

Running Head: TEACHER NOMINATIONS OF THE GIFTED

Identifications of the Gifted: The Efficacy of Teacher Nominations in British Schools

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Abstract

All British schools have been asked to identify their gifted students for a National Register. Following concerns about the consistency of teacher nominations for local provision initiatives, it was found necessary to establish whether this problem existed nationally. A self-selected sample of 800 school co-ordinators of gifted students was found to rely most, of all possible identification processes, on colleagues' views. Paradoxically, they also identified a large number of ways that this method is undependable. Behavioural patterns of teachers and students, created and driven by situational factors, are highlighted. This study warns that there is a high risk that the British National Register will not be a list of genuinely gifted students unless co-ordinators are able to build into their practices a way to use teacher nominations appropriately. The need to construct an on-line training package is highlighted, in order to assist teachers and co-ordinators to sharpen their observations.

In 2006 all secondary schools in Britain were asked to identify their top 5% of gifted and talented students for a National Schools Register. This request has extended to primary schools and changed to 10% for 2007. The percentage deemed to be gifted are then to be recipients of a 'voucher' scheme, allowing parents and schools a choice of how to spend the money for extra provision, rather than extra summer schools. This measure is believed to be a response to the fact that over 30% of secondary schools have failed to nominate any pupil to the academy (Lightfoot, 2006). The Register uses schools' identifications, pupil performance data and tests of ability. It is suspected by many G&T education professionals in Britain that this three-pronged identification strategy to create a Register will never really capture at any one time a full cohort of gifted children. A more likely scenario is that the 'gifted and talented pupils' are already a mixture of the genuinely gifted and the bright conforming hard-workers, whilst many thousands of the truly gifted remain unidentified. The current British government believes that this database may enable universities to identify potential applicants early, so that admissions officers from elite universities may contact bright pupils from disadvantaged backgrounds to invite them to apply.

Busy G&T co-ordinators in schools are trying to follow government guidelines to amass a wealth of data from different sources about the students for inclusion into their respective provision programmes. Subject teacher nominations are a sharp tool in their armoury to help them carry out this task, but co-ordinators' training, research and experiences should allow them to understand that their colleagues cannot always be expected to be fully accurate with their nominations, especially if factors such as misbehaviour, underachievement and unwillingness to self-promote serve to cloud issue for them. Misdiagnosing at subject teacher level can seriously endanger the academic progress of students in Britain. Getting these baseline nominations right has suddenly become more critical.

Our teachers should be, in theory, in a good position to identify 'gifted' children. They are able to observe and to test children many times during their years at school and thus should be

able to identify students with outstanding gifts if those gifts are displayed in the classroom.

However, such a picture is often just a utopian idyll. In practice, teachers can often feel they are reduced to little more than administrators of the national curriculum and controllers of behaviour.

This is especially true in secondary schools with large pupil numbers, where subject teachers have little opportunity to understand individuals and what makes them 'tick'. Sometimes they do not even get to know their names before they are moved on, especially in subjects with carousel systems like design and technology. It is easy to see how a 'potentially gifted' child may never reach, let alone make good use of his or her potential at school.

This paper seeks to understand the way in which erroneous baseline data from subject teachers contributes to this dynamic and illustrate some of the relevant results of a national study, which was constructed with the aim of finding out three things. Firstly, to what extent there is consistency in the way students are identified by subject teachers for G&T provision in Britain. Secondly, what kinds of factors are influencing their judgements, and thirdly, what could be proposed to help schools identify the truly gifted for enhanced support and provision as required. To preface this argument, the British definition of giftedness and the problems concerned with teacher nominations are discussed.

Relevant issues about definition

It is a reasonable assumption to make that gifted and talented mean roughly the same, but currently, for British schools, to be 'gifted' is to be orientated toward the academic, whilst 'talented' is equated more with sporting or artistic achievement. It can be seen that the British government, in a somewhat Orwellian fashion, has exploited the fact that each term has a slightly different resonance, and has given them their own particular definitions. This definition has not helped to persuade the many teachers in the Britain who are ideologically opposed to singling out gifted children for special help at all and who decry the idea of pupils as 'consumers' in an education market.

The recent White Paper (DfES, 2005), which spelled out the plans for the National Register, does not explain why the G&T label is needed (the word 'gifted' is mentioned only four times) other than in reference to 'targets' and 'incentivising schools to get more young people to level 5 by 14'. It leaves explanations of why education for the gifted is so important to others. For example, the current Director of Curriculum of the Qualifications and Curriculum Authority (QCA) leads us to understand that the British government is handing to today's G&T pupils nothing less than the responsibility for the future of the nation's economic competitiveness (Waters, 2006), whilst critics of the national initiative argue that the current definition does not seem at the moment to reflect societal needs. For example, it does not seem to recognise as equally deserving of consideration for extra provision those who are gifted in communication, creating new ideas, buying and selling, caring for others, coping with disability, or any number of vocational skills (Powell, 2007).

The definition also leaves teachers unclear whether it is sheer innate talent that results in a student gaining high marks in scholastic tests, coursework or being able to jump very high over a bar in sports. Could G&T be more do to with hard work, drive, motivation and persistence over time, which may allow some students to accelerate away from the progress of their peers in a certain area or areas? This issue is worth pursuing in some greater depth as a preliminary to presenting this study, for this research concentrates on identifying the problems that British G&T co-ordinators have whilst using trying to assimilate the government's definition into their practice.

The literature on motivation theory and expertise theory indicates that the idea that giftedness is all about hard work is not entirely correct; we cannot assume that *all* children who practice a lot will rise to the top. So perhaps there is an 'X-factor' which clearly gifted individuals possess, which is composed of a base natural talent or talents, the motivation and drive to expand and

prepare for future insights, combined with a wide range of environmental factors which may work for the particular individual. Perhaps the label of 'giftedness' may also be 'anti-process' by impeding the search for the real explanations for current levels of achievement.

However, it is certainly true that eminent investigators contributing to the literature concerning expertise theory, such as Howe 1999; Ericsson et al., 1993; Sloboda, et al., 1996, and others, have all produced persuasive studies to show that the magic ingredient in success (particularly socially recognised success) is usually practice. Persistent endeavour has also been shown to require a degree of positive feedback to maintain motivation. This was well considered a decade ago with a cognitive feedback addition to Gagne's 1993 model (Porter, 1997), and supporting neurological evidence (Geake, 1997).

Considering this, it is probably true that if a British student can identify a domain or domains within which they are prepared to work hard enough to outshine their peers (and the school is able to recognise and support a wide range of emergent talents), they will currently achieve the standard that for which many nominating teachers would currently label them as 'G&T. Therein lies the problem that this paper seeks to address. There is a danger of raising only on a pedestal only those who practise hard, whilst leaving un-nurtured the seeds of what we most value in excellent performance, like the creative game analysis of a chess player or the emotional expressiveness of a dancer.

