Directing the Teaching and Learning Research Programme: or 'trying to fly a glider made of jelly'

Abstract

TLRP's generic phase (1999-2009) is believed to have been the largest ever UK investment in educational research. This paper describes the critique from which TLRP emerged, its strategic positioning and the roles of successive directors and their teams in its development. The paper offers an early stock take of TLRP's achievements from the perspective of the last Programme Director. The efficacy of the *form* of the Programme, once likened to 'a glider made of jelly', is discussed.

Context and challenge

Between 1999 and 2009 the Teaching and Learning Research Programme (TLRP) provided coordination for over 700 educational researchers in some 70 project teams, some 20 initiatives of cross-programme thematic analysis and over 30 fellowships across the four countries of the UK. Projects were based in over 60 HEIs across the UK, including specialist colleges for music and education. These included over 40 colleges and universities in England, 3 in Northern Ireland, 12 in Scotland and 6 in Wales. The total budget in the summer of 2009, including an extension on technology enhanced learning, had grown to £43m – four times larger than the initial funds committed.

The origins of the TLRP can be traced to the mid-1990s when educational research was heavily criticised by government ministers and others for being small scale, irrelevant, inaccessible and of low quality. Such challenges were elaborated by David Hargreaves (1996) speaking at the annual lecture of the Teacher Training Agency (TTA), by Tooley & Darby (1998) who had been commissioned by the Office for Standards in Education (OfSTED), and by Hillage et al. (1998) acting for what was then the Department for Education and Employment (DfEE). David Blunkett, Secretary of State at DfEE from 1997-2001, was a trenchant critic of social science on grounds of utility – with education providing choice examples. Whether or not these criticisms were justified, researchers faced major difficulties in demonstrating the value of investment in the field.

Nevertheless, the espoused commitment of the 1997 New Labour Government to 'evidence informed policy making' underpinned decisions to 'do something' about this perceived weakness. New government research centres and initiatives were established and a National Educational Research Forum (NERF, 2001)) was set up to offer a strategic overview. In this challenging context, credit for imaginative initiation of TLRP and for its core funding is due to Brian Fender of the Higher Education Funding Council for England – though the belief that this funding was a punitive 'top-slice' of funds due to education research following the 1996 Research Assessment Exercise is well established. Although TTA control of this investment was considered, a decision was eventually taken that TLRP should be managed by the Economic and Social Research Council (ESRC).

The education research community in the UK was not alone in facing such a critique – as indicated by international commentators who contributed to a special issue on TLRP of the *British Educational Research Journal* (Vol 33, No 5, 2007). Across the world, globalisation brought 'reforms' of national education systems and international competition emphasised comparative national performance. The

ambition that policy and practice should be based on 'evidence' became more powerfully articulated - with aspirations that science could demonstrate 'what works'. Thus educational researchers came under the spotlight with calls that they should focus on national priorities more directly. How would they respond? Resistance - to protect academic freedom? Conformity - to grow funding streams?

In the early days of the TLRP, researcher responses were finely poised. Charles Desforges, the first Director, led the debate within the Programme by raising a number of challenging issues. These included the role of user engagement, of scientific design, of knowledge transformation and of theoretical advances towards 'more comprehensive pedagogy'. Some of the initial events however, did not go well and the first major conference, held in Leicester in November 2000, as recorded in a very thorough evaluation, generated frustration from researchers and users alike. One researcher, for instance, stated:

> Just at the moment I feel, especially after the conference, that there is more concern about checking up on compliance to Programme targets and progress towards those targets than there is interest in and understanding of the issues that are uppermost in our minds at this particular stage of our project's development.

The Director recorded his perceptions in his End of Award Report, covering the period March 1999 to April 2002 (Desforges, 2002). It is apparent that there were significant epistemological differences within the Programme and that the ways in which such issues were tackled generated debates and arguments at many levels. In his 2001 Annual Report, Charles Desforges had recorded his concern that TLRP would be 'captured by extant research cultures' within the field. In the 2002 End of Award Report he explained further that:

> Research cultures in education form a very broad church. Sadly, some sections of the community do not share a taste for objective evidence, measurement or cause-effect modeling.

More broadly, whilst reflecting on whether the establishment of a research centre might have been a better strategy, management of the Programme was likened to 'trying to fly a glider made of jelly' (Desforges, 2002, p 21). Despite TLRP's soaring ambitions, the early years evidently seemed somewhat wobbly.

Following funding decisions of the Steering Committee, as the archives attest, Charles Desforges made enormous efforts to tackle problems which he perceived in some early investments. Principal Investigators of the first round of network funding were Jean Rudduck (consulting pupils), Mel Ainscow (inclusion in schools), Robin Millar (science education) and Helen Rainbird (workplace learning). They and their teams embraced a wide range of positions on theory, methodology and epistemology – though not perhaps the perspectives to which Charles Desforges himself subscribed. Indeed, Phil Hodkinson, from the Rainbird project, was to establish himself as one of the most articulate 'defenders' of 'embodied judgement' in research – a position which he contrasted with the 'new orthodoxy' (see Hodkinson, 2004)

Reflecting on such issues in his End of Award report, Charles Desforges picked out a major structural problem which was undermining coherence:

> 'Perhaps the greatest difficulty is that involved in imposing some coherence on such a large and disparate Programme. The major source of these difficulties lies in the Programme model and its related commissioning practices, and will not be overcome.' (2002, p 4)

Notwithstanding debates around design, evidence and scientifically warranted conclusions, the initial policies of the Steering Committee and work of the first Director undoubtedly provided important foundations for the Programme. In particular, we should note the early commitment to user engagement, to innovative knowledge transformation and to theorising pedagogy.

