupils therefore complements attainment measures; it does not replace an effectiveness comparison.

Use reviews without overstating them

Gist and Bulla included studies meeting What Works Clearinghouse standards, with or without reservations, and found favourable results for the combined approaches. Five studies met all Council for Exceptional Children quality indicators. Their review was restricted to peer-reviewed publications, leaving possible publication bias [4]. A further review by Mc Tiernan and colleagues covers thirty years of academic applications [5]. Its abstract and publication details were accessible for this handbook; detailed findings are not inferred from them. Reviews may include overlapping studies, so two reviews are not necessarily two independent bodies of pupils.

What a school graph can establish

Repeated observations can show change after teaching was revised. They do not rule out attendance, familiarity or other instruction as contributing explanations. A single-case experiment needs planned demonstrations of an effect. A trial’s conclusions depend on its comparison, sample and outcomes; qualitative work addresses experience.

The practical judgement

Consider focused fluency work when the target matters, prerequisite teaching is in place and adults will review the results. Check delivery and classroom use, and change course when the work is ineffective or unsuitable. This is a selective account; the references state access limits. The author’s recording app remains unevaluated by these studies.

10 Record and organise the work

A dependable routine can use paper or the optional app. Choose the route staff can maintain accurately, with materials ready and clear responsibility for review. The tool should make delivery easier to manage.

Write a plan another adult can follow

Name the classroom purpose, observable response, exact material, teaching, scoring, duration and review. A colleague taking over tomorrow should be able to reproduce the routine.

Ruby's purpose is easier reading of the taught words in text; the immediate response is reading each card without a prompt. Sam's purpose is keeping track of a calculation; his plan names three understood facts. Choose a provisional aim for the particular task and starting performance, then check accuracy, retention and classroom use at review.

Save the A4 classroom sheets

The digital edition includes a separate file named Precision-Teaching-Classroom-Sheets.pdf. Save it with this book; the supplied ZIP keeps the files together. In this PDF edition it is also embedded as an attachment. In a PDF reader that supports attachments, open the Attachments panel and save that file, then print at actual size on A4 paper. Some browser viewers do not show attachments; use the separate supplied file or a supporting desktop reader.

For a printed copy of the book, the six blank sheets at the back can be photocopied or printed enlarged to fit A4, retaining the author credit. The copying permission is stated at the front.

Use a paper record

Keep the target plan and exact material with the session sheet. Enter dates, raw correct and error counts, the complete timing and short notes on teaching or interruptions. Calculate rates using chapter 4. Put a brief pupil comment and the next teaching action alongside the totals when useful.

Use the review sheet to bring the original concern, delivery, comparable results and classroom observations together. Store pupil records securely under the school's arrangements. The copyable sheets at the back can be adapted with author credit.

Start with a fictional app record

Before entering pupil information, explore the current instructions at precisionteaching.uk/start-here.html. Use fictional initials such as QA for a rehearsal. The steps below were checked against the live website on 26 October 2026; labels and features may change.

Choose Add pupil and use initials only. Year group and overall focus are optional. Select New intervention, give the target a clear name, choose a skill type and one of the four learning channels, enter a provisional aim and select a probe length. Available durations are thirty seconds, one minute and two minutes.

Enter appropriate targets, one per line, or use the relevant question-and-answer setup where offered. The set repeats during the timing. This supplies further response opportunities; it does not create new teaching examples or establish generalisation.

Teach and run the check

Teach and practise outside the recorded probe. Select Run first probe, then start the selected timing. For an on-screen probe, the adult marks each response Correct or Error once. Follow the help for presenting a Hear channel and for handling any specialist target format. Keep the response rule consistent.

The result is saved locally and shown on Progress. For a paper check, Record accepts raw correct and error counts and uses the intervention's selected duration to calculate rates. Enter counts, not already converted per-minute values. A thirty-second count of ten correct is entered as ten; entering twenty would double the result incorrectly.

For the next session, return to the same pupil and intervention, review the record, teach and practise, then choose Prepare next probe. Do not create a new pupil simply because a different browser cannot see the existing record.

Backups and privacy

Records are stored in the browser on the device used. They do not automatically synchronise between devices, browsers or browser profiles. Clearing browser data or a device failure can remove access to them. Initials and results can still identify a child within a school; use approved devices, storage and access arrangements.