Teacher nominations

Most modern research tends to support the use of multiple criteria for identification purposes... and most talent development programmes around Britain (whose criteria for selection are available for public scrutiny) use a variety of such methods. Typically, a G&T co-ordinator is nominated by the school, then tasked to use a number of strategies to nominate gifted children for

inclusion in the school's programme of extra provision. These strategies are often enough noted in academic journals, but they bear repeating if only to set a stage for this research study. Methods can include academic, intelligence and creativity testing, and nominations from current subject teachers, parents, peers and students themselves. Past work can be examined and co-ordinators may refer to teachers from previous schools or evidence from professional bodies outside the school that students are involved with.

Teacher nominations are favoured by schools (Davis & Rimm, 1989; Tuttle, et al., 1988) based on the premise that a teacher's knowledge of each student's ability and potential is likely to be substantial. Renzulli's view is that it is the thoughtful conclusion of knowledgeable professionals, rather than instruments and cutoff scores, which should guide selection decisions. (Renzulli, 2004). But how dependable should co-ordinators expect these nominations from teachers to be?

Brown et al., (2005) highlight particular issues which may impact upon teachers' abilities to identify gifted children:

1. How the nature of the student's interests influences classroom teachers.
2. How unexpected interests produce unexpected behaviours that attract attention.
3. How gender bias in gifted education that indicates teachers are more likely to select profiles in which the student's behaviour did not match expected gender stereotypes.
4. The fear educators have of misidentifying students and of placing students in gifted and talented classes.
5. The tendency of teachers to focus more on skills associated with academic performance and less on creativity, leadership, and motor skills.

6. How the extremely bright or the creative, curious, and questioning students, who may be stubborn, rule-breaking, egotistical, or otherwise high in nuisance value, may not be the teachers' favourites, but they sometimes are the most gifted.

Whether or not subject teachers are the most qualified identifiers of gifted students has been the topic of much debate throughout the years (Gagné, 1994). Gagne comments that some early studies of the effectiveness of teacher nominations (in particular, Pagnato & Birch, 1959) show the procedure as a *weak* addition to academic testing. Their research has frequently been cited to support the opinion that classroom teachers' views are an unreliable reference for identifying gifted students (Powell & Siegle, 2000).

Betts & Neihart (1988) estimated that as many as 90% of children world-wide, nominated as gifted by untrained teachers, are likely to be high achieving conformists – ‘teacher pleasers’ - who often become bored in school but learn to use the system to get by with as little effort as possible. Jacobs (1973) found that teachers who had received no training on the characteristics of gifted children, tended to over-estimate the ability of children who were verbally articulate and cooperative in class, and who sought teacher approval. Despite this evidence of research to the contrary, Hoge & Cudmore (1986) and Rohrer (1995) suggest there is actually very little empirical foundation for the negative evaluation so often associated with teacher judgment measures.

Appropriate training is clearly the guiding factor in successful nominations. For example, Gear (1978) found that teachers who were not trained in identification were not nominating students with high potential but merely selecting well-behaved students with good grades. After a brief training program, he recorded that teacher nomination effectiveness more than doubled. However, we do not seem to have learned very well this lesson from US research of thirty years ago, because a worrying statistic can be found inside a recent survey which targeted G&T coordinators in English secondary schools (Hewston 2006).

The survey, produced by the National Academy for Gifted and Talented Youth (NAGTY), revealed the extremely small amount of time available per week that English G&T co-ordinators spend on provide for staff development activities. Just over half of the 904 who responded indicated that it was reasonable to devote more than three hours a week to their role of co-ordinator. Of these three or more hours, identifying, leading or otherwise ensuring, the provision of staff development activity (whether from the responder's schools or other schools), in relation to supporting the learning needs of gifted and talented students, warrants just half an hour (or 9.5% of total time) per week. This duty is more than half-way down the list of the number of formally allocated responsibilities the average co-ordinator holds in England. How much of this time translates into valid information being disseminated to teachers is unknown: but it can hardly be much.

The results of this English study appeared at the same time as the results of the nation-wide study described in this paper were being analysed, serving to justify the current concern over teacher nominations for the British National Register and further provision for gifted students.

Method

Participants

800 G&T co-ordinators (615 women and 185 men) volunteered to participate. Volunteers were not paid for their participation. The sample was self-selective... and by and large captured co-ordinators committed to implementing the government's G&T policy. They stated their interest in helping to reveal if there were any national trends concerning the consistency of teacher nominations in order to inform their own practices. The co-ordinators were based in 760 state and 40 independent schools around Great Britain in November, 2005. The small independent school sample was included in this study to see if any useful findings would emerge

to inform the issue in question, given the freedom of restraint from the national curriculum and other pressures.

Materials

A questionnaire covering these issues was compiled. Each teacher was asked about their school and themselves; in order to contextualise the data and to make it easier to understand and analyse the returns. They were asked 5 questions concerning how they dealt with the problems they faced concerning teacher nominations of gifted children in their schools. The initial questions aimed to understand the co-ordinator sample; about who they were, and in what contexts they were working. Questions 1-5 then aimed to understand how the sample felt about, and used, teacher nominations. Questions 2, 3 and 4 were given Likert-type tick-boxes with just 4 possible choices in order to force judgements. For example: very reliable, fairly reliable, fairly unreliable, and very unreliable.

Questions

SCHOOL:

School Name:

LEA:

Description of school:

Estimate of pupil numbers:

Main ethnic groups:

YOU:

Dr/Mr/Mrs/Ms:

Initial letter of your surname:

Length of time as a teacher in schools:

Length of time as G&T co-ordinator for your school:

Subject(s) you teach:

1. Please rank the sources of information/evidence in order of effectiveness for identifying G&T children for G&T provision (even though you may not use them). Then highlight in bold the ones you do use.

1. *students' past work/ portfolios*
2. *parental nominations*
3. *current teacher observations*
4. *peer nominations*
5. *academic testing*
6. *IQ tests*
7. *creativity testing*
8. *out of school study reports*
9. *student self nominations*
10. *end of term/year reports*
11. *any other (if you have another to add, please indicate what it is)*

2. Do you think teacher nomination is reliable?

3. Can you always identify a G&T student from a class of students?

4. Do you usually find it a difficult task?

5. What is the single issue that can most prevent teachers from nominating a potentially G&T student?

Figure 1. Questionnaire designed to gather the views and experiences of British G&T co-ordinators concerning colleagues' nominations of gifted students.

The methods listed on the questionnaire were found by the researcher to be the ones most often provided as recommended by LEA websites throughout the UK, and make their way onto school G&T policy documents. Two points should be clarified. The category of *out of school study reports* include those which assist nominations, such as from objective tests carried out by sports clubs (e.g. martial arts) or Associated Boards (e.g. music). Within *current teacher observations* are included nominations by other school staff and learning support assistants. Other possible forms of identification not included in the list (for reasons of brevity) include reports from teachers at previous schools and reports from educational psychologists.