In mid-2001 Charles Desforges announced his intention to step down from leadership of TLRP and the post was advertised. I had been interested in TLRP since its inception, both as a funding opportunity and as an interesting initiative to lead - indeed, in 1999 I had been interviewed for the Director's post and in

2000 was a successful co-applicant for a £900k TLRP award on Home-School Knowledge Exchange. At the time, I believe that the Programme was still seen by the majority of educational researchers as a government-inspired imposition on the field – as a means, along with NERF and the new DfES research centres, of asserting control. Whilst I understood some of this thinking, I believed that TLRP might also provide opportunities. Of course, there is a dispositional element of this – but the stance was also one which I had researched quite extensively. For example, my studies of classroom relationships and coping strategies (1985) had identified the knife-edging strategies of 'Jokers' in primary classrooms and work on teacher responses to the Education Reform Act 1988 (see Osborn et al, 2000) focused on 'creative mediation' as a way of coping with external prescription. And was power or influence ascribed or could it be created through strategic action? Could those in the field, I speculated, find ways through TLRP to begin to disarm its critics?

As incoming Director in 2002, a three part strategy was adopted to:

1. Re-assure stakeholders by affirming the stated foundations of TLRP;
2. Re-engage the research community to generate new energy and commitment;
3. Re-cast objectives and develop a coherent strategic framework to enable progressive development.

My identity, as a qualitative researcher specializing in primary education, was unlikely to have been tremendously comforting for those who felt that TLRP must 'stir things up' within the field. My first priority was therefore to reassure stakeholders of the commitment to development and improvement in research quality and relevance. The Steering Committee was an important audience in this, as was its Chair, David Watson. The crisis of confidence in the field continued to be manifested publically. For instance, there were critical questions within the House of Commons which had to be managed. A lot of early effort went into liaising with senior Westminster politicians of each of the three major parties and also with other UK governments. My very explicit intention was to affirm the overall aims of the Programme that educational research should contribute to policy and practice, whilst reviewing the *ways* in which they were pursued.

As described above, the research community was initially fractured with epistemological differences and seemed relatively defensive and inward looking. Many researchers felt bruised and misunderstood. TLRP's Research Capacity Building Network, at Cardiff, became a particular focus of debate. Some interpreted the stance of its first Director, Stephen Gorard, as unnecessarily combative, whilst others felt that this contribution was an example of exceptional leadership. In response to this situation, mediating arguments about methodological fitness-for-purpose were advanced, for instance around the provision of a research 'warrant' and in relation to definitions of 'quality'. In parallel with this, attempts were made to build positive commitment to TLRP within the research community. Events were held to identify shared value commitments ('academic challenges for moral purposes' (Pollard, 2002), theoretical assumptions were explored (particularly on learning), collaborative activities were organized (thematic work, inter-project funding, etc). Gradually, over the years, the Programme developed a greater sense of collective intellectual purpose, more tolerance for difference and a more constructive sense of commitment to meeting contemporary research challenges.

In a sense then, the most fundamental of the challenges faced in 2002 was to simultaneously manage the external and internal faces of the Programme. Reassurance had to be offered in both directions. In a sense though, I felt that I was in a particularly fortunate position because the external critics, followed by Charles Desforges and Stephen Gorard, had acted, in a sense, as 'the tough guys'. The opportunity thus arose to explore more ameliorative and collaborative strategies and to try to establish a different form self-directed development.

Developing TLRP

Development of the relationship between the researchers and the Programme enabled TLRP to begin to generate, what I came to term, 'reflexive activism'. I reviewed this in 'Taking the Initiative?', the 2005 Annual Lecture for *Educational Review*:

> My argument is that educational researchers can and should 'take the initiative' in the development of their field. … We are trying to build the social capital of educational research - developing relationships and networks, sharing perspectives and building alliances with present and future stakeholders both within and beyond the research community. We are trying to promote collective, open and reflexive debate and action in respect of the challenges which need to be faced. We are working on politically engaged impact and dissemination strategies with a view to making a difference. And finally, we are attempting to position ourselves strategically in respect of long term issues. (2005, p4)

This stance affirmed the goal of improving the quality of research practices and outcomes – taken to be appropriate in any form of professional activity. However, it also associated this with a commitment to be pro-active in the public, democratic realm and, in particular, to generate independent evidence for public debate and decision-making processes of both practitioners and policy-makers. Educational researchers, it was suggested, could identify with such goals with dignity and commitment.

TLRP's overarching purposes were thus affirmed in terms of supporting *independent* research of both high quality in social scientific terms and of high relevance in terms of policy and practice – to satisfy the ambition of 'Pasteur's Quadrant' (Stokes, 1997). Helpfully of course, such goals were entirely congruent with the ESRC mission to promote quality, independence and impact in social science.

With both researcher identification and external impact in mind, the way the Programme was focused and presented was also reviewed.

The 1999 contract between ESRC and HEFCE had set objectives which were in fact amended over time – for instance, in the 2002 contract for Phase 3 projects, the 2005 contract for projects on Widening Participation in HE and in the 2006 call for funding on Technology Enhanced Learning. Such changes reflected new public priorities and the movement of ideas within HEFCE, ESRC and elsewhere. Overall, objectives for the Programme were significantly broadened over the decade to reflect greater appreciation of social context and of the complexity and multi-level nature of factors affecting teaching and learning. There was, in particular, a renewed emphasis on diversity and difference, which had been relatively weak in the initial conception of TLRP.

An early official statement of the Programme's objectives was provided in the End of Award report from Charles Desforges (2002). This emphasised TLRP's focus on learner achievement, knowledge transformation, effective and efficient teaching, research-based practice and multi-disciplinary and multi-sector research. The expression of these goals was felt by some to have a relatively narrow and technical feel to them. Without fundamentally changing these core purposes, the Programme's objectives were therefore re-worked and re-launched with a newly designed website and suite of presentational leaflets, publication templates and display conventions. Six objectives were identified concerning:

> *Learning,*
> *Outcomes*
> *Lifecourse*
> *Enrichment*
> *Expertise*
> *Improvement*

It is worth noting the positive connotations of these words. Learning outcomes were *broadly* defined, capacity issues were represented in terms of expertise, and the Enlightenment commitment to improvement through the application of science was affirmed. This was not by chance but was, along with the Programme's design guidelines controlling the use of typefaces, colours, logos and design, the result of an explicit strategy. The

intention was to present the Programme as a constructive contribution to public life, and to smartly move beyond the notion of TLRP as a remedial intervention in a failing field of applied research.

