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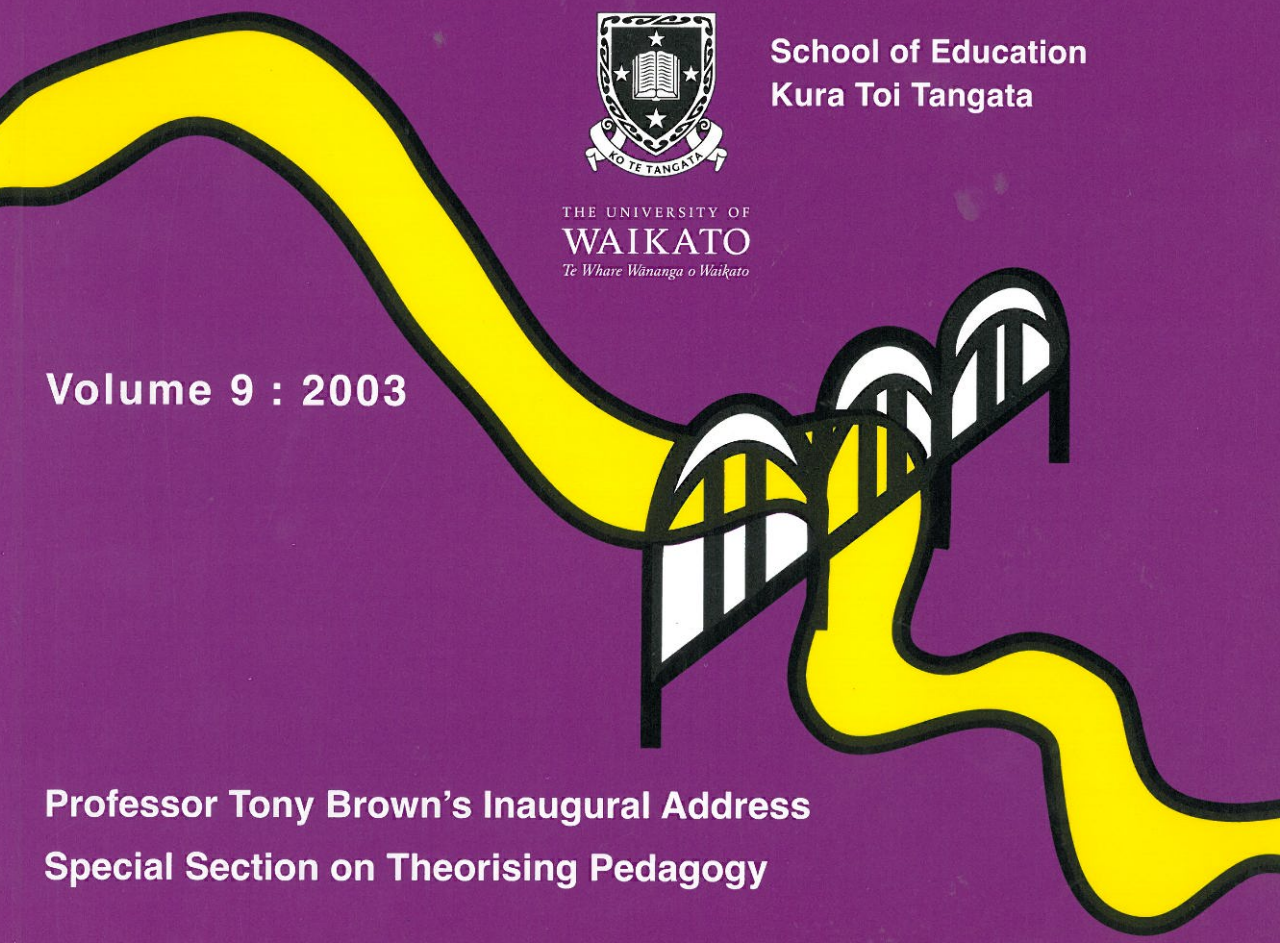

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Special Section on Theorising Pedagogy

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SPECIAL SECTION: THEORISING PEDAGOGY

