

# A Backward Look at the Future?

by Martin Lawn and Ian Deary

No. 46, November 2008

---

Research in education can be produced in different ways. Today, it is likely to be produced by academics in universities, often on the margins of teaching or for a higher degree. But in the past, education research in Scotland was organised differently on a partnership model and with the ambition of contributing to effective education reforms. This *Briefing* looks at the innovative way in which research in education was organised in the past in Scotland, and asks whether this offers any guidance to the organisation of Scottish education research in the future.

---

- ▶ There are different ways to organise education research. The most common way today is not necessarily the best way.
- ▶ Contemporary educational research is produced mainly through higher education institutions; funding is limited and studies are often quick and micro in scope. This contrasts with the model of research in the 1920s-1940s when Scotland had a distinctive research practice in education.
- ▶ This innovative approach was based on a partnership between teachers, professors and directors of education; it was “smart” about its organisation, making the most out of limited resources.
- ▶ Scotland’s organisation of its research capacity enabled it to be at the leading edge of research in Europe and to be admired by key American researchers.
- ▶ Education and learning policy today is more important than ever and Scottish research organisation needs to be even smarter to manage its responsibilities and work with its partners.
- ▶ Can the past be a useful way of thinking radically about the future, and if so, what actions would improve Scotland’s research in education as a field of practice?

## Introduction

Scottish education research was unique and cutting edge in its heyday from the 1920s to the 1940s. It was organised in a distinctive way, involved a range of interests and roles, and dealt enthusiastically with huge tasks. It was unique in the UK and across Europe. Organised under the umbrella of the new Scottish Council for Research in Education, education research was undertaken by a partnership of local authority directors, teachers, student teachers, college lecturers and professors of education. This *Briefing* looks back to this period in the organisation of Scottish research in education, determines its key features and asks how it could be recreated or what would its modern equivalent be?

## A “Smart” Scotland

According to the last Research Assessment Exercise, a significant university-wide peer review of UK research, Scotland has 135 active educational researchers, very few of them work in highly rated university departments, and in large parts of the country there are few researchers present. Most educational research is applied or school focused; it is local and it is micro in scale. In addition, it is not cumulative and has low publication visibility. There are very few specialist research centres in education research or evaluation in Scotland. Universities have difficulties in managing their education areas; they are mainly income-driven, teacher education centres staffed with late-entry experienced teachers. On the whole, Scotland does not produce blue sky research in education, nor does it appear to be able to build on evidence and insights from its research to contribute to the development of education policy and practice. Is this a question of funding, of organisation, of mixed purpose or of ineffective processes?

This differs from the position from the 1920s to the 1940s when Scotland was at the leading edge of educational research in Europe. For a country with few educational researchers, and none of them professional and full time, this was an enormous achievement and it is worthwhile understanding what it did and how it did it. It is possible that lessons from the past could be used to reconstruct it as a creative and useful field of work today. This model of education research can be seen as operating in the past through a three-fold process.

## Research and a teacher-based model of research

In 1920, there was a high proportion of graduate teachers, mainly in their Educational Institute of Scotland (EIS), which had a strong interest in education reform and in the idea that education research could deliver effective education reforms.

In 1919, the EIS had organised its own Research Committee, a mixture of teachers and co-opted experts,

chaired by William Boyd of the Department of Education, University of Glasgow, its main motivator and support. Boyd published news and appeals from the Committee regularly in the *Scottish Education Journal* (SEJ) and made it clear that:

*The Committee is willing to do all that can be done to make research work a vital concern of the Institute. The one condition of success is that it should be able to count on the cooperation of the whole profession. Realising this, the first question to which it has addressed itself has been – what can be done to get teachers all over the country interested in educational experiment, and willing to give what help they can? (SEJ Nov 14, 1919 p772)*

So, from the outset, Scotland became the home for a profession-based model of education research. Research work meant educational experiment, defined as empirical investigation. The EIS supported a range of research activity; for example, in the creation of a research library, new Research Fellowships and regular reports in its *Journal* about teachers’ research. It began the organisation of a community of teacher-researchers in Scotland, classed as Educational Scientists. The Committee intended to advise on best procedures, supply information about work in scientific journals, and make comparative country reviews. Within a short time, it organised an annual prize for student teachers, to be based upon an aspect of school work, involving personal observation or experiment.

