Observational methods

Observational methods are useful ways in which teachers can build judgements about individual pupils. There is a whole range of methods but some are easier to use in a busy classroom than others. Overall, it is worth thinking about selecting a 'toolkit' of user-friendly methods and making good and regular use of them. They need to be easily understood by the whole class team, teacher and teaching assistants, and should help the team and the parents and others learn about the pupil. Below are some well-established methods which you might consider using to observe the pupils. Needless to say, this is not a definitive list!

Running Records.

A running record is a continuous observation of a behavior stream for a particular period of time. The observer writes down what the pupil says and does for a length of time or a particular activity. During the recording, the observer should aim not to interpret what is seen but to provide an account of a naturally occurring behaviour. The purpose of the running record is to gather a great deal of information, which is generally *qualitative* in nature. After making a record, the observer may write up their conclusion and briefly summarise what occurred.

Running records clearly support planning of activities for individual pupils. They result in the systematic collection of detailed, descriptive narrative data about development. The main problems for teachers are that they require time to be set aside at regular intervals when an observer, usually the teacher or a teaching assistant, is freed to make the record. Making good running records calls for a good understanding of how children learn, knowledge of the child being observed, sensitivity, expertise and objectivity on the part of the observer.

Anecdotal Records

An anecdotal record is a short, concise, nonjudgmental written record of one directly observed incident rather than a narrative about a continuous stream of behaviour. The observer records the incident after the observation and briefly captures the essence of what the pupil said and did and the context in which this occurred. Not just any event is recorded; records are kept only of something the pupils says or does that seems as developmentally significant and valuable. Usually, the observer can make a quick memo using key words that are transcribed later. In many settings, staff use post-it notes for writing down observations of children engaged in learning activities. The notes are dated and linked to a particular area of learning or a priority target in the pupil's individual education plan (IEP). It helps to place the notes on a notice board alongside the pupil's name. This helps staff to see which pupils have been observed and makes it plain if there is a need to focus observations on particular pupils. Post-it notes only work if staff take the time to organise them and refer to them. The aim is to systematically gather information, which is generally *qualitative* in nature, to document significant evidence of the pupil's development. These anecdotal records are relatively easy to use and are less time consuming than running records. They can provides a rich source of documentation for recording a pupil's developmental progress in key areas. They are useful for curriculum planning and constructing IEPs and writing summaries for reports for parents

and others. The problems are the same as for running records. They require good skills on the part of the staff and it is possible to miss important milestones in pupil's learning. Unless the class team is exceptionally well-organised, there is a danger of drowning in post-it notes.

Checklists

Many education settings use checklists. A checklist, sometimes called a ticklist or tick chart, is an inventory of behaviors or skills that the observer marks or checks if the pupil is seen to demonstrate them. The focus is inevitably on easily observed behaviors or skills that happen within daily routines and activities. Observations may be conducted for a single period of time or over several observation periods. The checklist may be filled out during or after the observation. The class team member who is acting as the observer must be familiar with each item on the checklist and there must be clear agreement about what earns a tick. The checklist is used to assess what the pupil says and does at a particular point in time; use of dates or different coloured inks at different dates helps to track changes over time. Checklists are efficient and convenient. They are not too demanding of time. Progress within a huge range of behaviors and skills can be assessed using checklists. However, checklists can result in missing important information if observations are limited to only those items on checklist. A checklist indicates only presence or absence and does not indicate anything about the context in which the observations are conducted. So, it is not a good idea to rely totally on checklists. They can serve as a basis for identifying the targets of further observations and to provide a simple audit of how a pupil is progressing within a particular curriculum area. Checklists work best when observers record additional comments on the context or when linked explicitly to other observations that have been done. Some checklists are excellent. There are various checklists of child development: for instance, the *PIP Developmental Charts* by Dorothy Jeffree and Roy McConkey focus on 'milestones' of development in key areas of physical, social, play and language development. They provide a structured framework for observing and recording children's development from birth to five years (for more details and sample pages go to www.hoddertests.co.uk/tfsearch/development/pip.htm).