SCHOOL COMPOSITION EFFECTS: A REALIST CRITIQUE OF "QUALITATIVE" STUDIES IN NEW ZEALAND

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ABSTRACT *Considerable international attention has been given to the school composition or "mix" effect. It is accepted almost as a matter of common sense that schools with a high concentration of working-class students face particular difficulties, associated with peer group resistance, and that as a result their overall performance levels are generally depressed. The most recent presentation of this thesis has been offered by Thrupp's (1999) qualitative study linked to the influential New Zealand Smithfield project (Lauder & Hughes, 1999). Thrupp's evidence is subjected to a critical examination using, in a "triangulation" exercise, data from a parallel case study. The analysis does not support Thrupp's central hypothesis. The theoretical and methodological implications of these incompatible findings for qualitative and quantitative research are discussed. A realist strategy able to overcome this dichotomy, which confuses matters of scientific method with matters of data collection technique, is outlined. The paper argues in conclusion that the ability of low-SES schools to realise the capacities of their students is likely to be enhanced if they are empowered to support the effective non-cognitive dispositions of students that drive progress at school.*

INTRODUCTION

Studies of school effectiveness have frequently identified what is variously referred to as a school composition or school-mix effect. The 'effect' is revealed by a statistically significant association between a relevant indicator of school 'outcomes', usually academic attainment scores, and students' average level of social class or prior ability, once the statistical effect of their individual social class or ability has been controlled. If a positive school effect is revealed by statistical analysis then it means, for example, that a student of any given ability from any given social background will probably achieve more at a high-SES school than a low-SES school. The detection of a school composition effect is most convincingly established under stringent conditions. The ideal research requires attainment scores, from at least two assessment points, together with other relevant individual prior ability or SES data (or both), for a large number of students from a representative sample of schools, which must then be analysed by a statistical technique designed to separate individual effects from collective effects.[2] The number of studies of this kind, even throughout the world, is relatively small, and it remains uncertain whether a school composition effect is or is not generally observed. A recent review by Teddlie, Stringfield and Reynolds (2000), although inclined to the view that there usually is a compositional effect, lists more studies of this kind that fail to report an effect than do. Indeed, it can seem that for every analysis that finds a composition effect there is another that does not. Strand (1996, p. 131), in a study of all British primary schools – a huge sample – concluded that: "The only composition factor to reach statistical significance was the average age of the year group." It may be interesting that this concerns primary schools where there is relatively little overall competition between schools that could generate

internal class selection. The consensus among experts in the field, however, is that a significant composition effect can generally be expected in a large and comprehensive study. It is not necessary for the purposes of this article to provide an extensive review of the literature in this respect.

The basic theory of a school composition effect and its mechanism of generation are widely held. Bourdieu (1993, p. 69) presents the case:

> Among the very profound changes that have occurred in the French school system, there are qualitative effects of quantitative transformations. Beyond a certain threshold in the representations of working-class children in a school class, the overall atmosphere of the classroom changes, the forms of disorder change, the type of relationships with teachers changes. These are things that can be observed and taken into account practically.

To assert that an increase in the proportion of working-class students at a school "beyond a certain threshold" transforms a classroom, bringing disruption, is not, of course, necessarily also to assert that the performance of students at such schools will be depressed below that expected for students with similar individual characteristics at other schools but it is certainly not inconsistent with that thesis. The discussion of school mix, however, merits some precise argument. There is little doubt that differences of "atmosphere" in high-SES and low-SES schools are easily recognised. There will be differences of dress, hair style, speech, modes of control, resources, use of space and so on, in and outside the classroom, and affecting staff as well as students. The question for the school composition hypothesis is whether these variations affect 'learning outcomes' and, if so, in what ways and to what extent. Statistical analysis provides techniques of hierarchical linear modelling with the potential to answer that question (Harker & Nash, 1996). If the commonly recognised differences between high-SES and low-SES schools do emerge as a result of a qualitative transformation of a quantitative dimension, and do act to depress the attainments of students in low-SES schools below the level achieved by students with comparable SES and prior ability at other schools, then that fact will be revealed as a school composition effect by appropriate forms of statistical analysis.

One does not need to be so astute an observer as Bourdieu to suspect that something very much like this mechanism may operate in low-SES schools. An interview with a year 11 student will demonstrate that this is actually no more than the common sense of a wide community (Nash, 1998). The fieldworker asked Rena, a 16-year-old student, to look at the 'league table' of school examination results reported in the local newspaper. At the bottom of this list is School X, situated in a predominantly Polynesian district across town from her own neighborhood, and she commented:

> Well, I know for a fact that if I was at a - if I was over there [School X] - my Mum would take me out of it and put me into another school. Because in classes, like if the majority of the pupils are Maori and Pacific Islanders then you will have the teacher paying more attention to them than they will teaching the whole class. They'll be busy trying to, you know, "Look, open your book please, open your book, please, I've told you before, look, can you go out the class I'll be out in a minute", you know? And meanwhile you're trying to learn but the teacher's

> preoccupied with something else. So the student probably complains to their parents, the parents think, "Okay then, I'll just, you know, I'll give it a try", and then the student comes home and complains again so the parent thinks, "Okay then you can move schools!" It's - I don't think they're being racist: they're just being – sensible.