To fulfill these aspirations in practical terms, it was necessary to have the capacity to both support the development of projects and 'bridge' the worlds of researchers, policy-makers and practitioners in each of the educational sectors in which TLRP worked. As the Programme progressively grew to embrace the whole lifecourse, this meant that coverage across all education sectors was needed. By the end of the decade, ten sectors had been identified and worked within.

A crucial decision here was to build a small team of part-time Associate Directors who could offer specialist knowledge of particular sectors. In 2002, to emphasise inclusivity, geographically distributed individuals were appointed to form a 'Directors' Team'. This first group consisted of myself, Mary James and John Siraj-Blatchford (schools), Kathryn Ecclestone (further and lifelong learning) and Alan Brown (workplace learning) with the higher education portfolio being shared until Miriam David joined in 2005. In due course, some colleagues moved onto other things, and others joined – including Steve Baron (capacity building) and Richard Noss (technology enhanced learning).

TLRP's explicit strategy was to engage potential users in all aspects of the Programme. Each project was therefore encouraged to work closely with practitioners in their research sites to enhance validity and relevance, and also to develop links with appropriate bodies with high impact leverage. On behalf of the Programme as a whole, members of the Directors' Team maintained links with the major organisations in their sectors, most effectively through personal contacts. In particular, they negotiated the potential for cooperation and synergies and for the use of user dissemination infrastructures to maximise the impact of project findings.

The Directors' Team aimed to add value to the Programme by collaborating in sharing information between project teams, building cross-Programme trust, helping to generate a collective sense of purpose and organising various forms of coordinated activity. Facilitation of this work, together with the commitment to engaging with user organisations, was one of the main reasons for initiating the movement of the Programme from Cambridge to London from January 2005. The Bloomsbury location of the Institute of Education and its specialist resources enabled TLRP to promote activities and to network particularly effectively.

Infrastructural communication resources and project support services were developed with the help of excellent Office Teams in both Cambridge and London and with external partners. These included: a website (www.trlp.org) and electronic repository (D-space), annual conference foci, thematic groups, synoptic reports and Commentaries, a termly Bulletin and annual compendium of project annual reports, 'critical friends', supplementary funding for collaboration and impact activities, electronic discussion facilities and Virtual Research Environments.

Following conference and other consultations during 2004, the Programme's thematic development strategy became a particularly important tool for adding value. This used a simple conceptual framework for the commissioning and organisation of all thematic work and new initiatives (see Figure 1 below). The model was also the basis of the Programme's data-base of user and research interests and of the meta-tagging system which underpinned TLRP's D-Space electronic repository of outputs.
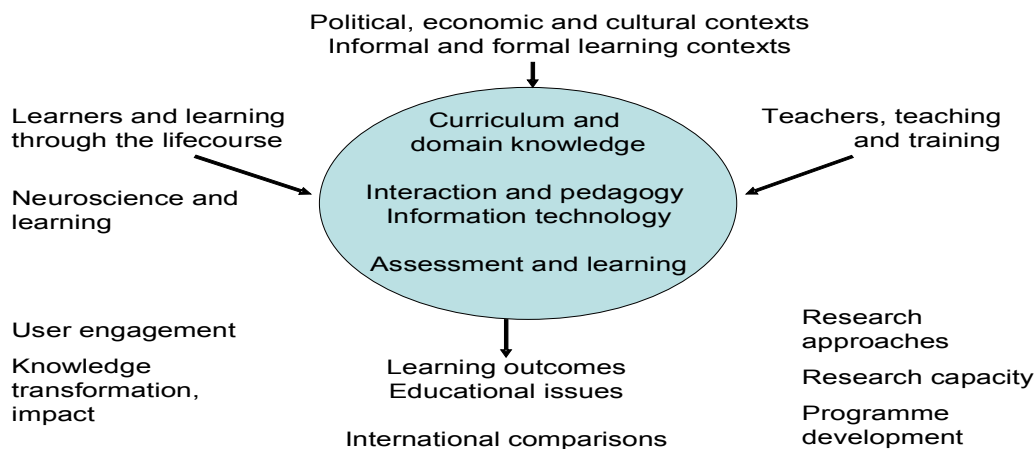
Figure 1:   TLRP's model for cross-Programme thematic analysis

Thematic analysis across the Programme evolved over the period from being exploratory to including greater elements of retrospective review. Indeed, in 2008/9 there was a particular initiative to take stock of various research quality issues during TLRP, resulting in a group of methodological Research Briefings. Such thematic work was integrated on the website, with automated links to publications in the Programme's electronic repository. Sectoral reviews and Commentaries were supported with partners as opportunities arose (for example, Esmee Fairbairn, Association for Science Education, General Teaching Council for England, Nuffield Foundation, Higher Education Academy, Institute for Employment Research).

A major goal of the TLRP Directors' Team was to create a climate, within the Programme and beyond, in which the significant challenges being addressed by educational researchers could be constructively discussed. The Directors' Team thus continued to insist, as Charles Desforges had done, on the appropriateness of considering: how 'learning outcomes' could be validly and reliably described and measured; how, whilst recognising diversity of research approaches, projects could provide 'warrants' to enable quality judgements to be made; and how the accumulation of knowledge could best be represented through appropriate review processes. In these ways, the initial TLRP challenge of how to produce relevant and secure pedagogic knowledge was sustained by the Directors' Team as topics on a collective agenda to be wrestled with.