Download backup (.json) creates the restorable backup. Check that the file actually exists and store it securely. Keep a dated earlier copy as well as the latest file. Restore backup replaces the current browser's app data, so save its existing records first if they are needed. Export results (.csv) is for spreadsheet analysis; it cannot restore the full pupil and intervention records.

The live site's help and privacy information should be checked for current operation. Do not email pupil records to request general technical help. Describe the problem using fictional examples where possible. App use is optional; a dependable paper record is preferable to insecure or confusing digital storage.

The teacher owns the plan and review; the TA delivers, records and flags difficulties. Chapter 12 supports preparation and handover. Invite useful family information while keeping school responsible for its provision.

11 Common questions in school

These questions arise when a routine meets the realities of classroom delivery. Use the answer to identify the next teaching or organisational decision. Where a school follows an established protocol, consult that protocol before changing its measurement rules.

How long should a session last

A one-minute probe is a one-minute sample, not the whole intervention. Time is also needed to explain, teach, practise, hear from the pupil and record the next step. Plan an amount that is feasible for this pupil and can be delivered dependably. If most of the available time disappears into moving rooms or finding materials, change the arrangement.

Begin with the educational purpose and the pupil's response. Short, focused practice may be appropriate; prolonged repetition after the pupil is tired or confused is unlikely to answer the original teaching question. Record what actually happened so the review can distinguish a teaching difficulty from an undeliverable timetable.

How often should we collect a score

Collect enough comparable observations to inform the agreed decision without making recording consume the teaching. The fictional examples use a recorded check within a planned routine. They do not establish that every practice opportunity needs a probe or that more measurements necessarily mean better learning.

If staff are writing down many scores but cannot explain what they will change, revisit the review question. If a single score is being used to decide that support is finished, collect a more dependable picture and check classroom use.

Should we change the target every time the aim is reached

Reaching the numerical aim triggers review. Ask whether the pupil is accurate, whether responding is easier, whether the learning remains available later and whether it supports the intended task. A narrow repeated set can become familiar without establishing wider application.

Decide whether to retain a brief maintenance check, teach use in another context, broaden appropriate examples or move to the next curriculum step. Describe what changed so that later scores do not pretend to measure the same task.

Should we mix new and secure items

That may be useful when it gives opportunities for successful independent responding alongside newly taught material. Choose the balance for the pupil rather than copying an unexamined ratio. Too many unfamiliar items can produce guessing; an almost entirely secure set can consume time without addressing the difficulty.

The teaching set and the recorded set need clear identities. If you substantially change the recorded set, mark a new phase. Teaching can use additional examples while the same recorded set is retained for a particular comparison, provided staff explain that arrangement.

Can a group do the same work

A small group may share an explanation or practise appropriate material, but the target and record must still make sense for each pupil. One pupil may need explicit teaching while another is ready for independent practice. A group average can hide both experiences.

For oral checks, ensure the adult can identify whose response is being scored and that pupils are not supplying answers to one another. For written work, check layout, access and marking. Avoid public ranking or a competition that encourages rushing. Where dependable measurement is impractical in the group, arrange an individual check or use another appropriate observation.

What if the pupil refuses the timing

Find out what the pupil understands and what feels difficult. The work may be confusing, too public, associated with failure or physically uncomfortable. Offer an accessible way to tell you. Explain the purpose and consider a different setting or response format.

Useful teaching can continue without forcing a timed record. An untimed observation answers a different question and should be recorded as such. Seek the teacher’s help if the task or the pupil’s experience needs a wider review.

What if the score is lower after a break

Check the task conditions and what support was available. Look at which responses changed rather than assume all learning has disappeared. A brief reminder may be sufficient; a consistent difficulty may require reteaching or a different maintenance arrangement.

A later check should not be preceded by immediate rehearsal if the question is retention without rehearsal. Be clear whether you are checking retained performance or performance after a refresher. Both can be useful when described accurately.

Should parents run the same checks at home

School remains responsible for the agreed provision. Home practice can be offered when the purpose, materials and feedback are clear and the family wants to participate. Avoid an arrangement that depends on resources or time a family cannot provide.

Do not merge home and school rates as though they were collected under identical conditions. Ask families about useful changes in ordinary activities as well as any agreed practice. A pupil may be willing to read a familiar book at home while still finding school tasks difficult; both observations deserve attention.