This young woman, herself Maori, attends a predominantly working-class school (Kotuku College) where about 40% of students are of Maori or Pacific origin. Her response suggests, however, that while such a proportion might be acceptable to her mother, a figure nearer twice that (as at School X) would be another matter. This statement reproduces the common sense of the community in a way that more than one academic contributor to the debate has found sensible. Bourdieu, for example, is not surprised that many parents should respond to the effects of market competition on state schools by deciding that "the surest thing seems to be to flee from the schools that have lost the most" (Bourdieu et al., 1999, p. 460). Fiske & Ladd (2000, p. 203) in their study of New Zealand school "marketisation" also ask whether "it makes sense for parents to behave as if high-decile schools generated higher value added than low-decile schools", and conclude that "[f]or a number of reasons, such behaviour is quite probably rational and sensible". They are careful to add "that what is rational and sensible for individuals may not be rational for society as a whole" (Fiske & Ladd, 2000, p. 203) but plainly sympathise with parents faced with such decisions. Most people, students, parents and researchers alike it seems, share a taken-for-granted view of the causal mechanism that links an aggregate property of the school to the classroom behaviour of the students and teachers. There is, nevertheless, a certain irony in this situation in as much as conventional common sense is often regarded by 'critical social theory' as an ideological product. Moreover, parents – if they are white – who do act sensibly in these circumstances are often, as Rena acknowledges, condemned as motivated by racism. In this context, it is somewhat surprising that so many writers within that tradition have embraced the common sense theory of the generation of school composition effects with so little element of critique and with no truly scientific consideration of the evidence.[3]

Evidence for or against a composition effect is both logically and practically distinct from evidence for or against the proposition that middle-class and working-class schools differ systematically in the ways that Bourdieu has noted. It will be argued that failure to appreciate this simple point has resulted in programmes of research that cannot achieve their stated goals. Just as the characteristic differences in atmosphere between high-SES and low-SES schools need not generate overall underachievement, so, also, need a statistical composition effect, when one is observed, not have its origin in those differences. The possibilities, accepting for the purposes of this argument the reality of characteristic differences in patterns of student behaviour in high-SES and low-SES schools, are just two: a composition effect is observed in a study (and therefore identifiable in particular schools), or it is not. In the first case, the question is why, given the differences in behaviour accepted, these patterns do not generate systematic underachievement. It is possible to argue that such effects *are* generated but that statistical techniques have failed to detect them: this argument, however, is contrary to the methodological identification of the composition effect. The point will receive further attention in the later discussion of quantitative and qualitative methods. In the second case, it is necessary to decide whether the composition effect is genuine or an artefact of the inadequate measurement of SES or prior

ability (or both), or to the omission of a variable or set of variables not included in the study. This new distinction between genuine and artefactual findings must be considered.

If the effect is genuine, in that sense, it is desirable to know what social mechanism generates it. There may, of course, be a number of mechanisms, but there is a clear analytical distinction between properties of a school, considered at that level as an educational system in itself, that emerge from the agency of teachers and those that emerge from the agency of students. A school composition effect, to the detriment of low-SES schools, might well be the product of an inferior curriculum, an ineffective pedagogy and inefficient modes of evaluation found in those schools. Is it not the common sense of the market that the best teachers will gravitate to the 'best' schools? The same common sense that sees more student disruption in low-SES schools than in high-SES schools might also be expected to endorse this position. For is it not equally common sense that the most academically talented and highly motivated students, even with social classes and ethnic groups, will also gravitate to the best schools? In practice, moreover, the same common sense is capable of understanding that a combination of weak teachers and a large proportion of indifferent or hostile students is another of those situations where a quantitative change is likely to have qualitative effects.

