**THE PISA 2012 RESULTS ON FINANCIAL LITERACY AND THE INEQUALITY OF SCHOOL ACHIEVEMENT**

One of the biggest problems in education today is the inequality of school achievement. The results of international measures such as the Progress in Reading Literacy Study (PIRLS), the Trends in International Mathematics and Science Study (TIMSS) and the Programme for International Student Assessment (PISA) indicate that in New Zealand some groups of children perform well while other groups of children do not, and that this difference in school achievement aligns with ethnicity and social class.

The PISA 2012 survey included, for the first time, a component on financial literacy. What do the results tell us? Quite a lot. But first, it is worth getting clearer about what we mean by the term ‘financial literacy’.

The Meaning of ‘Financial Literacy’

There are a number of definitions of ‘financial literacy. Here are two, the first used for PISA and the second used by the NZ Commission for Financial Literacy and Retirement Income:

The knowledge and understanding of financial concepts and risk, and the skills, motivation and confidence to apply such knowledge and understanding in order to make effective decisions across a range of financial contexts, to improve the financial well-being of individuals and society, and to enable participation in economic life (Ministry of Education, 2014, p.7).

The ability to make informed judgements and make effective decisions regarding the use and management of money. It is about having financial knowledge and having the understanding, confidence and motivation to make financial judgements and decisions (NZ Commission for Financial Literacy and Retirement Income).

The term ‘financial literacy’ is a little bit tricky, from a conceptual point of view. The ‘financial’ is about money, but calling it ‘literacy’ is a fair stretch from the usual meaning of ‘literacy’ as being able to read and write a language. Perhaps another expression is required to capture the intent.

Financial Literacy and Autonomy as an Educational Aim

If financial literacy is to have any educational value it must connect up with the aim(s) of education, in particular becoming an autonomous person.

* Autonomy – acquiring a degree of independence where, in daily life, we are able to manage our own affairs while recognising that we must also rely on the expertise of others to help us solve some of our more pressing problems and challenges (lawyer, doctor, car mechanic, plumber).
* Intellectual autonomy – acquiring a deeper and wider understanding of the world and our place in it through both learning from others and by direct experience. The concepts and theories we possess allow us to make informed judgements and decisions about, for example, how to obtain money and how to dispose of it wisely.
* Material autonomy – to be in a position to support oneself in daily life now and into the future by gathering financial resources to meet our basic needs as well as having sufficient to lead a rewarding and fulfilling life. There will be times when we may depend on the resources of others, particularly the state, to assist us in childhood and old age as well as when out of work through no fault of our own.
* Gaining intellectual and material autonomy in financial matters is critical to children acquiring the means to living in a modern and complex society. Those who do so are likely to benefit much more than those who do not.

PISA 2012 Results

The PISA results, from 2012 and earlier, reveal several disturbing things about the school achievement of NZ 15 year old students in mathematics, reading and science: over the years, in broad terms:

* NZ has slid down the national rankings, being overtaken by countries who have out-performed us.
* NZ has one of the widest range of scores between highest and lowest achieving students.
* Of the four broad ethnic groups, Pakeha and Asian students on average tend to be higher performing while Maori and Pasifika students on average tend to be lower performing.

The NZ results of PISA for 15 year olds are consistent with the results of PIRLS and TIMSS for 10 year olds.

The PISA 2012 results for Financial Literacy reveal similar trends. For the countries with similar mean scores, the percentage distributions across Levels 1-5 (1 lowest, 5 highest) are as follows:

Table 1 Financial Literacy Proficiency Levels

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Country** | **Mean** | **Level 1** | **level 2** | **Level 3** | **Level 4** | **Level 5** |
| Estonia | 529 | 5.3 | 19.1 | 36.0 | 28.3 | 11.3 |
| Australia | 526 | 10.4 | 19.5 | 29.4 | 24.9 | 15.9 |
| NZ | 520 | 16.1 | 18.0 | 23.4 | 23.3 | 19.3 |
| Czech Rep | 513 | 10.1 | 21.2 | 32.8 | 26.0 | 9.9 |
| Poland | 510 | 9.8 | 23.2 | 34.2 | 25.6 | 7.2 |

(Ministry of Education, 2014, p.38).

While New Zealand, of the five countries with similar mean scores, has the highest percentage (19.3%) of students performing at level 5, which is amongst the best internationally, it also has the highest percentage (16.1%) of students performing at level 1. Belgium, with a mean score of 541, has 19.7% at level 5 (very similar to New Zealand), but has only 8.7% at level 1, this being half of the New Zealand percentage (16.1%).

Here is a clear case of inequality of school achievement.

The Causes of and Solutions to the Inequality of School Achievement

*Inequality: What is it?*

We need to be quite clear what we mean by equality and inequality if we are to look more closely at the PISA results on financial literacy within the context of the inequality of school achievement.

In a very simple sense, equality may be defined as treating equals equally and unequals unequally so as to maximise equality. We ought to treat people equally unless there is a relevant difference which leads us to treat them unequally. By and large, people have different coloured hair but this is not a relevant difference for treating, for example, black-haired people less equally than those with blond hair. On the other hand, that children from a disadvantaged social group or from a deprived family neighbourhood have a low level of school achievement compared with their peers from advantaged social groups or wealthy neighbourhoods is a relevant difference for treating them unequally with the goal of maximising equality for all.