What if another adult takes over

Provide the exact material, teaching explanation, response and scoring rules, duration, current results and next action. Rehearse one or two sample responses together. A replacement adult should not need to infer the routine from the graph alone.

Keep the usual presentation if possible. Note a substantive change and explain it at review. The handover sheet in the reproducible section supports this conversation.

When should we seek further advice

Seek help when the target does not fit the difficulty, access needs are unclear, the pupil is distressed, or a carefully delivered and reviewed plan remains ineffective. Share the teaching question, material, actual delivery, results, work samples and the pupil's account. That gives an EP or other relevant professional a useful starting point.

An intervention record is evidence to discuss alongside other information. It should not be used alone to diagnose a condition or determine a pupil's wider needs.

12 Prepare staff and review delivery

A dependable routine is shared knowledge. It should remain understandable when the pupil meets a different adult, the SENCO reviews the record or the class teacher changes the target. Short preparation and discussion can prevent avoidable inconsistency.

Prepare together before starting

The teacher explains the classroom concern and demonstrates the selected skill. The TA practises the teaching explanation and asks about likely errors. Together they check the material, response, scoring and timing. Use chapter 4's sample events to expose disagreements before collecting pupil results.

Check that the adult delivering the work can answer three practical questions: what am I teaching, what counts as a response, and what will I do when the pupil finds it difficult? If the answers are unclear, further explanation is part of preparation rather than an optional extra.

Observe a routine without turning it into an inspection

An agreed observation can help a colleague notice a detail that is hard to see while presenting and scoring. Is the adult turning cards promptly? Are prompts creeping into the independent check? Does the pupil have a chance to explain a difficulty? Discuss the observation respectfully and connect it to one useful adjustment.

Record only what was observed and share it through the school's agreed process. Do not describe a whole programme as delivered faithfully on the basis of one brief visit. Repeated absences, inaccessible materials or an unclear curriculum sequence may require organisational action beyond the delivering adult.

Separate delivery from pupil outcomes

A weak result can follow a well-delivered but unsuitable plan. A positive result can occur even when delivery has varied. Review both. Counting completed sessions helps explain opportunity to learn, but does not demonstrate that every explanation or scoring decision was correct.

The delivery check at the back records the planned components, what occurred and the support needed. Use it to improve the arrangement rather than to turn every missed session into a judgement about a member of staff.

A short staff discussion

Start with a fictional example or an anonymised record shared appropriately. Ask colleagues to identify the target, interpret correct responses and errors, name one plausible explanation and propose a teaching action. Then ask what extra information would change that action. The purpose is reasoned discussion, not guessing what the graph author intended.

For example, correct responses remain at ten while errors fall from five to zero. One colleague proposes increasing pressure for speed. Another asks whether the pupil has adopted a more careful strategy and whether that helps the classroom task. Look back at the pupil's account and teaching record before deciding. Fewer errors may already be meaningful progress.

Decide whether the routine is sustainable

Check who prepares the material, where it is kept, who covers absence and when the teacher reviews the information. If those tasks repeatedly fall between roles, simplify the plan. A smaller routine delivered and reviewed well may be more useful than an elaborate schedule that rarely happens.

End preparation with a named next step. Involve the pupil in explaining the purpose and deciding how they can raise a concern. Effective delivery includes the interaction around the task as well as the count on the sheet.

A completed plan for Ruby

This worked plan accompanies Ruby's example in chapter 5.

Purpose and pupil's view

Ruby wants fewer interruptions when reading a short classroom text. She says, "I stop on the same ones." The immediate target is easier reading of five words she has already been taught.

Target and conditions

See → Say. Use the five printed words in prepared varied cycles, each word once per cycle. Time thirty seconds from the first visible card. Score the first completed whole word. Silence for three seconds, or no word completed by five seconds when responding began earlier, is a timeout. Wrong words and timeouts each add one error; note them separately. Move promptly to the next card.

Starting picture

Three probes after the existing brief teaching routine: correct rates 24, 26, 24 per minute; total error rates 6, 4, 6. Chapter 5 retains raw counts and separates wrong words from timeouts.

Adult teaching and practice

Continue the baseline teaching routine. From session 4 add two guided retrieval rounds, each starting with a varied cycle of all five words, separated by a one-minute familiar activity. Correct and revisit confused items during practice. Retain the measured set, scoring, layout and duration.