Within a short time, interested teachers were being encouraged to use new Arithmetic tests and about six thousand of them were requested for classroom use. At the same time, the Research Committee devised a marking scheme using three thousand five hundred pupil compositions sent in by teachers. Boyd invited teachers, in the EIS journal, to communicate with the Committee if they were doing “experimental work – however simple or unsystematic”.

Boyd promoted an approach to education research, based on teacher professionalism and policy engagement. The teacher was seen as a collective research worker in an integrated study on a Scottish school examination. The teacher was expected to act as if the classroom was a laboratory, with each classroom connected to the others, and together, their assured knowledge would contribute toward education reform.

At this time, and for some decades to come, this approach to education research was unique in Europe, and not until the late 1970s did the idea of the teacher as researcher or action-research grow again in the UK.

## An organised research network

From the late 1920s, the impetus in Scotland for experiment and inquiry in education was developed by strong links with leading research and education reform organisations, like Teachers College, Columbia, New York, and the New Education Fellowship across Europe.

At home, the EIS and the new group of Directors of Education agreed to create a Research Council in Scotland, funded by their contributions. It was inadequately funded but with a striking organisational model. Directed by a German trained, part timer, Robert Rusk, it involved teachers, head teachers, some directors of education, some university experts, and large numbers of tutors and students from the teacher training colleges - in Jordanhill, Moray House, Aberdeen and Dundee. The Scottish Council for Educational Research (SCRE) was unique in Europe, and for a time, in the Empire. Unlike the contemporary model of a university institute with a professor and a few students, SCRE was a network, an advanced machine, combining leading edge expertise, professional engagement and a policy focus. The SCRE organisation allowed research to be produced more "intensively and extensively" than any one individual or site was capable of, ensured that a local project became a national project, and that it could undertake long term investigations.

SCRE was an early scientific knowledge network in education, linking together professional and lay expertise across the country in such a way that it acted as single, consistent disciplined effect. This was a national but not a governmental initiative. The Scottish Office took no part in the Council meetings and offered it no funding until much later.

### **Scottish research networking: ambitious and confident**

An early achievement of SCRE was the promotion of pupil testing, building on the work in the training colleges and the advanced research courses of the universities. Testing was seen as the most useful and fair way of allocating pupils to the most appropriate post-primary courses. By 1936, the Council had been able, by extensive testing of ability and attainment, to promote the "best" combination of intelligence tests, examinations and teacher estimates to standardise assessment for secondary education.

But SCRE's most extraordinary achievement was the 1932 Scottish Mental Survey; this was a model of extensive fieldwork, a research partnership with teachers and an exemplar of policy focused research work. Teachers tested *almost all* children in the country born in 1921 (aged 10.5 to 11.5 years). It reflected a confidence about what Scotland could do, what expertise was available in Edinburgh about testing and what the teachers were capable of doing in their classrooms. The children were tested with a version of the Moray House Test No. 12, produced by Godfrey Thomson, a Professor of Education at Edinburgh and Principal of Moray House. Thomson was a key writer on intelligence from 1916 until his death in the early 1950s.

SCRE offered a consolidating network of teachers and administrators, and a flexibility of operation, which allowed the tests to become more widespread. Student

teachers were organised as well; they corrected the scripts or coded the data and on one occasion, the timetable was suspended at Moray House Training College for several days for this purpose. Its work was described at the time:

*...results so far attained are highly satisfactory considering that the work has had to be carried out in the spare time of teachers, lecturers, directors etc at a time when their own commitments were exceptionally strenuous and serious. The outstanding feature displayed in the Council's efforts is the cooperation of all the interests participating, which even apart from the outcome of the work, must influence and increase the efficiency of Scottish education as a whole.'* (SCRE Annual Report 1929-30 p7)

Research capacity building worked within the flow of ideas and people in universities, colleges and schools. But its argument develops beyond expert support, into that of cumulative value; research is interlinked, builds upon earlier inquiries and methods, and produces new lines of research. In this task, communicating and widely distributing research results, products and materials became a key task for SCRE; it showed how a woven network of experts and researchers could produce an impact, and a culture, greater than its individual parts. Its research reports – the Blue Books – were published in its own series for University of London Press.