Equality takes three forms, all of which are directly relevant to the inequality of school achievement:

*Inequality of access*: like a race, all children have an equal opportunity to enter the race and step up to the starting line which, in the case of schooling, is that every child may begin school on their fifth birthday. But note two things:

* Some races start with all competitors on the start line and the best competitors win every time and the losers always come last.
* Other competitions are handicapped, such as horse racing and wood chopping, to allow every entrant a fair chance of winning.

*Inequality of treatment*: in an ethical sense, teachers ought to treat all children equally with regard to their dignity and respect, by virtue of their being humans and becoming persons. However, with regard to teaching and learning, if children are unequal in their understanding then treating them equally will only perpetuate the inequality; they are to be treated unequally such that those least advantaged receive more while those most advantaged receive less to maximise equality in educational provision.

*Inequality of results*: if the goal of a good society is the maximum amount of social and economic equality as a citizen with a standard of life which no person ought fall below, then there must be equality of results to the extent that whatever differences there are these are not of a kind which permits such extremes of wealth and poverty where the few gather great wealth and power while the many are so seriously disadvantaged. The wealth of the nation is just that, the wealth of the nation for which the state and those who rule have a moral duty to protect the interests of all citizens to the detriment of none.

The Causes of and Solutions to the Inequality of School Achievement

People, whether they are politicians, policymakers, teachers, academics, parents or commentators, are rightly concerned about the inequality of school achievement. They seek causes and solutions. How they do so is where the problem lies.

* Within/Beyond Dualism. The issue is often conceptualised as a dualism of within and beyond school factors. Priority is all too often given to the within school factors for these are the ones which education officials in bureaucracies often think teachers in schools can do something about, so we have initiatives like national standards, charter schools, investing in educational success, quality teachers, smaller class sizes and so on. Others argue that this is too narrow a focus since the primary causes of the inequality of school achievement are located beyond the school and it is in the wider social/political/economic environment where solutions are to be found. There is little ‘meeting of minds’ between both camps.
* Proximal/Distal Continuum: rather than excluding or downplaying the causal factors of the other side of the dualism, which is no solution at all, we would be better to adopt the proximal/distal continuum where all factors, whatever they are, are located on a continuum from those most direct and immediate – the proximal (parents reading to their child, teachers saying things to the children) to those out at the farthest edge – the distal (government policies, NCEA exam marking): the proximal are those which are more likely to explain why one child achieves when the other does not while the distal are those which are more likely to explain why some groups of children achieve when others do not. This allows us to explain why children of a particular group tend to have low achievement (distal factors) yet account for why some children from this group have high achievement (proximal). And vice versa. Then tailor solutions to those most disadvantaged.

Role of Financial Literacy

As the results of PISA 2012 financial literacy reveal, the inequality in mathematics, reading and science are also found in financial literacy. What follows from this for those involved in financial literacy programmes in schools? There are some fundamental precepts:

* Not maintain the social/economic inequality but challenge it.
* Not accept the related inequality of school achievement but challenge it
* Reject within school solutions to beyond school problems
* Accept that causes and solutions are complex and socially connected

Conclusion

A good society which sets a standard below which no citizen shall fall is a society in which the state provides leadership in arranging the affairs of the nation in such a way that all benefit and none are seriously disadvantaged. Schooling is one avenue to help all attain an adequate level of intellectual and material autonomy so as to be able to live a good and satisfying life.

Financial literacy has an important part to play in addressing the inequality of school achievement which PISA results document. But it will only do so if it challenges the very assumptions which hold the inequality in place, and this means challenging the government policies and business practices which create and maintain the wider social and economic inequalities to be found across the whole social fabric of New Zealand.

Those working in the field of financial literacy certainly face a major challenge to right the wrongs which are reflected in the PISA 2012 results.

References

Clark, J.A. (2014) Challenging a myth: Teachers do not have the greatest impact on student achievement. *New Zealand Principal*. 29(2).

Clark, J.A. (2014) Does New Zealand have a long tail of underachievement? *New Zealand Principal*. 29(1), 17-22.

Clark, J.A. (2014) A principle to govern education policy: Abolishing national standards. *New Zealand Principal.* 29(1), 29-31.

Clark, J.A. (2013) Should we use cognitive enhancers to raise student achievement? A controversial proposal. *New Zealand Principal*. 28(3), 27-32.

Clark, J.A. (2013) Inequality of school achievement: Why the events of 2012 will not fix the problem. *New Zealand Teacher*. (Education Review series). 4(1), 18-19.

Clark, J.A. (2012) Metro’s school rankings: Why league tables should be avoided. *New Zealand Principal.*  27(3), 6-7.

Clark, J.A. (2012) Can the Ministerial Cross-sector Forum on raising Achievement really succeed? *PPTA News.* 33(7), 11.

Clark, J.A. (2012) Solutions to inequality in school achievement: policy mix or mess? *New Zealand Principal*. 27(2), 26-28.

Clark, J.A. (2012) Can national standards really close the achievement gap? *New Zealand Principal*. 27(1), 10-13.

Clark, J.A. (2012) The charter school; a Trojan horse*? PPTA News*. 33(3), 9.

Clark, J.A. (2011) Explaining differences in school achievement: Comment from the neurozone. *New Zealand Journal of Educational Studies*. 46(2), 89-94

Hailwood, K (2008) *Financial Literacy and the School Curriculum*. A thesis presented in partial fulfilment for the degree of Master of Arts in Education. Massey University.

Associate Professor John Clark

Institute of Education

Massey University

Palmerston North

J.A.Clark@massey.ac.nz

Presentation to a workshop on *Unpacking PISA 2012: What Next?* Massey University, Wellington. 24 July 2014. Fin-Ed Centre