Each member of the Directors' Team led TLRP's contribution to particular issues.

Some work was on fundamental challenges which the Programme had to face. For example, Mary James initiated a thematic group on learning outcomes. The group made a major contribution at the 2004 TLRP Annual Conference and subsequently produced a special issue of *The Curriculum Journal*. A seminar on ways of measuring learning outcomes took place at DfES during the spring of 2005. Further thematic work on the assessment of significant learning outcomes was developed through the Assessment Reform Group and culminated in a TLRP Commentary (Mansell and James, 2009).

Other contributions looked at more substantive themes. Kathryn Ecclestone led on learning through the lifecourse and her thematic group produced a special issue of the Journal of Adult Learning on this topic. The team went further to produce a book, *Transitions and Learning through the Lifecourse* (Ecclestone, Biesta and Hughes, 2009). Building on such work, TLRP also contributed to a 2008 DIUS-led Foresight Exercise on *Mental Capital and Wellbeing through the Life-course*. Miriam David led work on widening participation in higher education – helping to rebalance the Programme in terms of such issues. Her

thematic group on social diversity produced a wide array of publications, including a special issue of *Research Papers in Education*, and a TLRP Commentary with the Higher Education Academy (David, 2009a). The associated book, *Improving Learning by Widening Participation in Higher Education* was published in the last month of the generic Programme's funding (David, 2009b). This work appears to have had substantial international impact with presentations about diversity, equity and fair access in Argentina, Australia, Brazil, India and the USA.

The Programme's infrastructure was the focus of others. Thus John Siraj-Blatchford led on the potential applications of new technology. Thanks to his initial vision, the Programme came to be at the cutting edge of the application of technology for research development. With vital contributions from Patrick Carmichael and colleagues at CARET in Cambridge, TLRP contributed to UK innovation in the use of research portals, virtual research environments, repositories, knowledge management, meta-tagging and the use of semantic facilities on websites (see Carmichael, ???). Many of these assets were later passed on to other organisations, in particular to BERA.

Alan Brown was particularly concerned with international liaison. Thematic work during 2003/4 underpinned two ERA-NET proposals which were produced in collaboration with European partners, building on earlier work by Charles Desforges. European networking gradually grew into global networks in relation to both substantive topics and research development strategies. Such international work, particularly but not exclusively in Finland, Singapore, Hong Kong, the USA and New Zealand, made it absolutely clear that there are significant levels of convergence in understanding effective educational provision. TLRP was pleased to be able to provide a communication infrastructure to support the development of the World Education Research Association, which was formally inaugurated in Vienna in 2009.

More generally, the Directors' Team worked together to synthesise the major findings of the Programme as a whole. The generation of some sort of meta-analysis was necessary given both the wide-ranging expression of its substantive goals and the need to provide a concise and accessible statement of 'findings' suitable for application by practitioners and policy-makers. My own attempts at holistic conceptualisation can be traced from work on coping strategies (eg: Pollard, 1982) and reflective practice in schools (eg: Pollard et al, 2008), but the likelihood of success in a similar TLRP aspiration was significantly enhanced by the insights and development work of Mary James and other members of the Directors' Team. Views on learning were elicited at TLRP conferences and were related to research findings, to extant theorization on teaching and learning, to international discussion and to consultation with teachers and key policy-makers. Through iterative processes of this type from 2002-5, a model of 'ten principles for effective teaching and learning' was formulated as a synoptic summary of the implications of TLRP's findings and experience in relation to schools. This was promoted through two Commentaries (James and Pollard, 2006; Hofkins, 2008) and through a special publication, *Principles into Practice*, with an accompanying DVD which were distributed to all UK schools (Hofkins, 2007). The representation was then developed further by Miriam David and Alan Brown for use within TLRP Commentaries in relation to findings on teaching and learning in HE (David, 2009a) and on workplace learning (Brown, 2009).

The discussion above has offered an account of the development of TLRP focusing particularly on the strategic repositioning which took place in 2002 and on the role of the Directors' Team in facilitating the Programme's development. As a retrospective account, the narrative is a little more personalized and back-stage than some previous descriptions of TLRP's development based on the identification of 'strategic commitments' (see, for instance, Pollard, 2007a).

1. Early user engagement
2. Knowledge generation by project teams
3. Knowledge synthesis by thematic work
4. Knowledge transformation for impact
5. Partnerships for sustainability
6. Capacity building for professional development

What we have here then are two ways of viewing the same Programme. The lens of strategic commitments is a perfectly accurate way of describing TLRP's underlying architecture. But the account provided above indicates more about the thinking which underpinned adoption of such strategies. In particular, it clarifies how they related to the context which produced and shaped TLRP. The narrative also illustrates the agency of the Directors' Team and others in seeking to add value to the work of TLRP participants as a whole.

But did the Programme achieve its objectives?

Taking stock of TLRP

It is of course, much too early to really understand the long-term impact, if any, of TLRP. This paper was drafted within one month of the end of the decade-long funding of the generic phase, and with the phase on technology enhanced learning still continuing for three more years. ESRC evaluations, expected to be led by international teams of experts, will no doubt produce measured and empirically based accounts. The text below simply records a perspective at this transitional point from the Director of the generic phase.

The stock-take is organized by clustering cognate Programme's objectives into three groups relating to substantive findings, impact and capacity building.

Learning outcomes across the lifecourse

Substantive objectives in relation to 'learning', 'outcomes' and 'lifecourse' will be discussed together. They are:

> *Learning:* TLRP aims to improve outcomes for learners of all ages in teaching and learning contexts across the UK.

> *Outcomes:* TLRP studies a broad range of learning outcomes. These include both the acquisition of skill, understanding, knowledge and qualifications and the development of attitudes, values and identities relevant to a learning society.

> *Lifecourse:* TLRP supports research projects and related activities at many ages and stages in education, training and lifelong learning. The Programme is concerned with patterns of success and difference, inclusion and exclusion through the lifecourse.