### **Developing research capacity**

The network organisation of education research and its capabilities were soon underpinned by key actions taken by the teacher colleges who trained their students to administer tests and to understand their principles, and by the Universities, particularly Glasgow and Edinburgh. These Universities had developed a B Ed degree which began to act as a supplier of crucial education research skills and expertise. This was a two-year postgraduate degree, at Master's level and, by today's standards, often at PhD level. It was a rigorous degree and could be up to nine times longer than its English counterpart, the M Ed course. The Glasgow course was wider in scope than the Edinburgh degree but the latter, under Thomson and Drever, was a more advanced course in statistical and factorial studies. Many of the Edinburgh students went into the new areas of educational administration and psychological services, as well as teacher training.

SCRE, acting on behalf of its partners, collected and distributed a complete list of the Scottish B Ed theses and paid half the cost of typing them if they were deposited with SCRE. Soon after, it organised a group of its key professors of Education who produced a recommended Scottish Bibliography to be used within their B Ed courses in Scotland. The last edition of the "Aids to Research for Scottish Students of Education"

was produced in 1956. In this way, common standards of research in education were produced.

## Review

In this mid 20<sup>th</sup> century period, the dominant model of Scottish education research was that of a unique partnership between its key actors, and a collaborative model of research work. It had found a way of working in which large numbers of people could work for a purpose which interested them all.

This was an unusual way of working but it was highly effective and it looks increasingly modern in structure. Within a small country, a leading edge model of research was created which was productive and effective and unlike any other European model.

A “Smart” Scottish education research existed then. In retrospect, the narrowness of its focus on testing has not survived scrutiny but the audacity of its organisation and determination is still needed today. To develop a critical mass of researchers, in accord with the teaching profession and local authorities, using high-level theories and research expertise, is needed today to face the changes in knowledge production and the urgencies of education and learning policy.

Today, a new way of harnessing the energies and interests of a range of educational researchers (in the widest definition) is crucial. Linking together people in expert and skilled large scale projects would be of real value. It is the networking of people and the collaborative production of knowledge that is the crucial element in new policy thinking today.

It might seem odd to return to the past to learn how to manage the present better but it appears that Scotland should learn from the ambitions of its past.

Returning for ideas to the model of education research present in the mid 20<sup>th</sup> century might enable a new form of effective and stable networking to join university and governmental expertise, the teaching profession, and emerging researchers together in a creative and synergetic form. It is possible that new technologies will enable researchers, projects and publication to operate across Scotland and wider afield.

Scottish education research would be back as a powerful knowledge-producing network, and like our Nordic neighbours, able to act in European and international research networks, in an organised, cumulative and public way.

## References

- Deary, I.J., Whalley, L.J., & Starr, J.M. (in press, due 2009) **A lifetime of intelligence: follow-up studies of the Scottish Mental Surveys of 1932 and 1947**, Washington, DC: American Psychological Association.
- Deary, I.J., Whiteman, M.C., Starr, J.M., Whalley, L.J., & Fox, H.C. (2004) The impact of childhood intelligence on later life: following up the Scottish Mental Surveys of 1932 and 1947. **Journal of Personality and Social Psychology**, 86, 130-147.
- Lawn, M. (ed) (2008) **An Atlantic Crossing? The work of the International Examinations Inquiry, its Researchers, Methods and Influence**, Symposium Books: Oxford
- Lawn, M. (2004) ‘The Institute as Network: the Scottish Council for Research in Education as a local and international phenomenon in the 1930s’ in **Paedagogica Historica**, Volume 40, Nos. 5 & 6.

### About this study

This Briefing is based on the study ‘Reconstructing a Scottish school of educational research 1925-1950’ funded by the Economic and Social Research Council, January 2006-May 2009. The project aims to define and describe an astonishingly rich period of research and practical activity in Scottish education and one that has had an enduring influence on world education and psychological research.

The project is led by Professor Martin Lawn (CES) and Professor Ian Deary (Centre for Cognitive Ageing and Cognitive Epidemiology) at the University of Edinburgh and Professor David Bartholomew at the London School of Economics.

**For more information, published papers and original sources see <http://www.ces.ed.ac.uk/SSER>**

### CES Briefings

CES *Briefings* are edited by Dr Cathy Howieson.

All *Briefings* can be downloaded from our website, free of charge. If hard copy or multiple copies are required please contact Carolyn Newton at the address below.