

League Tables - Who Needs Them?

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No. 14, April 1999

School-level examination results have been published by the Scottish Office Education and Industry Department (SOEID) since 1992 and have given rise to League Tables of schools. Now attainment targets have been set for each school, and progress towards the targets is to be published. This *Briefing* discusses these developments and some of the issues which need to be addressed in order to provide information about school performance which will be helpful to parents, schools, education authorities and the SOEID.

- **League Tables** based on raw examination results have been discredited as misleading to parents and demoralising to schools.
- **Publication** of school-level attainment targets and progress towards the targets will provide a new source of League Tables which may be even more misleading because they give a spurious impression of fairness.
- **Research** suggests that the most appropriate way to compare schools' performance is to estimate the progress of pupils taking account of prior attainment and using pupil-level information; this is sometimes called "value-added".
- **Adequate** measures of attainment are essential for estimating pupils' progress but there is a lack of suitable measures for the 5-14 stage.
- **The** use of Free Meal Entitlement (FME) by the Scottish Office to take account of social class differences in school intake is not an adequate substitute for a proper measure of prior attainment.
- **Information** about progress at pupil-level is needed by schools to help them identify under-achievement, focus interventions and evaluate effectiveness.
- **There** are a number of different audiences for statistical information about schools: parents; school management teams; education authorities; and the SOEID. Each audience needs different information; current arrangements do not take this into account.

Introduction

Since 1992 the SOEID has produced considerable quantities of statistical information about school performance, of which the most notorious has been the publication of “raw” examination results which gave rise to the League Tables. These have been criticised because they do not take account of differences in school intake, do not measure pupils’ progress and may give a misleading impression of the relative effectiveness of schools (Paterson, 1993). League Tables have had a demoralising effect on teachers in schools serving more socially deprived areas which have relatively low academic attainment. League Tables have contributed to increasing social-class differences between school intakes through their influence on parental choice of schools (*CES Briefing No 12*).

Before coming to power, the Labour government condemned the League Tables as “a seriously flawed and misleading exercise” (Scottish Labour Party 1997, p15) but it now continues to publish the information on which they are based. As part of the government’s policy **Raising Standards - Setting Targets** a new series of statistical information is to be published by education authorities setting out for each school recent levels of attainment, the attainment targets and progress towards the targets. The attainment targets for secondary schools have been calculated using school-level examination results very similar to those used for the League Tables, and taking account of school differences in Free Meal Entitlement (FME) which the League Tables did not. However, FME is a very inconsistent measure of school intake characteristics. Setting examination results in the context of FME will give a spurious impression of fairness (Croxford, 1998).

Until now, there have been no League Tables for primary schools. The proposal by the former Conservative government to publish the results of National Tests associated with the 5-14 curriculum was resisted by parents and schools. Now school-level attainment of the 5-14 attainment targets is to be published as part of the Labour government’s policy of target setting. However, there are basic problems in doing this. 5-14 attainment targets are not assessed on a comparable basis because their purpose is primarily to inform teachers about their pupils’ learning, and they are not intended for comparisons between teachers and schools. There is lack of clarity in the criteria of the attainment targets. Assessment is a mixture of teachers’ subjective judgements and discretionary National Tests carried out at different times. Primary school comparisons made on the basis of these results will be meaningless.

We need to assess how effectively schools help pupils to progress, but a more fundamental evaluation

of the provision and use of statistical information is needed. We need to ask:

- what is the purpose of statistical information?
- who is the audience?
- what information do they need?

The following table summarises the different purposes of statistical information for three key audiences, and suggests that each needs different types of information.

Audience	Purpose	Information needed
EAs and SOEID	quality assurance	value-added by subject, taking account of prior attainment.
School management	to inform self-evaluation and development planning; to monitor pupils’ progress	comparative pupil-level information showing pupils’ progress in subject areas, broken down by pupils’ characteristics
Parents	to inform choice of schools	easily-comparable details about local schools, including curriculum, ethos and discipline

How can Education Authorities (EAs) and the SOEID assess schools’ provision?