The goal of contributing to the improvement of outcomes for learners teaching and learning at all ages and locations within the UK was directly tackled through the range of projects funded through TLRP. However, as Charles Desforges pointed out, despite the existence of over 60 substantive investments, the portfolio remained somewhat disparate since projects were not commissioned as part of a coherent strategy to directly address the Programme's stated objectives. Thematic initiatives, of which some 20 were particularly significant, were thus used as an indirect, post-hoc way of harvesting project insights and refocusing attention onto broader goals. In ESRC terms, this was a way of 'adding value' to project investments. An alternative perspective is to see the strategy as a way of ameliorating a weakness in the commissioning strategy of the Programme as a whole. In any event, thematic work did take place and was pursued through several levels of analysis. It culminated in the production of synoptic TLRP statements synthesising key project findings, accumulated knowledge and professional experience (TLRP, 2008; James and Pollard, 2006; Brown, 2009; David, 2009a).

Statements of TLRP's 'ten principles for effective teaching and learning' – thus offered sectoral answers with practical implications to the major substantive challenge which the Programme was set. Further work on this, by James and Pollard, is expected to lead to a book publication in 2011. Applied contributions to sectoral reviews were made through, for example, Nuffield's 14-19 Report, the Cambridge

Primary Review and the work-based learning website at the Institute for Employment Research. Direct contributions were also made to government education initiatives within each of the four UK administrations.

In relation to schools, the priority placed by TLRP on teacher expertise and on teaching/learning processes as drivers of improvement was endorsed by the McKinsey (Barber and Mourshed, 2007) and OECD (2005) reports among other sources. However, some of these (McKinsey in particular) promote a higher degree of central direction of the teacher workforce than TLRP's evidence supports. There is clearly a policy dilemma here, but it appears that a trend is strengthening within the UK (and in many other parts of the world) based on developing the intrinsic professionalism of teachers and requiring less centralized prescription. The Pedagogy Strategy in Wales is one example, GTC NI's work on professional standards is another, Scotland's new school curriculum and assessment procedures a third, and the TDA's emerging Masters on Learning and Teaching a fourth – but there are many others. We believe that TLRP has contributed to such developments by providing evidence on particular aspects of practice (such as pupil consultation, learning how to learn, effective group work, the role of subject knowledge) whilst also articulating a clear rationale for this approach to professional learning and systemic improvement. Evidence of similar developments in further and higher education is apparent in the work of LSIS and the HEA, though provision appears to be more fragile.

I had personally been very attracted to the potential of using TLRP to illuminate learning across the lifecourse, but much remains to be done in this respect. The goal can be seen as a partial victim of commissioning procedures which prioritised project quality over Programme contribution. Despite the dozen rounds of commissioning, project coverage of very young learners and of post-retirement and the elderly remained sparse. This was compensated for by drawing in some excellent, non-funded 'associated projects' (such as the *Effectiveness of Pre-School Primary Education* and *Older People and Lifelong Learning* projects) and by some partnerships (for instance, with NIACE) – and nor should the theoretical and empirical quality of *Learning Lives* (Biesta et al, 2010) be forgotten. Nevertheless, an integrated account of learning across the lifecourse drawing on TLRP findings has not yet been produced. An ESRC Fellowship (2009/10) provides an opportunity to explore this issue and it is intended that TLRP's lifecourse insights will be reviewed in terms of their resonance with findings from the Centre for the Wider Benefits of Learning and the Centre for Longitudinal Studies. In other words, the findings of UK cohort studies will be related to the findings of its largest educational research programme. Fertile ground for such an analysis lies in the ways in which agency emerges as a key issue in relation to learning at all ages.

In relation to social differentiation in education, this was not an initial goal of the Programme and, indeed, appears to have been seen by some in the late 1990s as having been over-researched by educationalists. Early TLRP commissioning reflected such perceptions, with only one network explicitly focused on school inclusion. Later, thematic work was commissioned to harvest available insights across the Programme. The suite of seven projects on widening participation in higher education and leadership of Miriam David made a significant difference to coverage. However, reflecting this history and notwithstanding the quality of some particular projects, TLRP was not as strong as might now seem appropriate in respect of projects specifically addressing race, gender, disability and social class.

The discussion above echoes the concern of the first TLRP Director, Charles Desforges, about whether the programme model could deliver coherently against its objectives. It would certainly have been stronger substantively had there been more early success at building a shared framework in relation to learning outcomes and related methodological issues and if more explicit attention had been paid to social difference from the start.

Enrichment and improvement

> *Enrichment:* TLRP commits to user engagement at all stages of research. The Programme promotes research on teaching and learning across disciplines, methodologies and sectors, and supports various forms of national and international co-operation and comparison.

Improvement: TLRP develops the knowledge base on teaching and learning and contributes to the improvement of policy and practice in the UK. The Programme works to maximise the impact of its research.

TLRP objectives in relation to the enrichment of research through user engagement provided a strong focus of work throughout the period of funding, and the Programme developed a reputation for its policy of twin engagement with practitioners and high-leverage national bodies. This was recognised by Ian Diamond in his speech at TLRP's 2008 Westminster conference when he stated:

> You should be very proud of TLRP's pioneering nature in establishing partnership ventures to enhance knowledge and have impact. TLRP has been an absolute model of the way in which researchers, working closely in partnership with beneficiaries, can cross the dual hurdle of excellence in academic quality and wider impact. The TLRP is terribly important in demonstrating this. The approach is entirely normal practice for ESRC now, but was quasi-experimentally piloted through TLRP and has then been rolled out further. Additionally, TLRP has been a model of communication to a wider public. In summary, TLRP has been a wonderful programme – a flagship.

The British Academy's promotion of co-production in research further endorsed this approach (Wilson, 2008). TLRP's work was well documented following thematic investment to take stock in this area (Rickinson, Edwards and Sebba, 2009). It appears that user engagement improved the validity of research, as well as providing partnerships for later impact and dissemination activity.