Design and Procedure

The questionnaire was sent to 20,000 state schools and 1,000 independent schools around Great Britain. This approach was considered the best way to capture as many experienced and newly designated G&T co-ordinators as possible, bearing in mind that at the time of data collection, (according to NAGTY) no data existed concerning which schools in Britain actually had G&T policies or registers. The National Register, once complete, will be the first source of this kind of data. A correct estimation was not available in order further to inform this paper, even by examining statistics from the government's largest and most complex yearly data collection exercise, the Pupil Level Annual School Census (PLASC).

Unable to find out, from a single source, which schools around the country possess a G&T register and provide G&T provision for pupils, this large scale research project was therefore constructed with a broad-sweeping approach by sending the questionnaire to every possible school in order to seek the advice, views and experience of as many existing G&T co-ordinators in Britain as possible.

The sample of 800 schools included 549 primary schools and 251 secondary schools. The sample excluded Northern Ireland, as it proved too difficult to gain consent to send research questions to their schools. The UK is divided into twelve regions; shown below to aid the understanding of international colleagues.



Figure 2. Map showing the 12 regions of the UK.

Local administration of education in England and Wales is provided by LEA's (Local Education Authorities), of which there are 167 in total. The same function is carried out in Scotland, by each council area, of which there are 32 in number. The sample therefore included G&T co-ordinators from 199 LEAs around Britain.

Results

The general reaction to the contact with the school co-ordinators was very positive, especially as the research involved a 'cold-call' to busy G&T co-ordinators. The breadth of the study meant that masses of data were received from a range of teachers covering those who were newly qualified, to those with perhaps over 40 years of experience. Many schools offered further

information – with many sending in their own internal guidelines for identifying and providing for the gifted. The researcher was able to follow up many offers to visit schools, observe how G&T identification is practised in disparate schools around the UK, and speak with many of the teachers who routinely make the decisions to include children in school G&T registers.

A return rate of 4% was recorded. It could be argued that this return rate is too small to make generalisations from the results. However, to put this view into perspective, it is necessary to revisit the background research for the study. It was estimated by NAGTY in 2006 that around 40% of all schools would not have a G&T register, and according to Lightfoot (2006), by December 2006 around 30% of secondary schools were thought to have failed to nominate any gifted and talented pupils. It is impossible to obtain more accurate statistics.

A statistical first release (STR) based on the British government's annual schools census (DfES 2005b) recorded the existence of 17,642 primary schools and 3385 primary schools in the UK. If the percentage reported by Lightfoot is accurate, it may be surmised that 12,345 secondary and 2370 primary schools by December 2006 had responded to the G&T initiative. Those schools with a G&T register would be roughly two thirds (or 14,714) of the total of UK schools, and a year before, the amount of schools UK schools with a G&T register may well have been around 10,000. Considering data from Northern Ireland is missing from the sample, a return rate of 12.5% (from those that may have G&T registers) may be inferred. It is hoped that such a sample has a fair chance of producing some meaningful generalisations.

Data revealed by responses to the preliminary questions (about the schools and the co-ordinators) follow in order to support understanding of the British situation.

The data revealed by responses to the preliminary questions (about the schools and the co-ordinators) and questions 1-5 are presented, together supporting qualitative data. Discussion of the implications of this data is linked into this section, for purposes of readability.

The schools

All data was entered into a spreadsheet. Respondents are placed in a table below, disaggregated by their schools' demographics:

Table 1
Number of respondents from each of the 12 regions of the UK

Region	No. of respondents
Scotland	19
North East	28
Yorkshire & Humber	71
East Midlands	53
Eastern	141
London	76
South East	108
South West	135
Wales	18
West Midlands	82
North West	69
Northern Ireland	no sample taken

The ratio of primary schools to secondary schools in the sample was $r=7:3$, which reflects the national ratio of primary to secondary schools in Britain. It was necessary to create distinct categories which included all the schools which were not simply primary or secondary schools. The totals were created by making the category of primary schools include schools with students from 4 to 11 years old, and secondary schools to include schools or colleges from 11 to 18 years old. This practice was designed make data analysis easier, and is explained below.

There were 38 infant schools, which were categorised in the *primary school* section, as were the minority of primary schools with infant 'feeder' schools attached. In the same way, secondary

schools which had a 'feeder' primary school attached were categorised in the secondary school section, as were the 31 colleges. A handful of schools ran the whole age range; from 3 or 4 years old to 16 or 18 years old. These were also classified as secondary schools.

In the total sample (800 co-ordinators), the average size of pupil numbers in secondary schools is 1,125, whilst the corresponding figure for primary schools is 403. Whilst the former number seems high, it is artificially raised by the small number of inner-city primary schools with over 600 pupils. Large state secondary schools can range up to 2,500 pupils whilst there exist very small community infant schools that have no more than 40 pupils at one time. The ways that teachers can gather detailed knowledge concerning identification is clearly affected by this issue. Therefore, analysis of primary and secondary teachers' answers are analysed separately, but presented together for comparative purposes.

Each school was asked to note its ethnic majority. As might be expected with a national sample, 84% of the schools identified their dominant ethnic majority as white and British. The largest other dominant groups (shown as percentages of the sample) were Asian Indian (3.1%), white Irish (3%), Asian Bangladeshi (2.5%) and black African (2%).

The co-ordinators

Co-ordinators were given code-numbers (eg. G&T-co 334) and may also be quoted and referred to by their institution type, where the information serves to contextualise data.

The 800 G&T co-ordinators were found to be, by totalling the latest figures for each school's pupil numbers, currently in charge provision for a fraction under 400,000 of the nation's students (aged from 4 to 18). A full 12% of the primary and infant schools' G&T co-ordinators identified themselves also as the Head or Deputy Head teacher, reflecting the ratio between primary and

secondary schools in this country. Very often, in British primary schools, the Head or Deputy Head (whether actively teaching as well) assumes the role of G&T co-ordinator. Of the 511 primary teachers sampled, 432 taught all subjects, the rest were subject specialists.

Of 251 G&T co-ordinators from secondary school and further education colleges, 76% revealed that they are principally subject specialists teaching the main curriculum subjects. 11% identified themselves as purely Special Educational Needs specialists, leaving 13% principally drawn from the non-academic subjects, who in this sample included those drawn from Personal and Social Education (PSE) and Citizenship. The way this sample is split regarding subject specialists mirrors the way British LEAs often advise schools to make up the percentage by finding two-thirds who are 'gifted' and one third who are 'talented'. The implications of this practice are beyond the scope of this paper; however, it is of interest that the sample indicates that British schools seem to be selecting co-ordinators in proportion to this weighting. For example, the English and Science-teaching G&T co-ordinators teachers each make up 14% of the total sample, both more than the sample's total combined percentage of the non-academic subject teachers.