The argument that a school composition effect may be considered an artefact if it disappears when other factors are taken into account requires close attention. In practice, it is difficult for researchers, especially those using existing bureaucratic data sets, to include in their models non-cognitive variables that operate selectively within social class and ability categories. There is strong evidence, for example, that relative progress at school is associated with high aspiration, positive self-concept and a willingness to accept the rigours of schooling (Nash, 2001). These attributes are associated with attainment, including any test score likely to be included as an index of prior ability, but the correlation between such dispositions and ability scores is only moderate, and the possibility of selection by these characteristics, within SES and prior ability levels, cannot be dismissed. Such students, moreover, are more likely to benefit from parental support, again within broad SES and prior ability categories. If such differential selection is not detected, the observed composition effect must be considered spurious and an artefact of the statistical procedure. The point is that were fully adequate indices to be included to assess the contribution to attainment of non-cognitive dispositions, possessed by the students when they entered the system, then the composition effect would disappear. It is here that the complexities of the argument begin to generate confusion. The observed composition effect may well disappear but the real nature of social practices in the school, as a direct result of the characteristics of the students, will almost certainly be visible to observation, and their level of attainment will be lower than those of students with their individual SES and ability. That might sound like a composition effect (and is treated by some writers as such) but, in point of strict definition, it is not. There is no evidence in such a case that students, given their individual SES, prior ability, and other relevant characteristics, would perform less well at low-SES than at high-SES schools. This seems to be the position taken by Willms (2000) whose empirical research in this field has been so fruitful.[4]

Table 1: SES, Educational Resources, and School Decile Group

SES	Low Ed Resources			High Ed Resources			n.
	Dec 1-3	Dec 4-7	Dec 8-10	Dec 1-3	Dec 4-7	Dec 8-10	
Prof.	12	59	29	8	30	62	692
Inter.	16	60	24	7	44	50	700
Skilled	22	56	22	3	47	50	614
Other	32	50	18	13	61	26	528

Note: Source PISA 2000 NZ dataset, n = 2534. Educational resources index is derived from mother's secondary education, number of books in the home, cultural possessions, home educational resources and father's tertiary education. The upper and lower quintiles are used in this analysis. SES based on modified Elley-Irving (1985) scale.

There is indicative evidence of a within-class selection effect in New Zealand from the PISA 2000 study (OECD, 2001). Table 1 indicates that students from homes where educational resource levels are high are more likely, even within SES categories, to attend high-decile rather than low-decile schools. Thus, in the skilled working-class, 50% of students with high educational resources attend high-decile schools and 3% attend low-decile schools; but only 22% of those with low educational resources attend high-decile schools and the same proportion attend low-decile schools. It is evident that working-class students at high-decile schools are not comparable in this crucial respect with those at low-decile schools.

THRUPP'S THEORY OF SCHOOL COMPOSITION EFFECTS

The most influential account of the in-school mechanisms believed to generate a statistical composition effect has been presented by Thrupp (1999). The major contributions of this author are particularly interesting in the context of the present discussion as his conclusions are substantially based on empirical research carried out in New Zealand. The Smithfield research project (Lauder & Hughes, 1999) has become quite well known to international audiences. Thrupp's project is to identify the social processes that "could plausibly" create the mix effect. He suggests that the academic achievement of students in predominantly working-class schools is depressed below the level predicted by their individual level of ability and social origin largely as a result of oppositional practices generated by students in predominantly working-class schools. The argument is that working-class schools are, in comparison with middle-class schools, characterised by (i) reduced levels of aspiration and academic self-concept due to the presence of disproportionately large groups of students antipathetic to the institution; (ii) fewer opportunities to learn complex and abstract areas of knowledge due to a restricted curriculum and the adoption of narrow forms of pedagogy; and (iii) inefficiencies in curriculum delivery and mechanisms of social control, associated with high levels of classroom disruption and reflecting an institution forced into a continual mode of crisis management (Thrupp, 1999). In other words, once again, the principal effective mechanism generating the composition effect is the production by students in predominantly working-class schools of a powerful culture of resistance derived from oppositional elements in traditional working-class life (Willis, 1978).

