



Key Findings

Research trends in education as demonstrated in three European journals

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This *Dossier* presents the main findings of a systematic comparative assessment of educational research published in academic journals over a 10-year publication period.

1. Objectives and method

Actors and decision-makers in education have yet to be provided with conclusive findings as a basis for developing educational policies and practices. The academic community therefore needs to assess general trends in educational research. 'Cartographic' analyses are useful for providing an overview of recent research findings and for assessing the current state of knowledge in an academic landscape governed by a wide range of approaches and references and offering very little opportunity for exchange and debate (Robert, [2001](#); Forquin, [2005](#); Rey, [2006](#), [2009](#)).

This *Dossier* is the outcome of a **'prototype' study** aimed specifically at addressing these issues. The comparative assessment required a relatively standardized body of writings despite significant national, cultural and academic differences – hence the focus on academic journal articles, which tend to be more rule-bound than other types of academic publications.

The basic corpus consisted of three peer-review journals: the *Revue Française de Pédagogie* (RFP), the *British Educational Research Journal* (BERJ) and the *Scandinavian Journal of Educational Research* (SJER). In view of their solid academic reputation, **the three selected journals may be deemed to represent a significant proportion of French, British and Scandinavian educational research.**

The articles published in each of the three journals (between 1999 and 2009) have been systematically incorporated into a bibliographic database and indexed based on the key-words of the Thesaurus for Education Systems in Europe (TESE) run by the Eurydice unit of the European Commission.

2. General results

Approximately 400 key-words were used to index 1,157 articles, including 439 articles in French (RFP) and 718 articles in English (BERJ and SJER).

There are a number of limitations in using common indexing for publications governed by distinct cultural and academic conventions. For example, while a significant number of articles published in French (37) used the term **'didactique'**, the term is not found elsewhere.

Articles with a significant theoretical, philosophical or historical content were found to be more common among French-speaking researchers than among English-speaking and Scandinavian scholars, who tend to place a greater emphasis on research findings, assessment methods and efficiency measurements and to use a

This document presents an overview of the key findings of the Dossier d'actualité.

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more explicit empirical basis. The typical format of articles also differs significantly. **Articles published in English tend to be more structured** than French articles, which use a wider range of presentation methods reflecting an equally wide range of disciplinary affiliations.

Notwithstanding these differences, there are a number of shared research interests, including **teacher training, motivation, and curriculum** issues and policies. Other themes apply more specifically to a particular country or disciplinary or cultural area, such as **'gender'** (an issue particularly emphasized in English-speaking countries). Two specific subjects are cited more often than others: **mathematics** (especially Britain) and **physical education** (especially France).

Surprisingly, analysis of the national origin of authors and of the subject of articles shows that **the French journal (RFP) has a wider international appeal** than the British journal (BERJ). Over the period considered, the RFP published articles by 113 non-French authors (including 51 non-French-speaking authors), as opposed to just 29 articles by non-British authors (all of whom were native English speakers) published in the BERJ.

3. Contemporary trends based on six key themes

The general trends in evidence over a 10-year period based on 6 key themes were identified to assess the relevance of the comparative approach used to conduct the study.

3.1 Teacher training

The debates surrounding recent European reforms point to significant **tensions between a university-based training model and a school-based training model**, as well as key differences in terms of subject knowledge, academic knowledge of education issues and experience-based knowledge (Bourdoncle & Lessard, 2002; Brisard & Malet, 2003; Bruillard & Baron, 2003; Munn, 2008).

In different national systems and as a result of country-specific reforms, there is also subtending evidence that teacher professionalism is characterized either by autonomous 'self-reflective practitioners' or on the contrary by a high level of conformity to 'technical' standards (Carney, 2003; Westbury *et al.*, 2005; Vali & Johnson, 2007).

The **increasing use of mentoring** in teacher training was observed in several systems, though it appears that knowledge transfer between experienced tutors or mentors and young teachers raises more problems than it solves (Edwards & Protheroe, 2003; Andersson & Andersson, 2008; Moussay *et al.*, 2009).