Provisional aim and review

At least 40 correct per minute and no more than 2 errors per minute, chosen for this example. Review after five opportunities with revised teaching, or sooner if distress or repeated confusion occurs.

Classroom use and retention

On the next attended school day, observe a first reading of suitable connected text and record help needed. Check the cards seven calendar days after session 8, before targeted rehearsal that day; if absent, use the next attended day and record the actual interval. Note ordinary reading and relevant practice during the gap.

Delivery and backup

TA records whether the planned practice took place and notes the confused items. Teacher keeps the materials available and briefs the backup adult. Do not remove reading support to obtain a cleaner score.

Review decision

Sessions 6–8 reach the provisional aim. Ruby still hesitates on two words in text and says the story is harder. Keep appropriate reading teaching, add supported sentence practice and review connected-text performance separately. Do not claim general reading improvement from the card record alone.

Blank target and teaching plan

Use an agreed pupil identifier and store securely. Record the precise material and scoring so a colleague can deliver the same task.

Pupil identifier _____ Date _____

Teacher _____ Adult delivering practice _____

Classroom purpose and pupil's view

Precise response and actual target set

Input and response channel and access arrangements

Teaching and supported practice

Complete probe duration and scoring including response windows and self corrections

Starting performance and provisional aim with reason

Classroom use and later check

Delivery plan and backup adult

Review point and reasons for an earlier review

Blank session record

Use one sheet for one target, set, channel and duration. Enter raw counts in the app. If the plan includes timeouts in errors, show the wrong/timeout split in the observation column. Record an interrupted check separately from the comparable complete timings.

Pupil identifier _____ Target _____

Set identifier _____ Channel _____

Complete duration _____ Scoring rule _____

Date	Adult and practice	Correct count	Error count	Correct per min	Errors per min	Change or observation

Rate per minute = count × 60 ÷ actual seconds observed. State whether errors include timeouts and record the components separately.

Wrong responses timeouts or hesitations to reteach

Pupil’s account and next teaching action

Blank review and classroom transfer record

Bring the original plan, delivery record, comparable results and ordinary classroom observations together.

Pupil identifier _____ Review date _____

People contributing _____

Original classroom purpose and starting performance

Teaching and practice actually delivered

Pattern in correct responses and errors

What the pupil can now do in class and help still needed

Retention after a gap and conditions of the check

Pupil’s view and relevant family information

Decision and reason

Next action and adult responsible

Next review point and what we will explain to the pupil

Blank error analysis sheet

Use this alongside the session record when totals conceal a recurring difficulty. Record actual responses or timeouts, rather than a general impression such as careless.

Pupil identifier _____ Target _____

Date _____ Adult _____

Presented item	Pupil response or timeout	Teaching or access question	Next action

Pattern across the items

What we will teach or adapt next and who will act

What will show whether that action helped

Blank staff handover sheet

Keep with the material and current plan. Rehearse the scoring rule with the receiving adult.

Pupil identifier _____ Date _____

Teacher _____ Delivering adult _____

Classroom purpose and exact target material

Teaching explanation and useful strategy

Presentation and response channel

Complete timing and scoring including response windows and self corrections

Current pattern and items needing attention

Pupil preferences and access arrangements

Next action and person to ask for help

Review point and where records are stored

Blank delivery and preparation check

Use as a discussion aid. Record what was actually checked and any support needed.

Target _____ Date _____

Adults involved _____

Component	What we checked or observed	Follow up action
Classroom purpose and target		
Teaching explanation and material		
Pupil understanding and access		
Scoring and duration		
Planned sessions and actual delivery		
Recording and backup		
Review and classroom use		

What is working in the arrangement

One useful adjustment and adult responsible

When and how we will check the adjustment

Glossary

Accuracy

Whether responses meet the agreed definition of correct. A percentage also needs a clear denominator. It is different from the number of correct responses per minute.

Baseline

A description of performance before the particular change under review. In school it may be performance under existing teaching and support.

Celeration

Multiplicative change in response frequency over a stated period, analysed within the relevant charting conventions. It is not simply the visual steepness of an ordinary graph.

Endurance

Maintaining useful performance over a longer, appropriate period. A short probe alone does not demonstrate it; avoid extending a task beyond what is suitable for the pupil.

Frequency

The number of responses per unit of time, such as correct words per minute. This handbook also uses the everyday term rate.