The evidence for Thrupp's position is derived from fieldwork observations in a small number of high-SES and low-SES schools in the Wellington area. Most of the information on working-class schools was collected at one school known as Tui College which, by chance, was also included in the Progress at School sample (Nash, 1998). The work of close textual criticism is rarely welcome. It does seem important, however, to put certain questions to this programme of research. It is not easy to re-analyse fieldwork reports, there is no body of data comparable to a quantitative data file to examine, and for that and other reasons it is an accepted practice of qualitative researchers to triangulate information wherever possible. The critique that follows is offered as a form of triangulation. As it happens, the Progress at School project was also engaged in the case study of a low-SES school in the same conurbation. *A Year in the Sixth Form* (Nash & Major, 1997) gives an account of 83 students at Kotuku College, an urban, multicultural, predominantly working-class school very like Tui College. The students' experiences there matched those observed by Thrupp in virtually every respect, and yet the hierarchical linear modelling of its results (compared with 36 other schools in the sample) indicated that the ability and social composition of the school had no discernible negative effect on students' aspirations or their attainments (the effect in two of three core subjects was, in fact, positive). Thrupp does not reveal whether any composition effects were detected at Tui College and the context suggests that he actually does not know whether the school "added value" or not.

Many of the characteristics of working-class schools described by Thrupp, perhaps all of them, need not be contested. There probably is, for example, more classroom disruption in low decile than in high decile schools. Nevertheless, the extent of the difference can be over-stated and the effect it has on student attainment can be no more than a guess – and if there is no effect, which is necessarily a matter to be established by quantitative analysis, there is no point in guessing at all. The Progress at School (Nash & Harker, 1998) study has field notes on 78 fifth form and sixth form lessons carried out in a working class school and on the infrequent occasions when disruptive behaviour was observed it was invariably of an episodic character that lasted no more than a few minutes and, even then did not interrupt the work of the entire class. In the tradition of ethnographic 'I was there' research it is understandable that the exciting news, fire-extinguishers erupting, boys playing hackies with the sheep's eyes in biology, fires in the wastebasket and so on, are irresistible, but the most frequent sort of disruption is of a much lower order – the teacher bawling out a student who has arrived late, the loudspeaker announcing the cancellation of the rugby game (great protests and "settle down boys" for a couple of minutes – is all very routine and barely affects the progress of the lesson, still less the examination attainments of the students. The greatest proportion of instructional time lost in the school system is likely to be caused by missed lessons, due to students wandering around without guidance or simply not attending at all. There are New Zealand schools (Kerslake & Lange 1999) where one can expect no more than 75% of students to be present on any given day – and rather fewer than that on Fridays!

It is interesting in the context of the argument about within-class selection, that Jencks et al. (1972) found that middle class students tended to hold higher aspirations than working class students even when their intake ability was controlled and almost all researchers report similar findings. Thrupp (1997, p. 71) reports that aspirations at the working-class Tui College were low:

> Students at Tui College thought about qualifications in terms of passing Year 11 School Certificate rather than other senior school or tertiary qualifications. At the middle class schools on the other hand, large numbers already saw the Year 13 Bursary (the highest New Zealand school qualification) as their goal, often to gain entry to tertiary courses.

When the Progress at School project carried out fieldwork in Kotuku College, the year 11 students were asked systematically at the start of the year what they hoped to do at the end of the course and the results, listed in *A Year in the Sixth Form,* were similar to those they had given on a questionnaire administered a little more than a year earlier and also, incidentally, rather like their actual destinations, which were also listed. No comparable data are provided by Thrupp. Moreover, these observations at Tui College, presumably based on fieldwork observations and interviews, compare oddly with the quantitative data for that school held by the Progress at School project. According to our records, the year 9 intake in 1991 numbered 95, of whom 18 eventually gained a year 13 University Bursary award. At the end of year 10 the students completed a questionnaire stating their expected destination on leaving school; 29% reported an aspiration to enter university and a further 24% aspired to polytechnic study. These are not low aspirations, but are entirely characteristic of Maori and Pacific Island students, and many were actually realised. The 1995 bursary ratio reported for this school by the Ministry of Education was 25.2: about average for an SES decile 2 school (Ministry of Education, 1996). The variable that most strongly predicts student aspiration is ability. In a technical sense, aspiration is largely a function of ability. In plain language, bright working-class boys and girls are *almost* as likely, in the mid-secondary years, to hold high aspirations as bright middle-class boys and girls and there is no difference in the aspirations of working-class students associated with school composition or school SES decile once test scores have been taken into account. Working-class boys and girls with the same ability scores have the same aspirations no matter whether they attend a working-class school or a middle-class school. In the Progress at School data set the proportion of working-class students expecting to study at university or polytechnic is always about 60%, regardless of the type of school they attend, and one may only conclude that their aspirations are not affected by the social class or ability composition of the school (Nash & Harker, 1998).