Newly-qualified teachers struggle to make the transition from a 'school' attitude based on subject-specific academic knowledge to a more 'self-reflective' attitude (Turner-Bisset, 1999; Beach, 2000; Dubois *et al.*, 2006; Ruohotie & Kaikkonen, 2009; Adé *et al.*, 2004).

It was also found that written work carried out as part of teacher training courses tends to involve overly academic exercises (Crinon & Gigue, 2002; Muholland & Wallace, 2003).

Several papers examined the subject-specific training of young teachers by assessing the level of compatibility between their personal conceptions of subject-specific knowledge (mathematics, physics, literary texts...) and teaching practice (Carlsson *et al.*, 2001; Dahlin, 2003; Ahtee & Johnston, 2006; Murphy, 2006).

3.2 Parents and family

Research on levels of educational success according to family education and parental situations (reconstituted families, gender roles...) is a common theme addressed in many studies (Bergonnier-Dupuy, 2005; de Léonardis *et al.*, 2005; Brooks, 2004; Cloutier & Deslandes, 2005).

A significant number of papers examined the impact of the cultural and social origin of parents, focusing particularly on the extent to which **the highly differentiated values and aspirations transmitted by parents shape the educational career and destiny of their children** (Francis & Archer, 2005; Rätty *et al.*, 2009, Foskette *et al.*, 2008, Vrignaud *et al.*, 2005).

Several articles examined recent reforms aimed at introducing market mechanisms in parents' choice of schools and showed that social inequalities between pupils are

often further exacerbated as a result of such mechanisms (Bagley, Woods & Woods, [2001](#); Vincent & Ball, [2001](#); Prieto *et al.*, [2003](#); Barroso & Viseu, [2006](#)).

To remedy the socio-cultural disadvantages of children from underprivileged backgrounds, the emphasis on parenting support has often been used as a basis for justifying an ever-increasing number of public mechanisms aimed at helping parents to monitor their children's schoolwork and to educate themselves in their role as parents (Hannon, [2000](#); Solomon *et al.*, [2002](#); Driessen *et al.*, [2005](#); Giuliani, [2009](#); Abreu & Cline, [2005](#); Passy, [2005](#); Hayden, [2009](#)).

The relations between school and parents as a social group are more rarely addressed. Current research underlines the difficulties involved in moving beyond the confusion between the individual demands of parents and their collective representation (Brunet *et al.*, [2004](#); Dutercq, [2001](#); Westegard & Galloway, [2004](#); Gombert, [2008](#)).

3.3 Motivation

The issue of motivation is at the forefront of the concerns of educational researchers, particularly among scholars publishing in French. Motivation is examined primarily from a socio-psychological and cognitive perspective. Irrespective of geographical area, analyses (Cosnefroy, [2004](#)) tend to emphasize goal theories (mastery goals, competency goals, learning goals, performance goals, guidance goals...).

The psycho-cognitive and psycho-social development of the child is also significant as a background for examining key factors (such as social goals or autonomy goals) determining educational performance and the desire to learn (Filisetti *et al.*, [2006](#); Guillaín & Pry, [2007](#); Sungur, [2007](#)).

The 'cognitive style' and behavior of pupils are key factors in the learning process (Bahar, [2003](#)), as is their affective and emotional state (Bjornebekk, [2008](#)). Disposition, associated with personal desires and self-esteem, plays a key role in activating (or in failing to activate) success goals (Bloomer *et al.*, [2000](#)).

Motivation level is also linked to class climate, school climate and teacher practices (Gurtner *et al.*, [2006](#); Byman *et al.*, [2008](#)). Pupils' need to feel competent and determined is more likely to be met in a safe environment dominated by the teacher, particularly if the teacher ensures that the curriculum is there to achieve efficient learning (Galland *et al.*, [2006](#); Stornes *et al.*, [2008](#); Bastien *et al.*, [2005](#)).