It was evident from the data that the role of the G&T co-ordinator is held to be of importance in Britain. From this sample of 740 teachers who answered this preliminary question, it was found that the job tends not to be given to newly qualified teachers, but to those with at least 5 years of experience. Those with 5 to 9 years of experience make up 18% of the total sample. From here, this percentage steadily dips as teaching experience increases in years, equalling (at 10% of the sample) those who have put in 0-4 years of teaching.

However, just as the statistics are about to continue the downward trend and fall below the initial 10%, the data reflects the presence of a large body of teachers (123) with 25 to 29 years of

teaching experience, and an even larger group of teachers (140) who have 30 years of teaching experience and over. This last group makes up almost one fifth of the total sample. This number is made up from 186 teachers working in primary and infants schools, and 77 teachers in secondary schools and colleges: a rough match to the national ratio of 7:3 (infant/primary schools to secondary schools/colleges). Imbalances from each group, such as long-serving head-teachers in small primary schools assuming the role, can be therefore largely be cancelled out.

This finding shows that the role of G&T co-ordinator is being recognised across Britain (in those schools that have implemented a G&T provision policy) as an important part of education that demands the attention of the most experienced teachers (rather than being ‘parcelled out’ as an unwanted duty to newly-qualified teachers). If length of time and experience of teaching in schools, therefore, is any indication of a school’s seriousness with which they take the issue of G&T, then the sample indicates that British schools are currently faring well. Furthermore, the sample found very many long-serving teachers with over 30 years teaching experience, yet sometimes having worked only a few even months as G&T co-ordinators. For example, over 10% of teachers sampled had been teaching for over 20 years but had less than 2 years G&T co-ordinator experience.

Ranking data

The co-ordinators in the sample were asked to consider ten methods of identification, and rank them in order of how they believed they might be effective, even if they did not use personally them. Then, thus ranked, they were asked to indicate the ones they actually used. The primary aim of this exercise was to produce a comparison between the two: how teachers currently believe is the ideal way to identify students as gifted, and how they actually do it in practice. The secondary aim was to establish how important teacher nominations really are to the practice of identification.

527 Co-ordinators from the sample returned both rankings of the 10 criteria and specified which of them they actually use. The rest responded with one or the other, so the data could not be compared. 362 of these co-ordinators worked in primary schools (including 30 infant schools) and 165 worked in secondary schools (including 34 colleges). The returns from these two groups were taken and put into a spreadsheet. The sum of the responses in each section indicated how well a method was preferred, and used, over all the schools.

Firstly, a count was made to establish how many primary and secondary school G&T co-ordinators stated they used certain method at that time. Many co-ordinators stated that they used just two or three methods in practice, others used many more (34 state that they used every one, to some degree). The relationships between the way the G&T co-ordinators used these methods are shown in the chart below:

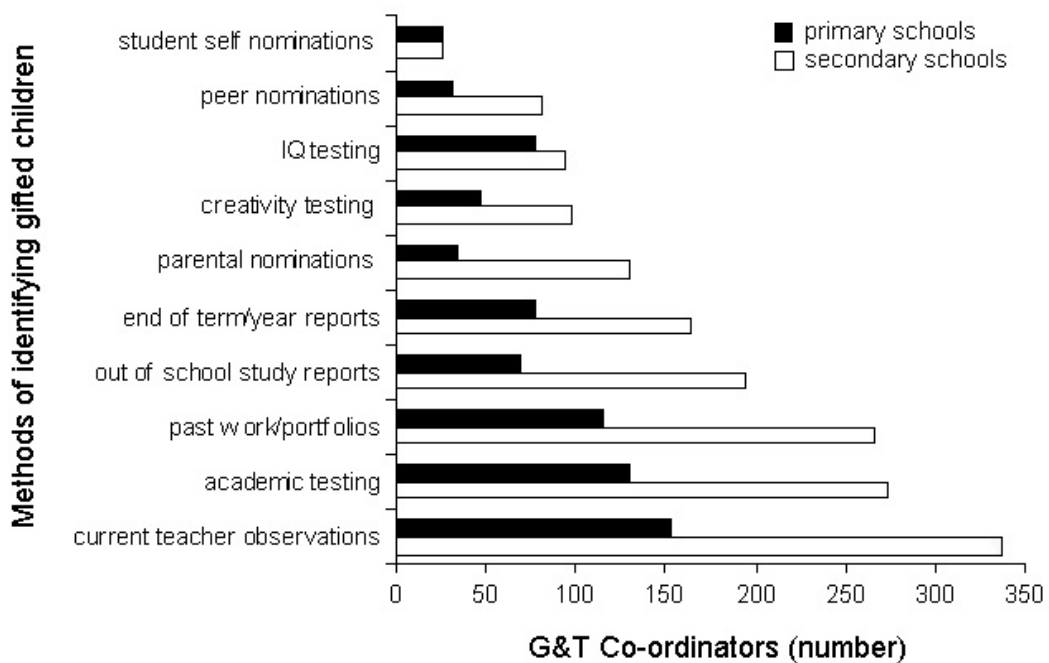


Figure 3. A graph showing 527 G&T co-ordinators' preference orders of possible methods to identify gifted children in British schools.

The chart indicates that in Britain, teacher nominations are the most popular way to gather data towards G&T identification. In this sample, 93% of primary school and 91% of secondary school G&T co-ordinators use this method, before any other, as their number one preference for gathering data. Academic testing and examination of past work and portfolios are the next most popular methods, usually used in conjunction with teacher observations. After these, the preference of methods used in primary and secondary schools differs. For example, in primary schools, examinations of end of term reports are more important than out of school study reports. Unsurprisingly, parental nominations are far more popular in primary schools than secondary schools, because teachers may speak with parents on a more regular basis.

The chart shows that IQ tests are ignored by the majority of co-ordinators in primary schools, but used more at secondary level. Co-ordinators report that Middle Years Information System (MidYis) results are being used as a kind of ‘replacement IQ test’, upon entry to secondary school. The MidYis test specifications take care to point out that it is designed to provide a measure of typical performance so that teachers can judge how much ‘effort’ it will be required to take pupils up to Key Stage 3 and GCSE.

At primary level, co-ordinators are tending to focus more upon how creative a student has been. For example, a primary co-ordinator (G&T-co 362) stated “...creativity testing is as important as academic testing and more important than IQ testing, but not teacher observations.” There is little evidence from the study that the teachers are actually using creativity tests per se, (eg. Torrance tests of creative thinking) – rather, the evidence supports the fact that most co-ordinators believe there are no existing tests suitable for use in the Britain which can help their identifications (Balchin 2005).