Inter-disciplinarity was an important focus for the Programme, along with encouragement of mixed-methods and cross-sectoral analysis. The latter are well reflected in the Programme's work, whilst inter-disciplinarity was a continuing challenge. Perverse academic incentives did not help here, with funding, publication and career prizes routinely being associated with disciplinary specialization. However, TLRP made progressively assertive efforts to encourage inter-disciplinarity, most recently and intrusively in the 2007/8 commissioning of projects on Technology Enhanced Learning.

Enrichment of the Programme though international liaison was actively sought with large numbers of contacts at both project and Programme levels. The latter were documented on the international pages of the TLRP website. The Programme was recognized as an unusual model of a large-scale national intervention and therefore attracted many visitors and invitations from beyond the UK. Interestingly, the strongest links were developed with academics in countries which have relatively high performing education systems.

TLRP's commitment to 'improvement' represented the long-established Enlightenment ideal of the application of science for the public good – and provided a value-led, shared rallying point for the diverse communities of researchers and users who were engaged with TLRP (Pollard, 2002, 2005). The Programme's Communication and Impact Plan, created in 2000/1 by John Kanefsky and Charles Desforges, was visionary in many ways (see: http://www.tlrp.org/manage/admin/caip.html). In particular, it conceived of impact through a collaborative, user-engaged process which was to be 'interactive, iterative, constructive, distributed and transformative'. This was built upon through the Programme's Outputs Review and web-based Portfolio to convert aspiration into practical systems for producing outputs at scale – posters, research briefings, commentaries, papers, books, presentations, etc. These outputs, in combination with the face-to-face work of researchers and the Directors' Team, provided the necessary means of achieving impact. The permeation of research findings into taken-for-granted understanding is, however, a very long process and it is too early to categorically assess more enduring forms of impact.

By far the greatest difficulty in achieving impact was, of course, the sheer scale and complexity of the UK education system. Despite its size, TLRP expenditure at some £3m per annum was only a tenth of the DCSF research budget (£30m in 2009/10). Indeed, its researchers pale into insignificance compared with the thousands of education professionals at work across the system. Communicating to achieve penetration and awareness within each sector was thus always extremely difficult, though a great deal of help was received through professional and government organisations in each UK country.

Attempts were also made to enlist the print and broadcasting media in relation to project findings, and project spokespersons were trained and supported accordingly. However, at the Programme level, a policy of 'constructive engagement' with government and required procedures on the issue of press releases meant that TLRP was not well positioned to take advantage of the rough and tumble of public debates. ESRC's support for impact initiatives was also balanced by its concern to avoid becoming 'too political'. Nor was it easy to establish how 'TLRP perspectives' could be legitimated in practice, with the Steering Committee being cautious on simply trusting to the Directors' Team to articulate views on issues of the day. The use of mass media to raise awareness about TLRP and its outcomes was not therefore as significant as, in my view, it might have been. The impact of some investments certainly gained attention, for instance on neuroscience, apprenticeship and assessment, but only time will indicate whether constructive engagement with policy-makers will turn out to have been effective. We will never know whether a more combative stance on some issues might have helped to focus minds further.

History suggests that knowledge and understanding develop incrementally however, and TLRP's contribution is consistent with many contemporary trends in both policy and practice. We must therefore await developments, which will no doubt include significant 'cherry picking' of findings, and take a long-term view.

Expertise

> *Expertise:* TLRP works to enhance capacity for all forms of research on teaching and learning, and for research-informed policy and practice. This work is the particular focus of the Programme's research capacity building strategy.

There is some evidence that research capacity has been significantly enhanced during the period of TLRP funding, though the extent of the Programme's particular influence is of course open to debate.

One indicator is the judgement of the RAE 2008 Sub-Panel for Education who, in 2009, when reviewing the field of educational research as a whole, concluded that: 'the quality of research activity reported in the submissions was high and significantly improved from 2001. ... It is clear that the best departments can compete on equal terms with the strongest departments anywhere in the world' (see: http://www.rae.ac.uk/pubs/2009/ov/). It is also interesting to see the spread of research funding between higher education institutions, with a reversal of the expected concentration being something which TLRP had worked towards, but not really expected. Perhaps the strongest indicator however is contemporary endorsement by the academic community of the importance of capacity building. For example, it is a considerable distance from the skepticism of 2000/1 to the prominence of 'capacity' within BERA's 2008 Strategic Plan and the investment it has made to embed capacity building resources within its services to members.

Four overlapping stages of TLRP's work can be identified with lessons flowing from each. They can be summarised as: training, social practices, resources and initiatives

Training: The 'particular priorities' of TLRP's first capacity building specification included strengthening expertise in quantitative methods and in more systematic forms of research design. Initially this work was led from Cardiff's RCBN, with training workshops and other events being provided between 2002-5. Such issues remained high priorities for many later thematic initiatives and publications.

Social practices: From 2005, an explicit attempt began to be made to embed processes for the development of research expertise within the social practices of educational researchers. In other words, learning would take place on the job through engaging in the research process. This was seen as a complement ESRC's provision through the National Centre for Research Methods and Research Methods Programme, which was by then becoming available. Additionally, close working relationships were established with the Applied Research in Education Scheme (AERS) in Scotland. This strategy was evaluated through the Mapping the Ripples project (Fowler and Procter, 2008).

Resources: From 2007, particular effort was directed towards the development of on-line capacity building materials and resources to be available to the field as part of the TLRP legacy. Structured by ESRC's research training requirements, UK experts were commissioned to provide 'walk through' guidance on methodological topics and issues. These were originally developed on the TLRP website but then merged by TLRP with NCRM and AERS material by and transferred to the BERA website for long-term sustainability and future development.