EAs and the SOEID have responsibility for Quality Assurance and need adequate statistical information to assess whether schools are providing good quality education. The most acceptable way of monitoring schools’ performance is to estimate the “value-added”, which is the contribution of each school to the progress of pupils after taking account of differences in pupil intake (McPherson, 1992). Research at CES has shown that reliable estimates of value-added can only be achieved if based on:

- individual pupil-level data, not average figures per school;
- several measures of pupil intake, especially prior attainment, sex, socio-economic status (SES) and first language;
- school characteristics including school size and socio-economic context;
- varied measures of the outcomes of schooling;
- statistical techniques which go beyond current methods to take account of differences in school size, and other potential biases in the data;
- techniques which examine differences in progress of different groups of pupils, such as those of high and low prior attainment.

The quality of the value-added information depends on the appropriateness of intake and outcome measures. Valid measures of pupils’ attainment are essential. In secondary schools the use of examination results has general acceptance. However, there is real difficulty in

finding valid measures of pupils' attainments in Scottish primary schools. In principle the attainment targets of the 5-14 programme should provide comparable measures. But in practice, difficulties arise from variability in 5-14 assessment described earlier.

Adequate baseline measures of pupils' prior attainment are vital for the estimation of value-added. FME is not an adequate measure of a child's ability to learn and should not be used as a substitute for prior attainment. FME may be an indicator of poverty in a child's home background, and is associated with high unemployment and deprivation in school catchment areas. However, there are regional differences in FME which suggest that it may be influenced by regional differences in provision of school meals and also random differences in FME between schools arising from differences between parents in deciding whether to apply for this means-tested benefit (Croxford, 1998).

Education authorities have a responsibility to monitor equal opportunities. In order to monitor differences in educational progress additional pupil-level characteristics are needed in the analysis; these include sex, SES, ethnicity, English as a second language and special educational needs.

How can schools monitor their own progress and development planning?

School self-evaluation and development planning are seen as the key to improving the quality of schools. The recent SOEID publication *How good is our school?* advocates a self-questioning approach: **How are we doing? how do we know? what are we going to do now?** Building on their self-evaluation schools prepare development plans, and may be in a position in future to set themselves meaningful targets for improvement.

Schools who undertake self-evaluation need appropriate statistical information about the curriculum, attainment and progress of their pupils. They need the information in a form which they can use to evaluate, in each subject area, how well they are providing for the needs of their pupils: for girls and boys, pupils of high or low prior attainment, pupils for whom English is not a first language or who have special educational needs. Current sources of statistical information, such as that provided by *Standard Tables*, are not adequate to meet the needs of this self-questioning approach.

Similarly, value-added measures of overall attainment, are not particularly useful to schools. Research in Grampian schools (Croxford and Cowie, 1996) experimented with feedback of survey-based information to schools, which included analysis of value-added. The information that schools found most useful concerned pupils attitudes to the ethos and

discipline of the school. Response to the value-added analysis, which showed only small differences between schools in examination results, was "So what!". Almost all schools could see from the results that they were doing as well as other schools when pupil intake characteristics were taken into account. But, how could the data be used to inform school improvement?

The value-added approach can be developed into a more useful information system for schools if it provides a means of monitoring the relative progress of individual pupils. For example, the *Performance Indicators in Primary Schools (PIPS)* system, developed by the Centre for Educational Management at Durham University, provides schools with confidential information on the progress of each pupil, as well as feedback on the relative progress of each class. This enables schools to focus extra help on pupils who are failing to make progress. It enables schools to evaluate the effectiveness of learning and teaching approaches on the progress of pupils who have different levels of prior attainment. The PIPS system is currently being used in Aberdeen City primary schools as part of the Aberdeen Early Intervention Programme.

How can parents choose?