Many are actually using mark-schemes with 'creativity' written on, which teachers fill in, in response to creative effort. For example, a primary teacher (G&T-co 777) stated: "...not specific testing but observing and recording how children deal with challenges and creative tasks." A majority of the primary school teachers (184 co-ordinators) recorded that they were waiting for appropriate creativity tests to become available for their schools.

It is now instructive to compare what co-ordinators report they do in practice, to what they feel would be the ideal way to identify G&T students. When analysing the data and comparing the rankings of the 10 criteria to the amount of co-ordinators who indicated they used each one, correlations were used to compare them. This is expressed as the Pearson product moment correlations co-efficient, a dimensionless index that ranges from -1.0 to 1.0 inclusively, reflecting the extent of a linear relationship between two data-sets.

A useful way to express this relationship is to show the sum of the rankings given to the criteria by the two groups. For example, both primary and secondary co-ordinators rated current teacher observations as the most important method they use to identify gifted students, so it would produce the lowest number given in the rankings. On the left side of this correlation comparison (in both charts), therefore, the lowest numbers are at the top of the list of rankings on the left, and the highest on the bottom. The reverse is the case for the right side of each chart, which is the data explored in Fig.3, but expressed in linear form. As these rankings express the number of teachers who use each criterion, the highest number is therefore at the top.

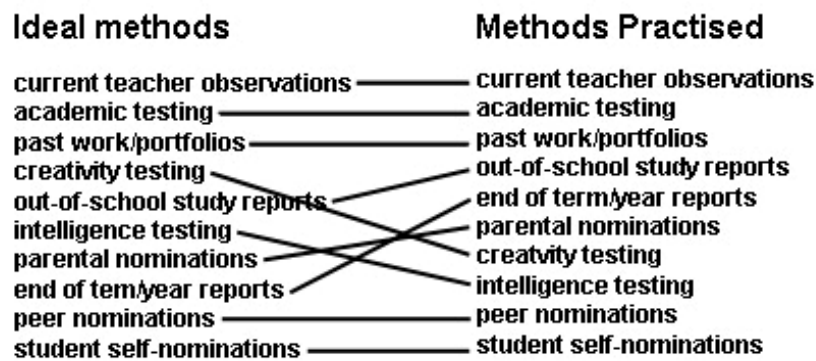


Figure 4. A correlation comparison between the ideal methods and methods used by 362 UK primary school G&T co-ordinators to identify gifted children.

The changing order of the variables (as evidenced by the lines connecting them) is significant because they visually represent the difference of views from each group concerning the order of the variables. The correlations between the primary school G&T co-ordinators' ideal identification methods, and the methods used in practice, are very strong... resulting in an overall Pearson correlation coefficient of $r=0.8$.

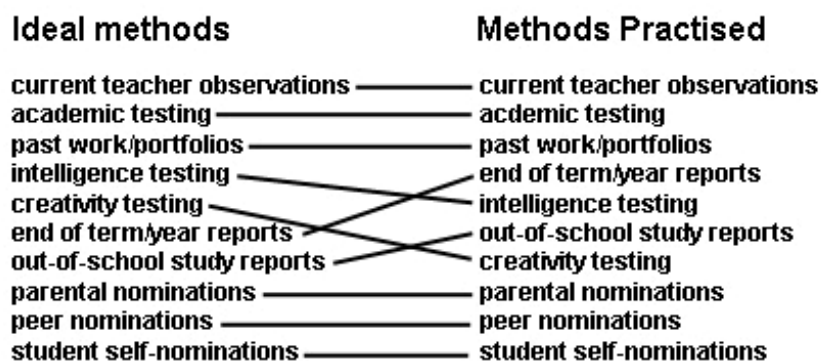


Figure 5. A correlation comparison between the ideal methods and methods used by 165 UK secondary school G&T co-ordinators to identify gifted children.

For secondary school co-ordinators, the correlation is even higher: $r=0.9$, than in primary schools. The two overall correlations reveal what can only be described as the possibility of a common culture inside G&T education in Britain, concerning co-ordinator's views about teacher nominations. The data so far establishes how much co-ordinators are depending on the quality of the data from current teacher observations, which are clearly the first source that co-ordinators rely on for information. 491 of the 527 co-ordinators indicated that conversations outside of lessons concerning individual students, is the easiest and quickest way to gather information. Only 36 teachers of the 527 sample did not wish to use it; only 13 of those were working in secondary education at the time of the sample.

There is the strongest correlation: $r=1.0$, between the ideal methods and actual methods used in both primary and secondary schools in the first three criteria (current teacher observations, academic testing and past work/ portfolios). In both Figs. 4 and 5, this creates a group of similar rankings which shows that vast majority of co-ordinators in the sample consider that these methods to be the best ways to identify gifted children. There also exists a group of dissimilar rankings; between the third and eighth comparisons in Figs. 4 and 5.

These rankings indicate that co-ordinators have different ideas concerning how best to use the other possible identification methods than they actually can do in practice. Using the primary co-ordinators sample, the correlation between the way these the methods are actually used, and how they believe they should be used in relation to the rest, is very different: $r=-0.2$. For example, they rate the use of end of term reports as low in preference, but find the data are being used a lot in practice.

The data shows that they may feel forced to place emphasis on the content of these reports, even though they know that the content may not be informative enough for identifications of

giftedness to emerge. Similarly, the co-ordinators reveal that they are using creativity or intelligence tests infrequently. They explain, in reference to their rankings, they are concerned that there is no set of nationally recognised and appropriately focused tools yet available to provide feedback on creativity and intelligence with particular reference to the gifted and talented, that they can viably use as part of their identifications.

How reliable do co-ordinators view teacher nominations?

The sample of co-ordinators was asked whether how reliable they regarded teacher nominations to be. The word 'reliable' was used in the vernacular (reliant upon), and not as used in the research literature (to mean generalisable as a measure of external validity). 730 co-ordinators responded. 178 stated that they regard them as very reliable, 494 regard them as mostly reliable, 57 regard them as fairly reliable and 1 regards them as very unreliable. The co-ordinators were also asked whether they could always identify a gifted child, and whether they found it a particularly difficult task. Predictably, of 731 teachers who answered the questions, a majority of 70% replied that they could identify giftedness 'most of the time'. 10% replied 'every time'. Asked whether they found it a difficult task, 64% replied 'some of the time' and 26% replied 'hardly ever'.

The responses show great optimism on the part of the co-ordinators; however the qualitative data showed that they are also very aware that they need to treat nominations with caution. They recorded a wide range of influences upon teachers' professional judgements which affects the way they observe, gather and present information. The dominant issue for the co-ordinators was how to identify gifted children personally if you do not see them personally. This 'once removed' identification is a big problem: for example... "I can identify children from my own class but I would find it difficult to go into a class and immediately identify the G&T without speaking to the teacher" (G&T-co 636).