Initiatives: In the last years of the generic phase of TLRP, 2007-9, a number of special initiatives were supported with a view to providing the seeds of future provision. A particular focus, selected because of its structural significance to many institutions in which educational research takes place, was teacher education. A thematic investment comparing teacher education provision in each UK country (Menter, ???) influenced several initiatives. A Teacher Education Group (TEG), formed with the support of other partners, produced a specialist on-line bibliography using TLRP technologies. Contributions were made to ESRC's strategic thinking about future capacity provision for education (Pollard, 2008) and two pilot projects were funded to test possible models. The Teacher Education Research Network focused on developing a collaborative network of universities within a region to support capacity building (see: http://www.tlrp.org/tern/). The Social and Professional Network for Early Career Researchers in Education aimed to co-develop networking and on-line tools to support capacity building (see: http://www.tlrp.org/tel/spnecre/).

More broadly, a new initiative was launched to facilitate more strategic thinking about education research across the UK. The Strategic Forum for Research in Education (SFRE) brought together practitioners, policy makers and researchers, over three 2 day events, to engage in a sequence of topics aggregating into the key elements of a 'knowledge management system' model - the latter having been adapted from OECD CERI work on the assessment of national systems (Pollard, 2007b). This pro-actively occupied the space formerly held by the National Education Research Forum set up in England by DfES, but the initiative was now led by BERA and ESRC with DCSF and CFBT providing funding support. SFRE is a good example then, of the change in the stance and positioning of education researchers over the period of TLRP. From feeling powerless in the face of NERF, the community was able to form alliances and begin to lead discussions on the future. SFRE posed challenging questions about knowledge production, mediation and application within each UK country and this contributed to some significant developments. Organisations formed such as the Welsh Education Research Network and Northern Ireland Forum for Educational Research. In Scotland, following the end of AERS, strategic discussions with Deans were organised by the Scottish Government. In England, new research centres were commissioned and data-bases of research evidence were supported (EEP, TTRP).

The influence of TLRP and SFRE on capacity building cannot be disentangled from other influences but an argument can be put that they have been significant. In particular, I would identify: finessing of epistemological and methodological differences through the adoption of 'fitness for purpose' principles; sustaining discussion of design, evidence, warrant and review so that the challenge of robust quality standards was maintained; supporting education researchers in taking ownership of methodological development as a form of professionalism; and forming alliances with other stakeholders. TLRP's work on capacity building and the development of expertise can thus be seen as a particular example of reflexive activism, but one with a significant potential multiplier effect. For instance, if BERA continues over the years to embrace, promote and develop this work as a service to its members, then such provision could contribute to self-managed quality assurance and professional development.

Flying a glider made of jelly?

This paper has described the critique from which TLRP emerged, its strategic positioning and the roles of successive directors and their teams in its development. It has also offered an early stock take of TLRP's achievements from the perspective of the last Programme Director. The efficacy of the *form* of the Programme has been a recurrent theme.

When Charles Desforges likened the early management of TLRP to being like 'trying to fly a glider made of jelly', he appears to have been primarily concerned about how to achieve coherence given the prevailing governance arrangements and in the light of the cultures of educational research which he experienced.

A key issue for the pilot of any glider is the amount of lift that can be obtained. Thanks to new materials and aerodynamic understanding, this has been improving over the years. As Wikipedia explains:

> With each generation, the performance of gliders has increased. One measure is the glide ratio. A ratio of 30:1 means that in smooth air a glider can travel forward 30 meters while only losing 1 meter of altitude. Comparing some typical gliders that might be found in a gliding club - the *Grunau Baby* from the 1930s had a glide ratio of just 17:1, the glass-fiber *Libelle* of the 1960s increased that to 39:1, and nowadays flapped 18 meter gliders have a glide ratio of over 50:1. (Downloaded 31/10/2009)

Aerodynamically, TLRP's basic formula for development since 2002 - of combining authentic user engagement with high quality science and appropriate outputs targeted onto contemporary issues - appears to have been productive in its own terms. Its glide-ratio probably turned out to be rather more than that which might be expected of a jellied aircraft – primarily, I believe because of the robust architecture of its fuselage of strategic commitments. Ironically, several of these were built on foundations provided by Charles Desforges.

Gliders are also designed with considerable attention to the elimination of drag. As we saw in the first section of this paper, TLRP initially suffered significantly from this problem, caused by an inordinate amount of baggage emanating from politicians and researchers alike. This hindered take off and it was necessary to respectfully and constructively move beyond these issues and to adopt more productive approaches to achieving progress. The TLRP Directors' Team and others thus attempted to harness the energy and commitment of the research community, to form respectful alliances with other stakeholders and to take available opportunities. By freshening up and finding new ways of facing enduring issues, the Programme was able to lighten its load and decrease drag.

However, any glider also needs updrafts of air on which to soar. It is helpful if these are relatively steady and predictable in meteorological terms. If suitable thermals are available and winds happen to be blowing in the direction in which the pilot and passengers want to go, then long distance travel is a real possibility.

There is little doubt that TLRP's generic phase did both benefit from and contribute to some major trends. For example:

- TLRP benefited from a decade of prosperity and optimism, from growing commitment to evidence in policy and practice, from the need to establish new foundations for 21st century education and from the pressure of international competition on UK governments.

- *Government education policy* in each UK country developed in ways which were broadly, though not consistently, consonant with the findings and key messages of TLRP. For instance, in England, both the Children's Plan and Widening Participation agendas required awareness of context, social and informal learning. TLRP's projects and Directors' Team were thus able to maintain a policy of 'constructive engagement' with policy makers. It appears that the Programme exerted some influence at many levels within the UK.

- Commitment to *evidence-informed practice* as a way of improving professionalism and standards grew in all sectors. TLRP worked assiduously with government agencies, teacher associations, councils and other bodies to support this development. The Programme produced many specifically tailored sets of practitioner materials derived from its research.