Thrupp's hypothesis that a certain "critical mass of alienated working class students" (Thrupp, 1997, p. 59) can be expected to produce a spectacular explosive celebration of cultural resistance and have a marked effect on the educational progress of students is worth a final comment. Our research does not support this interpretation. Thrupp's argument about the consequences of this behaviour for school management reduces to the observation that in the working class school "[d]ay-to-day routines were clearly much more difficult to carry out efficiently" (Thrupp, 1997, p. 72). They almost certainly are but whether the consequences of that has any effect on students' attainments over and above that which can be attributed to their intake ability (and pre-existing SES linked *habitus*) is extremely difficult to demonstrate. One might suppose that an overburdened working-class school could lead to classroom teachers obtaining "comparatively little support from the school in dealing with everyday disciplinary issues" (Thrupp, 1997, p. 69) but the evidence that this contributes to a supposed school effect is difficult to demonstrate. In this context it is relevant to note Boaler's (1997) finding, in a study of pedagogic practice in two contrasted English working-class secondary schools,

that one or two teachers whose classrooms she could only describe as "chaotic" actually gained the highest results. It may not be possible, in these circumstances, to do more than swap one set of field notes for another. Nevertheless, this exercise in *triangulation* raises matters at the heart of a theoretical and methodological disagreement only half-concealed by reference to what appears at first glance to be a distinction about techniques of collecting data.

QUALITATIVE AND QUANTITATIVE RESEARCH

Thrupp (1997) defends his approach by appeal to the traditions of qualitative research. He claims to have carried out a *qualitative* rather than a *quantitative* study. But this conventional methodological distinction – which has its origin in a positivist epistemology that sees in all *non-quantified* work a merely second rate methodology for the study of social practice – deserves to be recognised as problematic and subjected to interrogation. It is interesting that Thrupp (1998) declares himself to be "comfortable" with the qualitative-quantitative distinction at a time when many reflexive practitioners in this field, including Hammersly (1989), are anything but comfortable. The contemporary discussion about qualitative and quantitative methods has raised questions profoundly difficult to resolve within the accepted terms of the debate. There is, to begin with, a narrow and a broad conception of the meaning of 'qualitative' and 'quantitative'. The narrow distinction is between techniques of data collection; qualitative (interviews, field-work, and so on), and quantitative (large-scale surveys, bureaucratic databases, and so on). The broader distinction is to divisions in the philosophy of science about the nature of society, the construction of scientific method and the explanation of social process and events. It is apparent that sociologists ask a variety of questions and use a variety of data collection techniques to answer them. Gorard (2000), for example, is "not convinced that the very distinction between the two forms of evidence is a useful one". This is indeed so, but the substantive argument is not really about 'forms of evidence', but about what counts as evidence for a given proposition. There is an increasing tendency to regard the qualitative-quantitative division as merely a matter of data collection technique. This may serve to contain the debate within relatively uncontested boundaries, but it also threatens to trivialise more fundamental divisions of theory and methodology not easily resolved by an implicit policy of mutual co-existence. Quantitative workers, despite any non-interference pact, typically adopt an intransigent attitude towards qualitative methods. Maxim (1999, p. 2) suggests that journals of qualitative research might better filled be with "blank paper" and, while this leaves his position in no doubt, it does not engage at any serious level with the issues involved. In a more worthwhile contribution, Gorard castigates the practice of 'qualitative' researchers for making over-large generalisations from under-size samples. These are faults that can be directed at Thrupp who continually makes assertions of the kind Lazarsfeld (1993) has labelled "impressionistic quasi-statistics": ...classes [at the working class school] were more likely to be characterised by lower academic difficulty and lower student engagement than those in the middle class schools. (Thrupp, 1997, p. 60)

> A higher proportion of students in the middle class schools appeared intrinsically interested. (Thrupp, 1997, p. 61)

> Teachers at the middle class schools tended to ask numerous questions and to receive a lot of substantive and knowledgeable answers. (Thrupp, 1997, p. 62)

Gorard suggests that "all approaches should be complementary", pleads for "common sense with simple arithmetic", and argues that the "ideal experiment" can provide "safe" knowledge by "isolating cause and effect". These comments move far beyond the narrow interpretation of qualitative and quantitative methods as matters of technique affecting data collection. They raise, in fact, very deep issues. The notion of 'safe' knowledge is pragmatic, the reference to 'cause and effect' is clearly post-positivist, and the entire text expresses a closet realism that would be better acknowledged. The issues that need to be settled are hardly new.