Feedback from the co-ordinators showed they worry that well-meant professional observations and nominations from colleagues are vital, yet at the same time, can simply be misleading. For example a secondary biology teacher (G&T-co 410) stated: “in fact when you ask staff to identify G&T students and even give them descriptions, they actually just give you a list of most able.” The majority of co-ordinators feel confident about their own abilities to identify gifted children, but as many cannot access each classroom themselves, they feel it is difficult to rely completely on the professional judgements of colleagues. This finding was backed up to a large degree by the way in which teachers stated they identified G&T: for example, G&T-co 655 revealed: “...we overcompensate and use masses of data and sources to enter students into the register.”

If subject teachers and G&T co-ordinators are reporting discontent with the way the government seeks to deal with the question of gifted children, it seems that parents are often more so. This problem was highlighted exclusively by co-ordinators in primary schools where more parental contact occurs with teachers. 121 co-ordinators believed that in their schools, the presence of a G&T list can be divisive and cause problems among parents. The survey revealed that very often, schools do not reveal who is on the register. For example, a science teacher in a large rural state secondary (G&T-co 167) reported: “...my school has a policy of not informing G&T students that they are on the G&T register as it is felt that too many students would qualify for G&T status.” Furthermore, some co-ordinators report that they are advised to do this by their LEA’s, to avoid potential conflict.

Are talents easier to spot than gifts?

Even with back-up data, many co-ordinators reported that it may be an easier task to identify students who are clever academically, rather than talented in area like sports or drama. A secondary school teacher (G&T-co 358) stated: “...as a teacher of French, even before we had the quantity of data we now have, I could usually quickly locate gifted students; talented would be

more difficult in that situation, as I can't so easily check things out." However, there exists contrasting data: a secondary school teacher (G&T-co 70) stated: "...one can identify talent almost immediately...gifted takes a bit longer". She also commented that "...as a PE teacher the X-factor is always obvious." However, it is not just non-academic specialists in secondary schools who find identifying 'raw' 'talent' easier. For example, a geography teacher (G&T-co 193) felt "...it is easier in sport/music type areas. In areas such as geography, it would be hard for teachers to identify children because of the level of primary work. The way such subjects are differentiated makes it harder for children to stand out as being very different."

An English and Drama teacher from a secondary school (G&T-co 419) makes a point about the problems of identifying students as talented: "...'talent' is often a more subjective judgement and experience has shown that different staff within a given subject area might make contrasting judgements on the same student." A head-teacher from a primary school (G&T-co 647) stated: "...this is up to individual teachers to identify: some choose different children to a previous class teacher."

On top of this uncertainty, a related problem experienced by over a third of the sample is that government definitions are tending to be difficult to translate into practice; which has the effect of making subject teachers uncomfortable with nomination requirements. Reports of visits from LEA advisors show that even they were unsure how to draw a distinction between ability and giftedness, and impart it properly. For instance, they fed information to co-ordinators which includes outdated material such as Szabos' 1989 list of the qualities of high achievers and gifted learners, which has since been questioned with authority by Kingore (2004). The sample found 11 incidences of this happening, even though information on staff provision material was not requested of the sample.

A primary head-teacher (G&T-co 193) was interviewed: "... 'G&T' implies a much more able group than most pupils nationally, so we don't like this term when defining a top percentage of a cohort, regardless of ability". She stated that: "...we just identify the most able children in a class and also those who in our collective experience at this and other schools, stand out as being significantly more able than children of their age usually are" A primary teacher (G&T-co 792) stated: "...we have a number of children who are more able than their classmates, but are not necessarily gifted or talented. Drawing the distinction between the two can cause problems, especially if the majority of a class are poor at a given area." 47 co-ordinators indicated a similar dissatisfaction.

What do G&T co-ordinators feel most hinders successful teacher nominations?

Co-ordinators they were asked directly to state the single issue that they believed most hindered colleagues from identifying gifted children. 662 co-ordinators responded, and of those, 410 mentioned *two* problems, which often related to each other as a cause or consequence. Rather than disregard this wealth of useful information, the decision was taken to focus analysis on the latter group of 820 responses. Contained within these responses was a rich reflection of the realities of school life from all parts of Britain.

Two categories quickly emerged. It was clear that co-ordinators were recognising that teacher nominations are affected by the states and traits (and interaction between) students and teachers. Not only this, co-ordinators appear to be advising that peer communication (on both levels) is an essential factor if G&T nominations are to be as accurate as possible. It was found possible to divide responses into those factors (behavioural or situational) involving students, and those involving teachers (although it can be quickly seen that most issues are inter-related on some level). The former point means that some factors are more in the individual's control positively to influence; and some less so.

The first category of responses referred to aspects of the characters of the students and the influences upon them from school and home. 482 responses in this category were subsumed into 13 categories. The other related to the same things, but with reference to the teachers themselves and their operating environments. 337 responses in this category were subsumed into 14 categories. There was no particular limit to how many categories could be made available. It was necessary to define clear space between each issue, and so inside some issues were subsets (not shown in Figs. 6 and 7, but mentioned in explanations of the charts. Figure 6, below, shows how students' existing character traits or presented states can influence teachers' nominations:

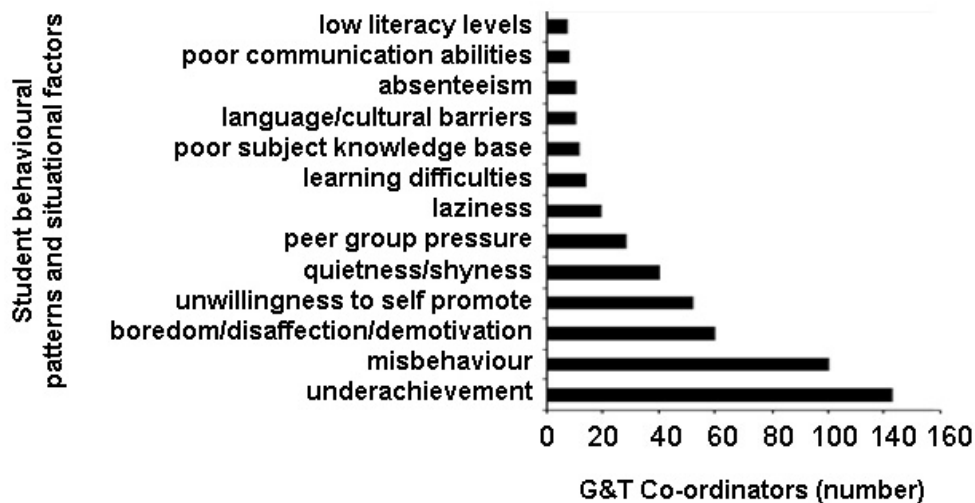


Figure 6. Chart showing co-ordinators' findings of the main hindrances to successful teacher nominations (482 responses concerned with student behavioural patterns and situational factors).