In terms of the Programme model itself, it is possible to argue that this may have been more suitable for the goal of enhancing research expertise and capacity than it was for the accumulation of new knowledge. If awareness and commitment exist, a relatively flexible structure enables responsive connections to be made and new capacity building provision to be developed. On the other hand, relatively serendipitous project commissioning must inevitably pose challenges for any Programme Director seeking an intellectually coherent portfolio. For those who like to hold things tight, the challenge would be particularly acute. As TLRP evolved and grew, the notion of 'collaborative adventure' provided a way of celebrating the diversity of projects – but a lot of creative in-filling and risk-taking also had to take place to build thematic coherence and synthesis. In this case, the TLRP air-crew knowingly decided to take those risks as a means of clarifying key messages which could be fed back into policy and practice domains.

The future seems particularly challenging following the financial crisis which began in 2007. Thermals are likely to be scarce in the economic circumstances of the next decade and political winds may blow in new directions. My personal view however is that global understanding about effective teaching and learning is accumulating rapidly, and that evidence-informed policy and practice will inexorably shape the long-term trend.

In the short-term, any opportunities to fly need to be taken when they arise. It is not by chance that the cover of TLRP's 'Principles into Practice' publication for all UK schools featured a child gazing into space under the headline: 'what is, and what might be?' (Hofkins,   ). There are always possibilities – and doubters might like to note that the US Space Shuttle, a product of interdisciplinary innovation, has a glide ratio of just 4.5.

REFERENCES

Barber, M. and Mourshed, M. (2007) *How the World's Best-performing School Systems Come Out on Top*. McKinsey & Company, London.

Biesta, G., Field, J., Goodson, I., Hodkinson, P. and Macleod, F. (2010) Improving Learning Through the Life-course: Learning Lives. London, Routledge.

Brown, A. (2009) *Higher Skills Development at Work*, A TLRP Commentary. London, TLRP.

Carmichael, P. (2007) Technological development, capacity building and knowledge construction in education research, *Technology, Pedagogy and Education.* Special Issue Vol 16, No 3, 235-247.

David, M. (ed) (2009a) *Effective Learning and Teaching in UK Higher Education*, A TLRP Commentary. London, TLRP.

David, M. (ed) (2009b) *Widening Participation in Higher Education*. London, Routledge.

Desforges, C. (2002) *End of Award Report to ESRC: Teaching and Learning Research Programme, March 1999 – April 2002*. Exeter, University of Exeter.

Ecclestone, K. Biesta, G. and Hughes, M. (2009) *Transitions and Learning through the Lifecourse*. London, Routledge.

Fowler, Z. and Procter, R. (2008) *Mapping the Ripples. An evaluation of TLRP's research capacity building*. London: TLRP.

Hargreaves, D. (1996) Teaching as a research-based profession. London, Teacher Training Agency.

Hillage, J., Pearson, R., Anderson, A. & Tamkin, P. (1998) Excellence in research in schools (London, Department for Education and Employment).

Hodkinson, P. (2004) Research as a form of work: expertise, community and methodological objectivity. *British Educational Research Journal*, Vol 30, No 1, pp 9-26.

Hofkins, D. (2007) *Principles into Practice: A teacher's guide to research evidence on teaching and learning.* London: TLRP.

Hofkins, D. (2008) *Enriching the Experience of Schooling*. A TLRP Commentary. London, TLRP.

James, M. and Pollard, A. (eds) *Improving Teaching and Learning in Schools*. A TLRP Commentary. London, TLRP.

Mansell, W. and James, M. (2009) Assessment in Schools: Fit for Purpose? A TLRP Commentary. London: TLRP.

National Educational Research Forum (2001) A research and development strategy for education: developing quality and diversity (London, NERF).

OECD (2005) *Teachers Matter: Attracting, Developing and Retaining Effective Teachers*. OECD, Paris.

Pollard, A. (1982) 'A model of coping strategies', British Journal of Sociology of Education, Vol.3, No.1, pp 19-37.

Osborn, M., McNess, E. and Broadfoot, P. with Pollard, A. and Triggs, P. (2000) <u>Policy, Practice and Teacher Experience: Changing English Primary Education</u>. London, Continuum.

Pollard, A. (1985) <u>The Social World of the Primary School</u>. London, Holt, Rinehart and Winston.

Pollard, A. (2002) TLRP: academic challenges for moral purposes, *Teaching and Learning Research Programme Annual Conference*, (Huntingdon, Cambridgeshire, September).

Pollard, A. (2003) 'Learning through life – higher education and the lifecourse', in Watson, D. and Slowey, M. *Higher Education and the Lifecourse*. Buckingham, Open University Press/SRHE.

Pollard, A. (2006) Challenges facing educational research - Educational Review Guest Lecture 2005, *Educational Review*, 58(3), 251-267.

Pollard, A. (2007a) The UK's Teaching and Learning Research Programme: findings and significance, *British Educational Research Journal - Special Issue*, 33(5), 639-646.

Pollard, A. (2007b). *Challenges for knowledge management systems in education for contemporary democracies.* London: TLRP.

Pollard, A (2008) 'Towards new strategic initiatives for research capacity in education: a discussion paper'. *Building Research Capacity.* Issue 13, pp 1-6. Cardiff, Cardiff University.

Pollard, A. with Anderson, A. Maddock, M, Swaffield, S, Warin, J and Warwick, P. (2008) *Reflective Teaching*. London, Continuum.

Stokes, D. E. (1997) *Pasteur's Quadrant: Basic Science and Technological Innovation*. Brookings Institution Press, Washington DC.

TLRP (2008) *Impact and Significance*. A synoptic leaflet. London, TLRP.

Tooley, J. & Darby, D. (1998) *Educational Research: A Critique*. London, Office for Standards in Education.

Wilson, A. (2008) *Punching our weight: the humanities and social sciences in public policy making*. London, British Academy.