Precision Teaching: a brief introduction

Essex Educational Psychology Service
‘Improving lives: using psychology to create positive change’

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EP Training available*

Part A  2 ½ hours
• To know more about Precision Teaching
• To know how to set up and monitor an intervention programme of Precision Teaching

Part B  1 hour
• To review how the implementation has been going and make future plans

* Other training providers are available
As part of the SENCO Briefings

• Introduce it

• Highlight common misconceptions

• Promote it

This session is not intended to train you to use Precision Teaching and is intended for those who attended the SENCO Briefing sessions Spring 2018.
What is Precision Teaching?

Precision teaching is a precise and systematic method of evaluating instructional tactics and curricula.

Pioneered by Ogden Lindsley in the 1960s.
Precision Teaching...

- Is an individualised programme for pupils
- Is a tool for knowing what a child has learnt and how well they have learnt it
- Enables collection of daily information to inform future teaching

It improves
- Identification of what needs to be taught
- Fluency and retention of skills
- Success, progress and self-confidence
It is not...

- A method of teaching – you can teach however you want
- A prescriptive programme of work

Essential principle throughout: The child knows best
What is Precision Teaching?

Precision Teaching is the bit in yellow.
Who is it for?

It is suitable for use with pupils:

• who need additional support due to making little, inconsistent or no progress with specific skills;

• who would benefit from increased self-confidence, self-esteem and motivation.

Can be used to help monitor teaching of a wide range of skills e.g. colours/shapes/reading and writing sounds/words/numerals, number bonds, times tables, foreign language vocabulary
What are the benefits of PT?

• helps to identify exactly what needs to be taught and enables the adult to teach what the pupil is ready to learn

• helps the adult to decide when to move on to new work as it offers daily feedback on performance

• provides visual evidence of success and progress – rewarding and motivating for pupil and adult

• enables the adult to speak of the pupil’s progress in precise terms

• is very specific and can support target setting.
Why does it work?

Precision Teaching:

• builds on current knowledge;

• ensures skills are taught to a degree of accuracy and fluency that will enable maintenance;

• ensures success (prevents failure);

• increases self-confidence, self-esteem and motivation and therefore learning progress.
Evidence of effectiveness

- It has been shown by research over decades to be effective if done properly
e.g.
- Chiesa & Robertson (2000): PT group learnt key maths skills over 3 times quicker than control group.

- Roberts & Hampton (2008): Mean word reading score increased by 28 for PT group over 6 weeks, compared to 1.3 for control group.
**Underpinning psychological theory**  
‘Hierarchy of Learning’  
(Haring et al, 1983)

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
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<tbody>
<tr>
<td>Acquisition</td>
<td>Acquiring the skill, sometimes accurate, some hesitation, need high level of feedback</td>
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<tr>
<td>Fluency</td>
<td>Perform skill with accuracy and fluency, without hesitation</td>
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<tr>
<td>Maintenance</td>
<td>Fluent and accurate over time, without regular practice</td>
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<td>Generalisation</td>
<td>Can use the skill in a variety of contexts</td>
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<tr>
<td>Application/Adaptation</td>
<td>Can adapt the skill to new contexts and use to solve problems</td>
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“He knows it one day and not the next”

“She’s forgotten it all over the holidays”

“He got those words right in his spellings and they’re still wrong in his writing”

“She’s not using what she knows about X to help do Y independently”
How to deliver Precision Teaching?

1. Identify the priority skill area that needs intervention (e.g. word reading)
2. Assessment
3. Establish focus items (e.g. words) and prepare a probe/test sheet [http://www.johnandgwyn.co.uk](http://www.johnandgwyn.co.uk)
4. Acquire a baseline and set a target
5. Short teaching session on the focus skills
6. Daily testing of performance using a probe/test sheet
7. Daily recording of results using semi-logarithmic chart [http://www.johnandgwyn.co.uk/PTprobechart.pdf](http://www.johnandgwyn.co.uk/PTprobechart.pdf)
8. Review: move on or amend target/teaching methods?
When considering the teaching element remember instructional psychology

- **Interleaved Learning**: mix the old with the new

- **Distributed Practice**: ‘little and often’ practice sessions
Step 7: Chart Results

Pupil:_____________________

Criterion:
______ correct with
max _____errors

Key:
→ Correct answers
✓ Incorrect answers

Do not join across weekends.

If you are not using semi-logarithmic graph paper you are not doing precision teaching.
Step 7: Chart Results

- Count up responses and chart results with the pupil – helps to motivate the pupil & increase confidence.

- Helps teacher to see which teaching methods are most effective for particular pupil (record what teaching methods used when so you can see what works best over time).

- Record all information: name/target/date and the number of correct AND incorrect responses.

- Record any changes made to task, e.g. record when new material was added to that being learnt, such as by ruling a vertical line on the graph, to show why number of incorrect responses went down after that (as it might).
Step 7: Chart Results

Ratio Charts/semi-logarithmic chart paper will show...

- When the information was collected.
- The effects of weekend/absences etc.
- The rate of learning – how many days are needed to learn new items
- Any patterns in learning.
- How well your teaching is working.

Can add LSA initials on column each day.
A standard chart

John & Dave's progress

Correct per minute

Monday  Tuesday  Wednesday  Thursday

Days of the week

John & Dave's progress

Correct per minute

Monday  Tuesday  Wednesday  Thursday

Days of the week
Feedback

Each day…

• Positive, specific feedback, with a growth mindset approach!
• You got XX right today.
• Here are the ones you haven’t quite learnt yet (emphasise will be able to do these if keep working on them).
• Which ones did you find easy? Which ones did you find tricky? Let’s focus on those more tomorrow.
Step 8: Analyse the data
3 day rule

- The first 3 days will tell you if the task is unrealistic for the pupil

- **If fluent and confident**, create a new probe using e.g. 3 known and 2 new items, or all new items, depending on the pupil’s learning rate and confidence

- **If not fluent and confident**, the most likely changes needed are about getting the task right (need new target or probe?)
  1. Task slice – reduce demands of task or target
  2. Pre-requisite skill – go back to an earlier skill
Step 8: Analyse the data

8 day rule

Stop if the pupil is not at or very near your selected aim rate after 8 days on same task, it is likely that a change is needed

• Consider teaching method used

• Consider pupil’s motivation

….the learner is always right