Rating Scales

A rating scale is an assessment instrument used to judge or rate the quality of a particular trait, characteristic, or attribute of the pupil based on pre-determined criteria. For instance, in a scale of emotional and behavioural development published in 2001 by the Qualification and Curriculum Authority, the teacher is given a series of statements of desirable behaviours and is asked to mark whether they occur not at all, rarely, sometimes, fairly often, often, always. The Preverbal Communication Schedule is another example of a checklist-cum-rating scale, although it does include some test items. It uses the rating scale U = usually, R = Rarely and N = Never. Another type of rating scale might ask for a rating of degree of intensity instead of or as well as frequency of occurrence. Two commonly approaches to rating used in such scales are:

a. Numerical rating scales offer the observer choices designated by sequential number values. Ofsted's rating scale is well known with its grades of 1 to 4 where 1 is

outstanding; 2 is good; 3 is satisfactory; 4 is inadequate. A numerical scale also could be used to indicate intensity of a behaviour when it occurs. The observer circles or otherwise indicates the number that seems most appropriate.

b. In graphic rating scales, the observer marks the quality of the behaviours or characteristic of the pupil using descriptors of frequency of occurrence on a continuum, as in the QCA rating scale. Typical descriptors include: Never, Rarely, Sometimes, Always and Poor, Average, Excellent.

Rating scales can be used to assess the individual once only or on repeated occasions to show developments over time. They can be completed using information derived from direct observations or from existing information contained in running records or anecdotal records. They require relatively little time to complete especially if information is already available and direct observations are not required. If they are designed well, they provide clear, objective criteria against which ratings are made. They can be used to provide large amounts of information which can be analysed to look for patterns and they can be used to present the information to parents and others. It has been found that, if an odd number of criteria are used, observers tend to fill out the middle descriptor. Also, the criteria must be very clear and precise in order to avoid subjectivity of ratings. Most importantly, they do not indicate the context in which the pupil is observed and much useful information is missed by evaluating behaviours in isolation and out of context.

ABC Analyses

ABC analyses are a range of methods that are used to investigate what precedes (**A**ntecedents) and what follows (**C**onsequences) a **B**ehaviour. Typically, the observer is looking for the occurrence of a targeted behaviour. Records are made only when the targeted behavior occurs and careful note is made of antecedents and consequences. This is known as event sampling but the recording of antecedents and consequences as well allows the observer to determine whether there are identifiable causes and effects of targeted behaviors. This will lead to the formulation of hypotheses about what typically serves to trigger or elicit and maintain or reward the targeted behaviour. ABC analyses can be very effective in developing individualised strategies for promoting a pupil's development. The main problem is that they demand much time and they require expertise and objectivity.

Event Sampling

Event sampling, also called frequency counts, involves observation of targeted behaviours or specific events. There is no recording of antecedents or consequences. Event sampling is used to determine how often a specified event or behavior occurs. In essence, the observer records a tally or tick every time a particular observable event or behaviour occurs. The method can be used to examine a wide range of behaviours of individual pupils or groups or whole classes in a range of routines and activities. The method can be used to show how frequently (or infrequently) a specific event or behaviour occurs and this information can be used to monitor developmental progress or the impact of changes in teaching strategies. The method is simple; tally marks are easily made on a prepared record form or using a tally counter and the observer can continue teaching, stopping only to record the occurrence of

the targeted event or behaviour. Although simple, it can increase awareness of what pupils are doing or not doing and that helps with the formulation of IEPs. The main problem is that behaviour is taken out of context with no indication of what preceded or followed it. Thus, it does not identify the causes of behaviour.

A simple example would be to record how often and for long a child engages with a play activity. Does the pupil tend to engage more frequently and for longer periods with certain types of equipment? This kind of information can affect choices of by teachers in the development of high-interest activities. A rather more complex example sampling several behaviours, might be to record elements (but not all) of teacher language used with a pupil or pupils. Do instructions or requests occur more frequently than questioning to check for understanding or explanations of what to do?

