

Research Paper No 4.

March 2015

Results of a Precision Teaching Pilot

What is Precision Teaching?

Precision teaching is a method of planning a teaching programme to meet individual needs of children and young people who are experiencing difficulties with the acquisition, fluency or maintenance of some skills. It is particularly effective in aspects of learning (such as literacy & arithmetic) where tasks can be broken down into small steps with clear objectives. Difficulties with acquisition and fluency mean learners either cannot remember what to do or can't do things fast enough for skills to be automatic.

Precision teaching's repetitive approach is effective because over learning and committing information to long term memory reduces the likelihood of learning being 'lost' again. Teaching sessions take place daily for 10 - 15 minutes and an evaluative and monitoring process is built in, which provides accurate information about learners' progress and the most effective teaching methods.

Precision teaching can be delivered by teachers and support staff. It can be used in the early years, primary or secondary context with learners who appear to know something one day but not the next; appear to know something in one area but not in another; are very slow in the production of work; don't have the 'basics' and / or seem able enough to complete tasks but are reluctant to try.

The Pilot

Teachers and support staff from five schools across Moray took part in the precision teaching pilot, which began with a 3 hour training session in January 2014. Training covered the theoretical underpinning of precision teaching, how to use the programme, designing and administering probes (grids for measurement), writing learning objectives and recording and monitoring progress and effectiveness of teaching. After the initial training, participating schools were offered follow up school visits and support at any time via telephone or email.

In June, schools were asked to comment on:

- How easy precision teaching was to implement
- How useful it had been and the impact / sharing of good practice
- Any difficulties or barriers and how they were overcome
- What additional or different support might be needed
- Whether they would recommend precision teaching to others

Education and Social Care

The following is a summary of the feedback received from two of the participating schools.

Benefits

- Pupils have enjoyed the predictability, routine and seeing their progress in concrete terms (getting better scores).
- Progress is closely monitored and the use of probes provides a clear indication of where support is needed.
- Short bursts of targeted, precise, 1-1 support seems beneficial
- Precision teaching is straightforward to implement and can be carried out by teachers and / or support staff.
- Probes are accessible and can be tailored to individual needs.
- No special equipment is required and resources for the teaching element usually exist in the school already.

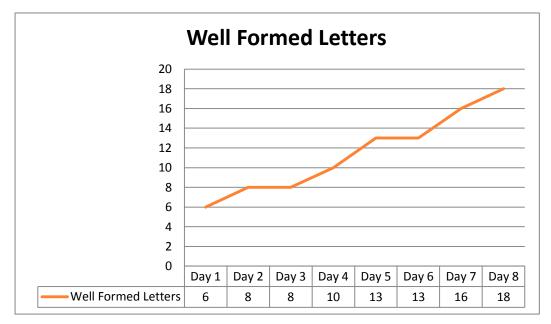
Challenges

- Having the time and staff capacity to carry out precision teaching with multiple pupils every day.
- Recording progress by making up charts and graphs was also a challenge in terms of time.

Example of Application

Precision teaching was used with a P5 pupil who found forming letters difficult. In consultation with the pupil, the letters, a; c; d; o and g were targeted and daily practice took the form of tracing and letter tracking. On the first day, 6 letters were well formed and by the end of the first week, there were 13 letters "very well" formed and "others were better". After 8 days (again with consultation) it was decided that more practice was needed with letters o; g and c and letter e was added to a new probe.

Before precision teaching, the pupil (who has an autism spectrum disorder) was reported as "not seeing the need for neat handwriting". After the first probe was completed, the pupil was said to be "very enthusiastic" about practicing and improving his handwriting and had begun to transfer these skills to everyday writing in class.



Graph 1: The number of well formed letters, P5 pupil

Possible Application - Maths

Fluency in basic skills, a range of strategies to add, subtract and multiply (both by mental and written methods) and an ability to apply these skills and manipulate information are important for problem solving. Some children and young people can have good basic skills but find the application and manipulation aspects difficult while others can problem solve but have difficulty memorising times tables and basic addition and subtraction facts. Others may have difficulties in both areas. Difficulties and / or a lack of fluency in either area are problematic for learners. Problems with basic skills make other aspects of maths very hard and time consuming while difficulties with problem solving can lead to frustration and a perception that learners 'can't do' maths.

Precision teaching can be used to improve skills that are beginning to develop in terms of either basic skills or speed of application. Possible areas to focus on include times tables, addition and / or subtraction sums, adding (and / or subtracting) two digit numbers or adding numbers where the answer is no greater than 5, 10 or 20.

The following link describes, to parents, how precision teaching might be used at home to improve basic maths skills

http://www.moray.gov.uk/moray_standard/page_62202.html