INTRODUCTION

Any measurements made around the impact of study support activities must have a clear purpose. The purpose will be a major determinant of what measurements are made and how they are done. Some measurements may be required by outside bodies, but the best value is obtained by measurements that are designed to answer a question that is relevant to improving practice or outcomes. The audience to whom the results will be reported may also have an impact on the measurements made.

REASONS FOR MEASURING IMPACT

Possible reasons why data is collected, analysed and evaluated are as follows:

- To assess the effect of an activity or a programme of activities on academic attainment.
- To assess the development of identified skills as a result of an activity.
- To assess the effect of an activity or a programme of activities on personal development.
- To help target appropriate pupils for an activity or a programme of activities.
- To see if identified needs/objectives have been met.
- To inform the planning of a future activity or programme of activities.
- To assess if an activity/programme provides good value for money.
- To help set objectives for the development of the activity/programme.

The best place to start is with a question that you want or need to find the answer to. What this question is will shape the planning of your evaluation methods. This planning is dealt with in more detail in another pamphlet in this series.

POSSIBLE QUESTIONS

To what extent did activity X attain its objectives?

Evaluation is a relatively simple procedure in many cases, because only a single activity is involved, provided the outcomes are specific and easily measured. For example, if an objective of a swimming club is to ensure that all beginners can swim one length after 5 weeks, then this is easily measured and, because the objective is obviously and very closely linked with the activity, there is no need to consider control groups. Wider objectives (e.g. Improved self-confidence) may may
the process more complex, however, because they are more difficult to measure and less directly related to the activity.

**Does study support improve academic attainment?**
This is a much more difficult question to answer than the last one. A multitude of subsidiary questions must be asked, such as:

- How will we measure *improvement*?
- Are our baseline measurements reliable?
- Do we have adequate controls?
- Are the participants representative of the year group as a whole?
- How can we be sure of the cause and effect relationship?
- Is the sample size (if used) adequate?
- Are all study support activities within the programme likely to have equal impact?
- What do we call ‘attendance’? Should there be a minimum number before it ‘counts’?

To get a valid answer to such a question usually requires a large sample and this is easier in a large institution or a cluster. Smaller schools can still investigate the question, but their conclusions will be less secure unless carried out over several successive years (so increasing the sample).

**Does study support develop personal skills?**
This question raises the difficulties of the last, but has the additional one that personal development is more complex to measure than academic attainment. Unless you are confident that the personal development profile you are looking at is precisely defined and able to be measured accurately, the results will be unreliable.

A future pamphlet in this series will deal with assessing personal development in more detail.

**What type of pupil benefits the most from this activity?**
Measuring impact can inform future targeting. It may be that a particular gender, specific ethnic group or a certain ability range show the greatest benefit from an activity. For instance, in a reading club, all pupils showed an increase in reading age over the course of a term, but it was noticed that the greatest benefit was for those with a reading age below 8 years, and those with a reading age of 10 or above increased their reading age only slightly more than a control group. This allowed the school to target the reading club at pupils with a reading age of 8 years or below the following year.

Although measurement and evaluation can be planned to study different groups, this is not always necessary and the differential effects, if any, may be noticed from the data collected. It is only necessary to be aware of these possibilities and look for differences in the data.

**What type of study support is most effective?**
The first subsidiary question to ask is - effective at what? - clear objectives need to be set. There is evidence that all types of study support can boost attainment, but in devising a programme you may wish to assess differentials in effectiveness. We suggest the following ‘typology’ of study support activities:

- **ACADEMIC**: Revision classes, coursework clinics, booster classes, homework clubs, subject clubs (if curriculum based). The focus of these clubs is specifically directed to improving exam performance.

- **SKILLS BASED**: Sports clubs, school teams, art, drama and music clubs (not curriculum focused), school performances, Duke of Edinburgh award etc. The focus of these clubs is to build a set of clearly defined performance skills
• GENERAL INTEREST: Subject clubs when not curriculum focused, wargames clubs, fantasy football, computer games, book clubs, philosophy for children, etc. The purpose of these clubs is to widen pupils’ interests and learning beyond the curriculum.

• ENABLING: Reading clubs, ICT skills, learning skills etc. The idea of such clubs is to build up cross-curricular skills to improve performance across a range of subjects.

• BREAKFAST CLUBS: These can be a special case, particularly those that only provide a breakfast without combining it with any specific learning activities. The purpose is simply to improve the pupil’s learning state.

Is the methodology and/or content appropriate? 
If an activity runs over several sessions, and outcomes are measured, it is useful to note any changes in outcomes that result when content or methodology is changed. This can provide information about the effectiveness of these features, but it must be borne in mind that the cohort will be different and that small differences cannot necessarily be attributed to what happened in the activity, as they may be more related to the nature of the pupils taking part.

The questions above are the sort of questions that relate to outcomes. However, there is a need to consider other questions if the measurement of impact is to provide meaningful results.

How are we going to establish an initial baseline? 
Impact relates to improvement. This cannot be judged unless there is a baseline measure before the activity starts. Ideally, this baseline should be specific and reliable. The most reliable impact measurements result from pre- and post-testing, where the pre and post test are the same, so that scores can be directly compared. Baselines for general academic attainment (whether internal or external) can never be entirely reliable. The issue of different baselines and their advantages and disadvantages will be dealt with in another leaflet.

Is the method of measurement reliable? 
In other words, does the measurement reliably reflect the desired outcome? For instance, if a certain skill is measured, is there a possibility that a pupils could perform well (on a single occasion) purely by chance, without really having consistent ability? Is the ‘test’ actually measuring what is intended? Looking at the effect on vague qualities like ‘attitude to learning’ suffer in this respect. For instance, is the measure of ‘attitude to learning’ independent of other factors such as attitude to school and attitude to individual members of staff?

Is the group attending representative? 
To use an example - attendance at a science club may well improve attainment in science. However, the pupils attending may well be those already interested in science and a better performance may be linked to general motivation rather than attendance at the science club. If less science orientated pupils could be encouraged to attend, the effect may not be so great because general interest was not so developed. This is always a problem when ‘overall’ effects of attending study support programmes are looked at. The cohort that attend study support may be different in nature from the non-attenders, and some attempt will then need to be made to tease out the actual effects of study support attendance.

Is the ‘sample size’ adequate? 
Sample size is only a concern when you want to draw ‘general’ conclusions. If the impact is being measured purely on those attending a given activity, for instance, then sampling is not even necessary, as the whole group can be assessed. If there are too many students to record the results of the whole group, then a sample will be necessary, and it is important that it is of sufficient size to be representative. This most usually happens when a school wishes to look at the progress of pupils who did attend any form of study support activity with those who did not.
Is it possible to set up a control group?
It is often difficult to precisely correlate an outcome with attendance at study support, as other factors about the pupils who did or did not attend may influence the outcome. In such situations, ideally, there should be a control group of pupils who are similar in every way to those who attended study support, the only difference being that they did not attend. An ideal control group is often difficult, if not impossible to set up, but conclusions will always be more reliable if a control group of some sort, even if imperfect, is used for comparison. A further guidance sheet deals in more detail with sample sizes and control groups.

**A SUGGESTED PROGRESSION IN MEASURING IMPACT**

Different schools are at different stages in measuring impact. It is better to start with simple data and/or small studies, and to then move on to wider issues. A suggested progression is listed below:

1. Tracking attendance and evaluating pupil enjoyment.
2. Measuring improvement related to a single club or activity.
3. Using measurements to inform targeting and planning.
4. Large scale measurement of impact on those attending any aspect of the study support programme.
5. Action research around study support and its effects.