

EDUCATIONAL GOVERNANCE
AT LOCAL LEVEL

DECENTRALIZATION
AND STRUCTURAL CHANGE
IN SECONDARY EDUCATION
IN ARGENTINA: THE CASE
OF THE PROVINCE
OF BUENOS AIRES¹

*Clementina Acedo, Jorge M. Gorostiaga
and Silvia Senén-González*

Over the past decade, Argentina created and implemented a compulsory lower-secondary education level, within an ambitious educational reform programme. This article addresses the reform at the national level, diverse provincial responses, and the particular way that the powerful province of Buenos Aires appropriated the structural change. Our main source of data is fieldwork in Argentina, specifically in that province,

Original language: English

Clementina Acedo (Venezuela)

Ph.D. in International and Comparative Education, and master's degrees in Philosophy and International Development Education from Stanford University. She is the new Director of the International Bureau of Education (IBE-UNESCO). She was a professor in the Department of Administrative and Policy Studies at the University of Pittsburgh when she wrote this article. Previously, she worked for the World Bank. She is the author of several articles and other works on international educational policy, teacher education systems, secondary education reform, and curriculum development in various countries. E-mail: c.acedo@ibe.unesco.org.

in May 2002; we gathered official documents, interviewed national and provincial policy-makers, educational researchers and school actors, and observed schools and classrooms.²

In Latin America, secondary education reform has become a high priority, especially redefining its structure and role in national development and social integration (Braslavsky, 2001). In general the region does not provide enough opportunities in secondary education; it lags in “quality, efficiency and equity”, and often its content is “outdated” (Wolff & Castro, 2000, p. 5). Most Latin American governments know they must focus on disadvantaged groups; now that primary education has been expanded, secondary education is “key” to reversing “the social reproduction of inequality” (Reimers, 1999, p. 537).

These challenges have been critical in the reform of secondary education in Argentina, where complex dynamics affect the actors in a decentralised system. In this article, we analyse the ways actors form and appropriate educational policy at three levels – national, provincial, and school – and within the limits set by various global, national and local policy discourses. Levinson and Sutton (2001, p. 17, note 2) see the appropriation of educational policy as an active process that “emphasises the agency of local actors” as they interpret and adapt the “policy to the situated logic in their contexts of everyday practice”.

After reviewing the historical background and context of Argentina’s reform, we discuss national education policy during the 1990s, focusing on the change in academic structure, and the different provincial responses and implementation problems. We then analyse the case of the province of Buenos Aires (PBA). Finally, we summarise some quantitative effects of the reform.

Biographical note: continued

Jorge M. Gorostiaga (Argentina)

Ph.D. in Social and Comparative Analysis in Education from the University of Pittsburgh. He is a Professor of Education Reform and the Assistant Dean for Academic Affairs at the School of Graduate Studies of Universidad Nacional de San Martín in Argentina. His research focuses on various aspects of educational reform in Latin America. He is the co-editor (with Mark Ginsburg) of *Limitations and possibilities of dialogue among researchers, policy-makers and practitioners: international perspectives on the field of education* (2003). E-mail: jgorosti@unsam.edu.ar.

Silvia Senén-González (Argentina)

Bachelor’s degree in Sociology from Universidad de Buenos Aires. She is a professor of graduate studies at Universidad Nacional de San Martín and Universidad Nacional de Córdoba in Argentina in the areas of educational policy, planning, and administration. She is the author of several articles on decentralization policies and fiscal adjustment, and their impact on educational reform in Argentina. E-mail: silviaysantiago@netizen.com.ar.

Historical background, socio-economic and political context

In the twentieth century, Argentine schools typically included 7 years of compulsory primary education, beginning at age 6, and 5 years of secondary school. A 1905 law authorised the federal government to create and administer its own schools alongside the existing provincial systems. Initially, secondary schools prepared primary teachers and university entrants; gradually, technical and vocational schools also appeared. By 1986, 75% of secondary students were enrolled in the more academic tracks (*Bachiller* and *Comercial*), around 20% in technical schools, and around 4% in more specific tracks like agriculture or arts (Aguerrondo, 1996, p. 110).

During the 1980s, as democratic rule was re-established, secondary education expanded remarkably; entrance exams were eliminated and new secondary schools built. The secondary *net* enrolment rate rose from 33.4% in 1980 to 53.5% in 1991 – but with great regional differences. In 1991, net enrolment for the city of Buenos Aires was around 72% compared to about 38% for the province of Chaco in the less-developed northeast (Tiramonti, 1996).