The chart above shows the problems which co-ordinators believe can mask 'giftedness;' which are directly attributable to student behaviours. Most are intrinsically linked; some are cause (eg. peer pressure or learning difficulties) and some are consequence (eg. absenteeism or unwillingness to self-promote). One can be the result of another and a selection of these influences can impact upon each other to make life difficult for teachers tasked with nominating gifted children. For example, a secondary school teacher (G&T-co 140) asks: "...how can you tell, when their grades are poor and they hardly ever speak up, if a student is actually gifted?"

Presented lastly are examples of comments concerning the top three factors directly concerning student behaviours. As the ‘most mentioned’; it is possible to seek to generalise that these three are factors are common currency in the Britain for teachers to be aware of. The top two most mentioned comments contain the keywords underachievement, misbehaviour and boredom. Combined, they represent over half of this particular division of the sample. As stated before, none of these factors are mutually exclusive: A biology teacher (G&T-co 410) stated: “...bad behaviour can be a diversion with underachievement and de-motivation masking true ability.” In practice, bad behaviour, (according to G&T-co 254) may “means that staff are ‘setting’ students according to behaviour rather than ability.”

Co-ordinators tended to identify boys as the main underachievers; and gave many reasons; the most popular being that they underachieve so as not to appear cleverer than others: a head-teacher (G&T-co 584) pointed out: “...it’s not cool to be clever.” During analysis, ‘coasting’ was found to be mentioned 9 times, and was categorised as ‘underachievement’. For example, a primary teacher (G&T-co 747) puts “...students adopting a 'coasting' approach,” as her biggest problem during the identification process. Similarly a teacher (G&T-co 289) stated that: “...when teaching a new pupil who just coasts – does just enough to stay out of trouble, but no more.” Lacking clear advice about how to reliably identify these types of children forces some co-ordinators to develop new approaches: for example, a teacher (G&T-co 315) from a village primary school notes: “...underachieving children who have a gift are often seen as SEN rather than more able in a particular area. I am working more closely with the SENCO than ever before.”

G&T-co 444, warned: “...nominating teachers mustn’t confuse outward impressions –with lack of intelligence.” 67 co-ordinators reported that students who become bored, disinterested and demotivated are the hardest to diagnose, because they seem to help themselves the least. A primary school teacher (G&T-co 625) has found that gifted children can show signs of disengagement due

to a certain teacher or style of learning that doesn't cater for their needs. These traits usually visibly manifest themselves in one or both of the two behaviours above and make it very hard for teachers to contemplate nominating them.

A secondary Citizenship teacher (G&T-co 331) commented that: "...there is a certain diffidence they sometimes have towards work in school- if they already know the lessons that are being taught to their peers." A history teacher (G&T-co 587) from Blackburn and Darwenshire expanded upon this problem: "...they often do not appear to be performing well, because they have already 'switched off' from lessons. This often clouds the issue and the common response from staff is often ' they don't do the work I give them now.'

She understands that colleagues find it hard to nominate students who are not hard-working and that hard work, conformism and prior knowledge can effectively masquerade as giftedness. The chart below seeks to display the feedback received from co-ordinators concerning other problems that teachers may have, which affect nominations.

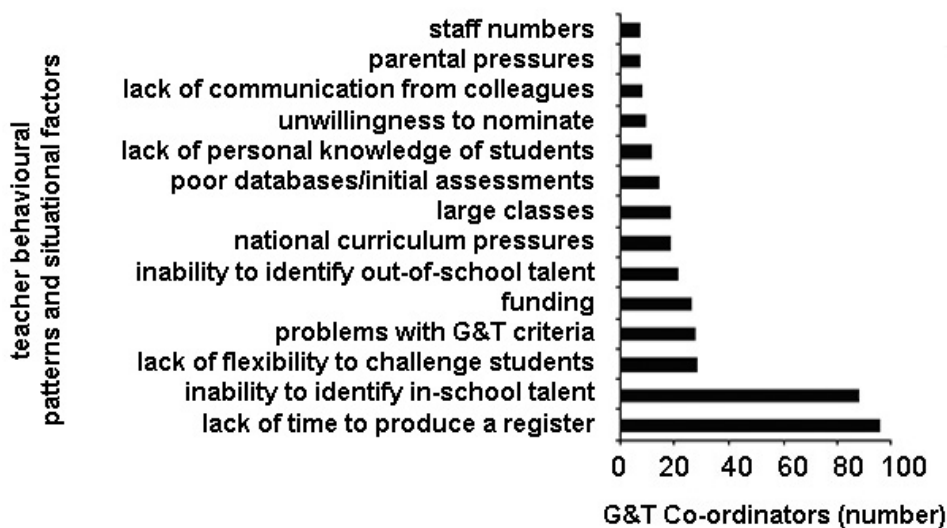


Figure 7. Chart showing co-ordinators' findings of the main hindrances to successful teacher nominations (377 responses concerned with teacher behavioural patterns and situational factors).

The data shows that co-ordinators believe that a wide range of other things affect teacher nominations, besides the way students behave. These range from their colleagues' efficiency to their belief systems, and from problems with the government's G&T criteria to national curriculum pressures. Lack of adequate funding, staffing and manageable class sizes are also important issues.

The feedback showed two distinct problems: lack of time to consider the cohort and inability to identify students. 95 co-ordinators mentioned that lack of time to observe and consider is the biggest problem for them and their colleagues. Just under two thirds of these co-ordinators work in secondary schools; these teachers reveal that they struggle because of "...having colleagues who are less able to spot the signs and therefore miss opportunities" (G&T-co 600 from Southampton) Their over-reliance on academic results is cited many times: "...colleagues not looking beyond test or assessment results," (G&T-co 173 from Walsall). Co-ordinators also blame the way "...staff equate G&T with neat handwriting, good behaviour and lots of correct answers" (G&T-co 392 from Derbyshire).

As mentioned above, there were comments identified (17 incidences) which directly focused on the way teachers can misdiagnose hard work, ability and prior knowledge as giftedness. These were later subsumed under the banner of 'teachers' inability to identify talent in-school'. A selection of these are mentioned separately here, as they seem to confirm the way that teachers around the UK are finding it extremely difficult to separate up gifted behaviour from hard workers and above average ability.

1. "Very hard work from a child who doesn't actually have the 'spark'" (G&T-co 71)
2. "Subjectivity. One teacher's G&T child is another's hard working child." (G&T-co 495)

3. “Are they just very hard working and conscientious & therefore reaching full potential already or are they a natural?” (G&T-co 547)
4. “Distinguishing between G & T and the hard grafters.” (G&T-co 597)
5. “Getting confused between hard work and real giftedness” (G&T-co 747)
6. “The most able can be bored and not achieve as good results as the determined plodder.” (G&T-co 786)

27 co-ordinators commented that government guidelines were confusing and unhelpful to teachers. They commented that “...staff are unclear on definitions of G&T” (G&T-co 445), or “...staff differ in what they feel is a G&T child.” (G&T-co 407).