It is certainly an error, as Gorard (1999, 2000) has recently pointed out, to attempt the reconciliation of incompatible data by an appeal that opposes so-called qualitative and quantitative 'perspectives'. Thrupp (1999, p. 28) has argued, for example, that "the quantitative claim that tracking does not matter remains counter-intuitive for many educators...analyses that draw on more qualitative forms of evidence such as school ethnographies invariably argue that tracking or grouping is important". This disingenuous appeal should be disallowed. It ought to be agreed that quantitative and qualitative methods should not give different accounts of the same real state of affairs, and that when they do there is evidence that one approach, at least, has failed to produce accurate results. The reason why 'qualitative' work on streaming, to remain with this example, is so often misguided is because observers in schools are deceived by the surface level behaviour,– 'phenomena' is almost an appropriate term – that seems too *present* to have no effect on the relative progress of students at school. The facts of the matter, however, may be otherwise and only large-scale statistical surveys can provide the necessary facts.

The discussion about the capacity of educational research to provide knowledge useful to policy-makers, school managers and teachers has become sharply focused in recent years. Educational research can be divided – it is one division among others – into questions about the causes of variation (between the outcomes of different types of area, families, schools, teachers and students) and questions about matters that have no such necessary form (how a curriculum is structured, how a pedagogy is acquired, and so on). Questions of the first kind can only be given satisfactory explanations in a quantified form and questions of the second kind do not necessarily require a quantified explanation. The research question Thrupp attempts to answer is plainly one about the sources of variance – the composition effect is only detectable by rather sophisticated statistical analysis – and that alone makes the use of a non-quantified narrative of explanation seem problematic. It would have been preferable to select a working-class school where a negative composition effect had been identified in order to study the hypothesised generative mechanism. That information was not available when Thrupp commenced his research and although Hammersely (1990, p. 110) accepts that "one might choose a case for investigation where one would expect the empirical relationships postulated by the theory to be discovered", he is careful to specify that "having tested the plausibility of the theory in that relatively weak way, one might employ falsifying selection strategies, choosing central cases in which the factors embedded in alternative explanations for the phenomenon are controlled". However, as the discussion has already noted, it is has never been

reported whether Tui College did show a negative composition effect at the conclusion of the research and no test of the hypothesis, even a "relatively weak" one, has therefore been accomplished. In the conventions of qualitative work research popularised by Strauss (1987), Thrupp might have investigated how, for example, students from different social origins respond to the regime of schooling in high-SES and low-SES schools, or any other question which has no necessary element of quantification, but the declared aim of his research, to investigate what sort of school practices *might* be responsible for a composition effect *were one to exist*, is methodologically unsound.

It is the attempt to justify the findings of ethnographic research by an illegitimate "I was there" appeal – ironically the very basis of the empiricist attitude – that is finally unacceptable. Overcome by the *facticity* of the phenomenological experience, Thrupp (1999, p. 122) plaintively declares, "it is hard to see how a school mix effect would not occur." In this argument, there must be a "school mix" effect because it is apparent to an experienced observer that contexts of teaching and learning in working-class schools are second-rate in comparison with those at middle class schools; therefore, if statistical analysis fails to reveal an effect that fact can be accounted for by the limitations of quantitative research (as demonstrated by its failure to agree with "qualitative" research); and if another research group, even one with a larger and more competently analysed data set, reports different – or as Thrupp (1999, p. 27) writes "diffident" – results, they can easily be dealt with by ignoring them. "Let's be realistic!" his book demands: but this is anything but the programme of a realist social science. Thrupp's unprincipled acceptance and reproduction of the 'common sense realism' that underpins the decision making of parents as they select the 'best' school on the basis of its class and ethnic composition, a perception based on unexamined appearances, in fact represents the negation of realist social science with its commitment to discover the often hidden mechanisms of causal social processes.