Economically, the 1980s was a “lost decade”; an external debt crisis, plus economic stagnation and hyperinflation, drove down educational budgets and teachers’ salaries. The school system seemed out of control (Braslavsky, 1998) and quality varied widely. Rising enrolments plus falling investment in education led to overcrowding and a growing sense of crisis.

During the 1990s Argentina profoundly reformed its educational sector as part of a general State restructuring; it was also trying to modernise and adapt to international economic competition. Carlos Menem’s administration (1989–1999) thoroughly reformed the economy; it opened markets to international trade, privatised State-owned companies and deregulated economic activities. As the State reduced and redefined its functions, it transferred the profitable ones to the private sector and the not profitable – including education and health care – to the provincial and municipal levels. International lending organizations, including the World Bank and the Inter-American Development Bank (IDB), had great influence over the economic restructuring, and provided large loans to finance the reforms.

The Argentine economy grew quickly during the early 1990s but the decade ended in recession and uncertainty. Poverty levels “stubbornly stayed high” and “rising income inequality and high unemployment, especially for the unskilled”, indicated “that the benefits of growth [were] not widely shared” (World Bank, 2000a, p. 3). In December 2001, President Fernando De la Rúa resigned under pressure, in a context of massive street demonstrations and violent police repression. National and provincial governments found it increasingly difficult to invest in education, and to maintain reform efforts.

National education policy during the 1990s and the new academic structure

In 1992–1993 the government transferred all the national secondary schools and post-secondary institutes to the provinces, mainly for financial reasons, including agreements

with the external lenders. Provincial administrators agreed to take on this burden, but were not given the funding to do so – and few had the technical expertise.

After the transfer, Argentina embarked on a comprehensive and ambitious reform of education, in 1993 enacting its first-ever Federal Law of Education (FLE) to improve quality and equity. It expanded compulsory schooling from 7 to 10 years, and created a new structure for primary and secondary education. It also introduced changes in curriculum design, teacher training, school management and information and evaluation systems.

Many of the proposed changes had been discussed at the National Pedagogic Congress (1986–1988), which involved teachers, parents, community members, students and representatives of different organizations. Other changes, like the extension of compulsory education, followed international reform trends promoted by multilateral organizations such as UNESCO and the World Bank (e.g. Jomtien), and the Menem administration's general impulse towards modernisation. At the secondary level, the reform addressed key problems: low enrolment amongst low-SES students, high dropout rates and outdated curriculum and instructional methods.

The academic structure of a 7-year primary and a 5-year secondary, in place for nearly a century, was replaced by 9 years of compulsory *Educación General Básica* or EGB (Basic General Education) plus 3 years of optional *Polimodal*. The secondary level was also transformed. A 3-year compulsory level called EGB3 or Third Cycle (TC) included the last year of the former primary school and the first 2 years of the former secondary school. The *Polimodal* (formerly the upper secondary) offered five different academic and vocational orientations. (This structure was recently changed.)

The reform was to be quite decentralised, implemented under a new division of responsibilities established by the FLE. As Argentina is a federal nation, the implementers had to consider which functions are the responsibilities of the national level or the provinces – or both. This division, defined by the Constitution, is complex.

The model that emerged during the 1990s relies on a strong centre with a few strategic responsibilities. The national Ministry of Education (MOE) was to evaluate and monitor the education system, ensure adherence to national policies, provide financial and technical assistance to improve quality and equity and develop a federal management information system. The 23 provinces and the city of Buenos Aires (federal district) were given other responsibilities: to fund, administer and manage schools, and hire and train teachers. The Federal Council on Culture and Education (FC), which included the national and provincial ministries of education, became the forum for discussing national policy and implementation with the provinces. Given that earlier reform attempts, using more focussed or more gradual strategies, had failed, national policy makers opted for a radical reform strategy that would break strongly with the traditional system (Tedesco & Tenti Fanfani, 2001).

Between 1993 and 1998, the FC defined the reform's major elements: a new overall structure, a new system of teacher training, curricular reform and a student evaluation system; it also worked out general agreements on goals and schedules. MOE planners also used it to discuss and negotiate initiatives and documents they produced. The FC's decisions were not compulsory for the provinces, but provinces often respected and

adopted them, given their financial dependence and lack of expertise (see Tiramonti, 1996). The national government also sought support from provincial authorities by involving them in activities and distributing additional resources.