A secondary school teacher (G&T-co 498) made the important point that “...there are no national criteria for G&T identification.” Another secondary school teacher (G&T-co 403) made the same point: “...(there is a) lack of agreed criteria, nationally, unless there is some and I have missed it!”

A primary teacher (G&T-co125) commented that her colleagues face the problem of the relativity of children’s abilities within a cohort if an exceptionally gifted child is in a class: “...comparisons will be made to that child and not other, necessarily consistent, bench marks.” A secondary teacher (G&T-co 306) stated that the biggest issue preventing effective teacher nomination is the “...uncertainty about definitions of G&T in a particular area and related to norm for cohort or same cohort in other schools.” In the same vein, a number of co-ordinators indicated that they find in practice that colleagues can feel pressured to nominate individuals, whom their professional judgement tells them are not gifted. They believed that nominations can be falsified because of the government’s insistence on identifying a fixed percentage of students. A primary teacher (G&T-co 157) pointed out: “...we are supposed to treat G&T as a percentage,

yet each year group has different numbers of G&T students.” This teacher believed he had only one or two really gifted students.

Others co-ordinators, however, consider the 5-10% requirement not enough for their schools. A secondary teacher (G&T-co 133 was interviewed: “I think working in a school with exceptionally high standards means the question is who else is of high ability along with the 5% of the school cohort? Currently, we have over 30% of girls in Year 7 identified as of exceptional potential through looking at Nfer scores.” This kind of finding was not unique; it was also noted that the co-ordinator speaks about ability as synonymous with giftedness.

Discussion

This study revealed widespread confusion with the concept of G&T in schools; and a picture of co-ordinators struggling to justify the Government’s view of G&T education in their schools. The vast majority of school G&T co-ordinators reported that teacher nominations are the best (and favourite) way of accessing the kind of detailed information on the character of individuals that they need. Paradoxically, however, they acknowledged that there are a wide range of traits and states that teachers and the students themselves possess or are affected by, which contribute directly towards misdiagnoses of giftedness. Some are within the teachers and students ability to control, and some not. Moreover, most are either a cause or consequence of each other. An example is that an unwillingness to self-promote was often seen as a consequence of negative peer group pressure.

Co-ordinators recognised that the nominations usually came from colleagues who were *not* trained to recognise gifted behaviour. A corollary to this is that these colleagues tended to define gifted students as those who work hard, conform or possess above average ability compared to peers. Some teachers were even unprepared to identify students. At the same time, they were

coping with the lack of funding and curriculum flexibility issues. Many were not formally allocated time in their schedules to do the job required of a G&T co-ordinator.

The qualitative data from the study also revealed that the co-ordinators felt that to gain further insights concerning whether a student was really gifted or not, they needed more information from diverse, more objective tests, in order to avoid having to rely so much on teacher nominations. However, they often felt that they were trying to diagnose giftedness with assessments from which often even school-generated results were missing.

The study has shown how confused British pre-collegiate educators really are about the concept of giftedness, and how this puzzlement stems mainly from wondering how to apply the definition to find fixed percentages of gifted children in a school. The research seems to indicate that the British definition (and corresponding legal requirements) is a 'red-herring', which diverts the attention of teachers away from identifying gifted students for their school G&T co-ordinators, into something else: presumably more about targets and rewards.

But it need not be that way: it is possible that British gifted education co-ordinators and teachers need to be allowed to focus less on the definition, and more on ways to hone their ability to recognise a gifted child. The researcher takes the line that Cramond (2005) does - that there is no need to define something completely in order to understand it. She argues that if we (the field) can't agree on the definitions of intelligence, creativity, and talent, which are components of giftedness, then we can't expect to agree on a definition of giftedness itself. She advises that in each country (and to a further extreme, each US state), giftedness should not necessarily be defined in the same way, because the music, food, art, alphabet, predominant religion, and other cultural aspects are very different. Cramond argues further that to agree to a definition that we assume to be true is to stop the search for truth. In Britain, we want our G&T co-ordinators to

keep thinking, and to maintain a passion about G&T education, rather than to feel they have become solely ciphers of centralised control.

Cramond (2005) suggests that it is the belief in the transitory nature of knowledge that we should aim to convey to our most gifted students so that they can continue to search for better explanations, solutions, and meanings. Succeeding in this regard might go some way to stopping children (labelled as gifted and and talented) who sometimes expressed to the co-ordinators in this study the misguided view that they don't have to work or look further... because they are gifted! It is highly possible that the definition itself is failing to help children; and will lead to a generation of surprised and disappointed youngsters when they reach world of work.

In view of the conceptual problems of definition, it is not surprising that diagnosis of the gifted has been proved to be tricky for teachers. It is, of course, dissatisfaction with the existing, rather than the reverse, that leads to the necessity for creative problems solving – and in the same way, dissatisfaction with knowledge that leads to further research. The study revealed, however, that co-ordinators felt that colleagues rarely had the time to do much in the way of the kind of extra-curricular research that is necessary in order to discover how to make nominations more effective. The study data suggests that co-ordinators need therefore to be given more comprehensive training in order to inform colleagues how to better distinguish gifted and talented youths.

The background research for this enquiry found a study done almost thirty years old in the US by Gear. He observed that without training, teachers were not nominating students with high potential; they were merely selecting well-behaved students with good grades. After a brief training programme, the effectiveness of teacher nominations more than doubled. It seems that we have not managed to accomplish this feat yet in Britain. It is true that even excellent training

programmes cannot avert all unsuitable selections, but it clearly is necessary to try and facilitate ways for teachers to be 'on the same page' when it comes to selection processes; even if many are not signed up to the government's view of gifted and talented education.

This study concludes that British school subject teachers may well be expected to be inconsistent and unreliable nominators of gifted children until they have been appropriately trained. G&T co-ordinators should therefore be enabled to build more time into their work-loads, to provide the appropriate level of training and information in order to ramp-up effectiveness. Co-ordinators should be helped to do this, possibly by outside agencies tasked with constructing a non-onerous, generic training programme for staff... which needs to be easily accessible. The researcher proposes that training programmes should be published on-line, and be strongly recommended for nominating teachers. The internet is increasingly being seen by researchers in the US, like Renzulli, as the most accessible information transfer medium for training programmes intended for gifted children. The issue of the design of appropriate training and online modules for subject teachers is beyond the scope of this paper, which has concentrated on highlighting the need for such materials. However, it is noted that Ireland is currently (2007) ahead of its sister country in considering how to produce a workable structure.

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