CONCLUSION

It may be that the debate about the general existence or non-existence of a school composition effect is misguided. An effect is detected by statistical analysis and it either exists in a data set or it does not. When such an effect is found it may or may not be a technical artefact and there is often no way to find out by re-analysis whether that is so or not. It is becoming clear from empirical research, particularly that informed by an integrated numbers and narratives approach within a realist theoretical framework, that the characteristic differences widely observed between practices in middle-class and working-class schools need generate no *necessary* level of student underachievement. It is also by no means demonstrated that market competition between schools has had any detectable effect on school performance (Gorard & Fitz, 1998a; 1998b). At the same time, the concerns vigorously expressed by Willms (2000) that the concentration in certain low-SES schools of students with multiple problems – those designated in the taken-for-granted concept of bureaucratic positivism as 'at risk' or in the associated practitioner euphemism of 'special needs' – together with the transient poor, refugee immigrants and all those trapped in the most deprived urban areas, is a matter of genuine educational concern. Such children often fail at the schools they attend and the strong likelihood that they probably would do little better at any other schools is no reason to overlook the specific contexts in which they do fail.

Considerations of equity require policy-makers to pay the closest attention to ways in which additional resources, of finance and of other forms of support, can be provided. The Progress at School research suggests that some schools do raise the overall level of student attainment, in the 'added value' sense, and it is possible to glean some clues about how they manage it. Schools that appeared to succeed are those that increase the level of realistic aspirations, enhance positive academic self-concepts and win general acceptance for their necessary modes of control. Schools that appeared to fail were, on the other hand, characterised by bullying and a high level of emotional distress reported by students. In so far as the debate about school composition can contribute to the educational policy-making process it may enable schools to realise their real tendency to operate as institutions for the transmission of useful knowledge to students from all social backgrounds. This article is offered as a critical contribution to that end.

FOOTNOTES

1. Roy Nash is a sociologist of Education working in New Zealand.

2. Croxford, Raffe and Brannen (2000) provide an illustration of what can happen when attempts are made to identify a school composition effect and assess its size with less than adequate information. These authors possess an index of aggregate school SES but lack data on prior ability and, consequently, are unable to reach any useful conclusions. They go through the motions anyway with, not surprisingly, extremely unconvincing results. It is suggested, for example, that the school composition effect is more than 50% of the individual effect in England and little more than 20% in Scotland. The authors make no attempt to explain this strange pattern, which suggests they are well aware that it is almost certainly a technical artefact, and this criticism may serve to balance that offered of Thrupp's qualitative research. It is possible to be a great deal more concise here simply because errors of analysis and interpretation are more easily recognised when statistical data are involved. There is also the point that no one, the authors included, is really likely to be deceived by this presentation.

3. It is possible for common sense on this matter - often a little over-confident - to mislead. Barry (1989, p. 221) provides a nice illustration of this:

> at a cost of some millions of dollars sociologists discovered the rather obvious fact that a large part of the educational environment of a child consists of the other children in the school. Given the tendency of people in a neighbourhood within any city to have similar education and cultural background, this entails that (at any rate in urban areas) the effects of individual parents on their child will be multiplied by the likelihood that the other children will have similar parents.

The sociologists in question were doubtless the authors of the Coleman Report who stated (Coleman, 1990, p. 128):

The finding is that students do better when they are in schools where their fellow students come from backgrounds strong in educational

motivation and educational resources. The results might be paraphrased by the statement that the educational resources provided by a child's fellow students are more important for his achievement than are the resources provided by the school board.

It is possible to argue that Barry's lack of regard for sociologists did not go far enough, for a later re-analysis of the Coleman data by Smith (1972, p. 272) declared: "The Report's finding that 'a pupil's achievement is strongly related to the educational backgrounds and aspirations of the other students in the school' is due in part to a mechanical error on the part of the Report's authors". Which just goes to show that common sense, social philosophers and sociologists can all be wrong, and that hubris is often repaid in the coin it deserves.

4. Willms (2000) position is interesting. He is convinced that "[t]here is unequivocal evidence that the average socio-economic status of a child's class or school has an effect on his or her outcomes, even after taking account of (individual-level) ability and socio-economic status" (Willms, 2000, p. 18). At the same time, he argues that the effect is "rooted in the early years, and determined by the ability of communities to develop children's literacy skills during the period from conception to age 5" (Willms, 2000, p. 5). How are these positions, apparently at odds, to be reconciled? Willms proposes the 'simple explanation' that if a quarter of all students are vulnerable to learning failure, because of their environment or behaviour, then segregating them into one half of the educational system will give rise to a significant composition effect if all the effective variables are not included in the model. This is actually to argue that when a statistical composition effect is found, controlling only for SES (and perhaps prior ability), it is likely to be an artefact of within-class selection for characteristics of students and their families not entirely correlated with the controlling variables.

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