The current series of publications by SOEID entitled *Information for Parents* demonstrates lack of clarity about purposes and audiences. The series provides compilations of data on examination results, post-school destinations, truancy and school costs for all schools in Scotland. Such reports are irrelevant to parents who need different in-depth information about local schools to help them choose a school for their child.

Research focusing on the effects of the Parents' Charter has been reported in *CES Briefing No 12*. The research indicated that most parents had inadequate information for making a choice of schools. They were primarily concerned with the proximity of the school and factors associated with its social and disciplinary climate. Parents with high SES were more likely to use information obtained from teachers and head teachers, at school meetings, or through visits to the school. Parents with lower SES tended to rely more on information from friends, neighbours, acquaintances, and other children in the neighbourhood.

Since parents are concerned with making their choice of school within a local context, information for parents should be more locally-based. It should include information about curriculum, ethos and discipline. Parents' representatives, including school boards, should be consulted regarding the scope of information that should be collected and reported.

Implications for policy and practice

The policy of publishing League Tables is based on the perception that “naming and shaming” schools will bring about school improvement. There is no evidence that this policy is effective. In fact the publication of League Tables is detrimental to schools.

In view of the importance of raising pupils’ levels of attainment, and the crucial role played by teachers in supporting pupils’ learning, it is essential that in future statistical information about school performance should be helpful to practitioners rather than harmful as at present. Policies such as target-setting, and the development of statistical performance indicators, should be based on firm research evidence, and rigorously piloted and evaluated.

If schools are to evaluate their own performance and set themselves realistic targets for improvement they need a better quality of information about the progress of pupils and the relative effectiveness of learning and teaching approaches. However, improvements to the quality of statistical information will require:

- collection of adequate pupil-level data in a framework which permits appropriate methods of analysis;
- improvements to assessment techniques and attainment measures in such a way that the relative progress of each pupil can be evaluated;
- development of pupil-level monitoring systems that enable schools to track the progress of pupils throughout their school career and detect underachievement or inequality.

Such improvements will be dependent on goodwill and co-operation between schools, education authorities and the SOEID, which can only be achieved if there is a genuine atmosphere of partnership and trust.

There is need for improved statistical literacy among policy makers and practitioners. Too often statistical performance indicators are regarded as conclusive evidence of school performance without consideration of issues such as the validity and reliability of the statistics. Statistical performance indicators can be a useful source of evidence about the relative progress of pupils, but they should be compared with other, more qualitative, evidence to achieve a fuller picture.

Related publications

Croxford,L. and Cowie,M. *The Effectiveness of Grampian Secondary Schools*, Edinburgh: CES, 1996

Croxford,L. **The Statistical Background to Government Target-Setting Policy**, Final report to the Educational Institute for Scotland, Edinburgh: CES, 1998

McPherson,A.F. “Measuring added value in schools”, *NCE Briefing No 1*, National Commission on Education, 1992

Paterson,L. “A Commentary on Methods Currently Being Used in Scotland to Evaluate Schools Statistically”, in L.Paterson (ed) **Measuring Schools: the rights and wrongs of practice in Scotland**, Edinburgh: CES, 1993

Scottish Labour Party “Building Scotland's Future: Labour's Compact for Scottish Education”, Glasgow: the Scottish Labour Party, 1997

SOEID “How good is our school? Self-evaluation using performance indicators”, Edinburgh: HM Inspectors of Schools, 1996

Further information

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About this study

This Briefing is based on research projects carried out in collaboration with the former Grampian Regional Council and Aberdeen City Council. They included surveys of secondary school leavers, the development of value-added measures of attainment, and indicators of students’ perceptions of their school experiences. Current research with Aberdeen City Council includes evaluation of the Aberdeen Early Intervention Programme and development of systems for monitoring the progress of pupils.

Related CES Briefings

No 6: “Improving Opportunities: Changes in S4 Examination Scores, 1984-1990” by Adam Gamoran.

No 12: “Parental Choice and Education Policy” by J Douglas Willms.

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