An alternative approach is to divide a session into five minute periods. It is helpful to create a simple grid with several columns for recording rather than just write on a blank sheet of paper. The left-most column may be used for timings – every five minutes in this example. The other columns would be used to record the pupil's activity. At the start of each five-minute period, the observer should look up to see where the pupil is and what he is doing at that point in time. The rest of the five minutes would be used to note down any behaviour (or lack of engagement) or events seen during those few seconds.

Time Sampling

Time sampling is very similar to event sampling in its purpose. However, it is used to observe behaviours or events that occur very frequently or too frequently for efficient event sampling. During predetermined units of time (time samples), say, for one minute at the start of every 20-minute period, the observer records every occurrence of targeted behaviours or events. The method gives a good indication of how frequently a specific event occurs during a specific time period, in the above example for three minutes in every hour, and by extrapolation its probable frequency throughout a school day. It is adaptable for use in different settings and activities focusing on pupil or teacher behaviour. Again, behaviour is taken out of context and there is no indication of the quality of what occurs. For instance, time sampling could be used to record the frequency of rapidly occurring behavioural tics such as jerks or stereotypical behaviour such as hand flapping.

Use of New Technologies

Over the past twenty years educational settings have gained access to increasingly sophisticate digital recording methods which can be used to enhance the data collected during observations or to maintain permanent visual records. Digital cameras are cheap and ideal for taking photographs of pupils doing things and many cameras allow the observer to take short videos. Digital camcorders can be useful when it is hard to write down what pupils are saying or doing and remain involved in teaching them. Just orient a wall-mounted or tripod camera in the right direction and press the record button. Film clips can often show things missed by an observer using more traditional methods. Sound recordings can also be made using MP3 recorders or even mobile phones and can be used to analyse what pupils

say. There are a number of software assessment programmes, e.g. CASPA, which allow digital recordings to be stored in the individual pupil's records as evidence of progress and attainment. Of course, pupils may behave differently in the presence of a camera or other recorder but they do tend to become accustomed to their presence in the classroom if they are used often enough.

Photographs and work samples

Documentation of pupils' work can form an integral part of information about what the pupil can do. This may be represented in various forms. When pupils work on projects, a camera should always be ready to use. It pays to save artwork, samples of writing, and other things that pupils create to share as a class team or with parents and others. However, all of these samples have no utility if they are not annotated in some way. They have to be dated and the notes have to show what the pupil did and the context. A picture may be worth a thousand words but often little can be understood from them without the back-up of some written record.

Involving the pupils

The pupils can be part of their own observations. Ideally, there should be a record of what they have to say about what they are learning. What do they think about their work? What would they like to do differently? Let them be part of the process in planning for their own success. When pupils develop a vision for themselves, they are active participants in their own learning. Pupils take great pride in their accomplishments and are very honest and open in assessing themselves and the direction they need to go. Observers must listen to them.

Of course, the above methods are not incompatible and can be used in combination, e.g. a running record may lead to identification of a behaviour to be sampled through event sampling and this may lead to an ABC analysis. There are both advantages and disadvantages in using structured, systematic observation methods within a classroom. If the method is well-designed, it can supply much useful information. It can show whether or not a teacher's impression is justified, for example, that a particular pupil habitually says little unless directly asked a question. However, pupils may interrupt the observer's work or behave differently because they are aware of being monitored. The use of structured observation schedules also requires at least two adults to be present, one to carry out the observations and one to work with the class. They can also be time-consuming both in terms of making the observational records and the subsequent analyses. However, observational methods remain useful ways of building judgements about individual pupils and even the dynamics of the classroom. They may point to features of the classroom which the teacher could improve, such as making certain types of resources more accessible or creating visual timetables. But observation is only one way of assessing pupils' developmental progress. It is equally important to test pupils' abilities and knowledge in more controlled situations and other elements of this module will explore further the use of tests.