Frequency building

Timed repetition of a specified response followed by performance feedback, intended to build accurate responding. Distinguish it from a timed probe used only for assessment.

Fluency

Performance that is accurate and easy enough for its purpose, with attention to retention and useful application. A single fast timing is insufficient to establish these qualities.

Generalisation

Use of taught knowledge or skill with an appropriate change in material, person or context. The comparison must not introduce demands the pupil has not been taught.

Implementation or delivery

What adults actually do and what opportunities the pupil receives. A written plan does not establish that its components happened.

Latency

The delay before a response begins. It is different from the total number of responses produced during a minute.

Learning channel

The input and response being measured, such as See → Say or Hear → Write. It is not a learning style.

Phase

A period during which specified conditions apply. A meaningful change in target, teaching or measurement should be identified so results can be interpreted.

Pinpoint

A precise description of an observable response and relevant conditions, rather than a broad aim such as improve literacy.

Probe

A brief performance sample collected under specified conditions. In this handbook it usually samples independent responding separately from teaching.

Provisional aim

A task-specific value agreed to guide review. It is not automatically a norm or a universal criterion for mastery.

Retention

Availability of learning after a gap. State what help and rehearsal preceded the check.

Stability

Maintaining useful performance amid ordinary, appropriate changes or distractions. This is a learning-performance term, not a judgement about emotional stability; do not create distress to test it.

Timeout

An opportunity that reaches the response limit defined in the plan without a completed response. If included in total errors, record it separately from a wrong answer.

Standard Celeration Chart

The standard chart used in the technical Precision Teaching system. Its ratio scale and proportions differ from ordinary linear graphs.

Transfer

Use of learning in the larger task for which it matters, such as moving from word cards into connected text. Teaching may be needed to support that change.

References and further reading

These sources support the history and evidence chapters. Access notes distinguish full articles from abstract summaries and further reading. The practical examples and graphs are original fictional illustrations. No listed author or organisation has reviewed or endorsed this handbook or the app.

[1] Evans, A. L., Bulla, A. J., & Kieta, A. R. (2021). The Precision Teaching System: A Synthesized Definition, Concept Analysis, and Process. *Behavior Analysis in Practice*, *14*, 559–576. Full open-access article consulted. A conceptual account of the system, including the central place of the Standard Celeration Chart.

https://doi.org/10.1007/s40617-020-00502-2

[2] Athabasca University. *Ogden Lindsley and Precision Teaching: A Brief History*. Educational resource, accessed 26 October 2026. Historical introduction; some terminology in older quotations differs from contemporary respectful language.

https://psych.athabascau.ca/open/lindsley/history.php

[3] Lindsley, O. R. (1992). Precision Teaching: Discoveries and Effects. *Journal of Applied Behavior Analysis*, *25*(1), 51–57. Historical further reading; publisher record consulted.

https://doi.org/10.1901/jaba.1992.25-51

[4] Gist, C., & Bulla, A. J. (2022). A Systematic Review of Frequency Building and Precision Teaching with School-Aged Children. *Journal of Behavioral Education*, *31*, 43–68. Published online in 2020. Full article consulted through the author-provided copy on ResearchGate; findings and review limitations checked.

https://doi.org/10.1007/s10864-020-09404-3

[5] Mc Tiernan, A., McCoy, A., Mendonca, J., Lydon, H., & Diffley, S. (2022). The implementation of Precision Teaching for the improvement of academic skills: A systematic review of the literature over thirty years. *Behavioral Interventions*, *37*(2), 505–528. Published online in 2021. Abstract and publication details consulted; included here as relevant further reading rather than a source of detailed study-level findings.

https://doi.org/10.1002/bin.1852

[6] McTiernan, A., Holloway, J., Healy, O., & Hogan, M. (2016). A Randomized Controlled Trial of the Morningside Math Facts Curriculum on Fluency, Stability, Endurance and Application Outcomes. *Journal of Behavioral Education*, *25*, 49–68. Publisher abstract consulted for the sample and reported outcomes.

https://doi.org/10.1007/s10864-015-9227-y

[7] Hayes, B., Heather, A., Jones, D., & Clarke, C. (2018). Overcoming barriers to using precision teaching with a web-based programme. *Educational Psychology in Practice*, *34*(2), 166–174. Full accepted manuscript consulted through UCL Discovery.