3.4 Gender

The issue of gender was found to be a particularly recurrent issue in the British journal. In view of the sheer variety of approaches used to address the question, an overview of the full range of issues linked to gender is beyond the scope of this *Dossier*. Suffice it to say that educational performance according to pupil or teacher gender remains a dominant research focus (Giota, [2002](#); Jackson, [2002](#); Faure *et al.*, [2003](#); Clegg *et al.*, [2000](#)).

Teaching contexts and the socio-cultural approach to male and female roles are common research topics examined in relation to inequality (Charlton *et al.*, [2007](#); Carrington *et al.*, [2008](#); Skelton *et al.*, [2009](#)). Coeducation as a factor in democratization has also been widely debated (Mosconi *et al.*, [2005](#); Beck *et al.*, [2006](#)), as has sexual identity (Allen, [2007](#); Ellis *et al.*, [2004](#)).

3.5 Mathematics

As an area of significant focus in the English-speaking world, the teaching of mathematics tends to be examined from three main angles: teachers, didactics and assessment. Some researchers have deplored the lack of adequate initial training to ensure that fundamental theoretical principles are acquired in order to standardize teachers' mathematical conceptions, in line with the curriculum (Goulding *et al.*, [2002](#); Andrews *et al.*, [1999](#)). Teacher-pupil interactions are also deemed to be important for creating a positive learning environment (Sarrazi, [2001](#)) or to ensure an efficient 'class effect' (Ainley *et al.*, [2006](#); Buty *et al.*, [2004](#)). Maury ([2001](#)) provides an overview of the theories developed by three psychologists working on the didactics of mathematics and the cognitive functioning of pupils in specific contexts.

Semantics also appear to play a key role in understanding concepts and problem-solving (Tijus *et al.*, [2002](#); Johansson, [2005](#); Favrat *et al.*, [2005](#)).

Political contexts, the strategies used by national governments and large-scale as-

assessments have an impact on mathematics education through the reforms they generate, shaping the education system (Brown *et al.* [2000](#); Meadows *et al.* [2008](#); Mendick, [2008](#); Eklöf, [2007](#)).

3.6 International student assessments

International student assessments are more often addressed in the RFP and the SJER than in the BERJ, which has no article on PISA over the period we worked on.

Assessment results can be used to identify the strengths and weaknesses of national or regional educational practices highlighted by international comparisons, particularly through **secondary analyses** or complementary items that are specific to a particular country (Elliot *et al.*, [1999](#); Wilson *et al.*, [2001](#); Tymms *et al.*, [2004](#); Leino *et al.*, [2004](#); Linnakylmä *et al.*, [2004](#); Turmo, [2004](#); Olsen & Svein, [2006](#); Prenzel & Zimmer, [2006](#); Rémond, [2006](#); Linnakyla & Malin, [2008](#)).

A significant number of articles criticized the methodological deficiencies of international assessments, arguing that the results of assessments are often used without due caution in public policy-making, largely as a result of overlooking significant **cultural, cognitive or psychometric biases** (O'Leary, [2001](#); Vrignaud, [2006](#); Moreau *et al.*, [2006](#); Bautier *et al.*, [2006](#); Hilton, [2006](#) & [2007](#)).

Large-scale assessments such as PISA can also be used to develop typologies of educational systems and to draw connections between policies, educational structures, educational performance and differentiated instruction (Mons, [2008](#); Kjærnsli & Lie, [2004](#); Hvistendahl & Roe, [2004](#); Green, [2008](#); Crahay & Monseur, [2008](#); Demeuse & Baye, [2008](#)).

Educational policy-makers have tended to use the results of international assessments to introduce reforms or to legitimate their actions. However, many studies focusing on the effects of PISA or the international dissemination of educational models show that **the issues involved often become country-specific and adapted to specific local contexts**, thereby remaining largely unrelated to the international data originally generated by international assessments (Phillips & Ochs, [2004](#); Schriewer, [2004](#); Barroso & Carvalho, [2008](#); Rochex, [2008](#); Maroy & Mangez, [2008](#); Greger, [2008](#)).

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