https://doi.org/10.1080/02667363.2018.1433129

https://discovery.ucl.ac.uk/id/eprint/10067798/

[8] Diffley, S., Kubina, R. M., Jr., Noone, C., Hannigan, F., & Mc Tiernan, A. (2026). The Social Validity of Teacher Implemented Precision Teaching: Students' Perspectives. *Journal of Behavioral Education*. Open-access article consulted. Qualitative research on pupil experience, not a comparative effectiveness trial.

https://doi.org/10.1007/s10864-026-09632-z

[9] Vostanis, A., Thompson, P. A., Padden, C., Rizos, K., & Langdon, P. E. (2023). PROTOCOL: Evaluating the application and effectiveness of precision teaching: A systematic review and meta-analysis. *Campbell Systematic Reviews*, *19*, e1317. Abstract and publication details consulted. This publication is a protocol, not completed review findings.

https://doi.org/10.1002/cl2.1317

[10] Kubina, R. M., Jr., & Yurich, K. K. L. (2012). *The Precision Teaching Book*. Greatness Achieved Publishing Company. Specialist further reading on the system and charting; publisher description consulted rather than the complete book.

https://greatnessachieved.com/products/book-1

[11] Johnson, K., & Street, E. M. (2013). *Response to Intervention and Precision Teaching: Creating Synergy in the Classroom*. Guilford Press. Further reading in a US school context. Publisher description consulted; commonly cited as 2013 following release in December 2012.

https://www.guilford.com/books/Response-to-Intervention-and-Precision-Teaching/Johnson-Street/9781462507610

[12] Department for Education & Department of Health (2015). *Special educational needs and disability code of practice: 0 to 25 years*. Chapter 6 provides the English school context for graduated support and teacher responsibility. Consult the current statutory guidance for decisions about duties and provision.

https://www.gov.uk/government/publications/send-code-of-practice-0-to-25

[13] Athabasca University. *Precision Teaching: Concept Definition and Guiding Principles*. Educational resource, accessed 26 October 2026. Introduction to frequency, ratio scales and celeration.

https://psych.athabascau.ca/open/lindsley/concept.php

[14] Department for Education (2023). *The reading framework*. Guidance for England, updated September 2023. Relevant context for phonics, fluency and comprehension; not an evaluation of this handbook.

https://www.gov.uk/government/publications/the-reading-framework-teaching-the-foundations-of-literacy

App instructions

PrecisionTeaching.uk. *Help*, *Your first session* and the live app interface, checked 26 October 2026. These are the author's resources. App instructions describe the version inspected and may change.

https://precisionteaching.uk/help.html

https://precisionteaching.uk/start-here.html

https://precisionteaching.uk/app.php

About the author and this handbook

Dr Ian Corban

Educational & Child Psychologist

HCPC Registered

Associate Fellow of the British Psychological Society

Ian is an independent Educational Psychologist working through Corban Psychology Ltd. His background includes person-centred counselling. His approach brings together documents, consultation with staff and parents, pupil voice and observation where appropriate.

Companion resources

PrecisionTeaching.uk provides the optional app and related instructions. The book can be used entirely on paper. Day by Day Tools offers additional classroom resources, while EP for Schools provides articles for school staff. These resources are maintained separately and may change.

https://precisionteaching.uk

https://daybydaytools.co.uk

https://epforschools.co.uk

Make brief practice count in the classroom.

A pupil becomes quicker on word cards, but still hesitates in a sentence. Another answers more number facts and makes more errors. What should the adult change next?

Precision Teaching in School helps teachers, SENCOs and teaching assistants turn focused practice and clear records into useful teaching decisions. It explains the history and evidence, then shows how to choose a worthwhile target, teach it explicitly, record performance fairly and check whether learning helps in class.

Worked reading, spelling and mathematics examples show the adult's role before, during and after a brief check. Graphs, scoring exercises and troubleshooting questions help staff respond thoughtfully when results improve, stall or become misleading. Six reproducible sheets support planning, review and handover.

Written with a person-centred emphasis on the pupil's experience, this practical handbook can be used on paper or alongside the optional recording app. It explains simplified school practice and signposts the specialist Standard Celeration Chart tradition.

Dr Ian Corban is an HCPC-registered Educational and Child Psychologist and Associate Fellow of the British Psychological Society. His background includes person-centred counselling.