The FLE mandated that the EGB include 9 years and three cycles but did not specify the number of years for each cycle. The FC defined the form of the EGB as three cycles of 3 years each (CFCyE, 1993), so the TC would include grades 7, 8 and 9. Some provincial authorities proposed a 4-3-2 structure, but the 3-3-3 structure represented a more radical change that did away with old notions and institutional arrangements.

Although the MOE emphasised a radical departure from the traditional secondary school, it identified the TC as a lower secondary level rather than a continuation of the primary. It was meant to address the abrupt transition between primary and secondary school and respond to the specific needs of young teenagers (Argentina. MOE, 2000a, p. 6). Both the TC and *Polimodal* were intended to improve equity and instructional quality for low-income students.

Curricular reform was also key. The FC set the general objectives and guidelines, including a set of minimum or “Common Basic Contents” developed by subject-area and ministry experts. Provinces developed additional content and more specific objectives and guidelines, reflecting their local situations. Finally, at the school level, principals and teachers were to decide on content and instructional approaches.

The Common Basic Contents focus on “training in basic and fundamental skills, introducing many procedural contents”; they emphasise “training in conceptual thinking more than ... factual contents” (Braslavsky, 1998, p. 308). They were organised into eight chapters: Language, Mathematics, Natural Sciences, Social Sciences, Technology, Arts Education, Physical Education and Ethics and Citizenship Training. In 1998, the FC established a common curricular structure for the TC; its nine “curricular spaces” correspond to these knowledge fields plus Foreign Language. The FC set a minimum number of hours for each space; up to three subjects can fill a space.

The FLE also established a compensatory role for the national government. The Social Plan for Education provided federal funds for facilities, computers and textbooks at the poorest schools, affecting over 17,000 schools and around 3,600,000 students between 1993 and 1998; in the poorer Northeast it reached around 87% of all schools (Morduchowicz, 1999). A programme for rural schools provided technical and financial assistance to implement the TC. And, as the social crisis deepened in the mid-1990s, the highly visible Scholarship Programme helped families cope.

In 1994, in the Federal Pact on Education, the national government agreed to invest US\$3 billion over 5 years to fund educational infrastructure and equipment, and teacher training, for the provinces, which promised to implement the FLE and invest in the reforms (Consejo Federal, 1994). Between 1992 and 1998, the national government almost doubled its educational expenditures, from 1,451 million pesos to 2,285 million, while the provinces (including the City of Buenos Aires) increased their expenditures by about 60%, from 5,643 million pesos to 9,470 million. Moreover, between 1993 and 1997, both the national government and the provinces invested heavily (over 1,100 million pesos, then equivalent to \$US1,100 million) in buildings and equipment, and significant resources (over 300 million pesos) were transferred to the provinces for

“intangibles,” including training, scholarships and grants for educational projects (Morduchowicz, 1999, p. 15). This should have had a major impact on the whole education system.

Provincial responses

Within these federal frameworks, with some MOE support, the provinces were responsible for implementing the reform, making important decisions about infrastructure, curriculum development and teacher training. Since 1996, the TC was introduced gradually in almost every province; by 2000, it included 75% of students (Dussel, 2001). Implementation of the *Polimodal* began in 1999.

In general, provinces appeared to accept the national initiatives because they brought in additional funds during the fiscal crisis (Senén-González, 2000) but few provinces had enough financial and technical resources, and enough technical support from the centre, to fully and effectively implement the proposed reform (García de Fanelli, 1997; Experton, 1999). This may have been a failure at the national level (Senén-González, 2000; Roggi, 2001); agreements between the national ministry and provincial authorities should also have accounted for variations in provincial situations.

In addition, differing financial and technical resources – and local politics – led provinces to mediate or appropriate the centrally designed policies and strategies in different ways, so the timing and quality of implementation differed significantly. And, given varying degrees of autonomy, some provinces designed independent policies while others accepted central prescriptions (Senén-González, 2000).³ The Peronist political party (*Partido Justicialista*) was in power nationally and in almost all provincial governments during the 1990s, making it easier to involve the provinces. The only jurisdiction to strongly resist the national proposals was the comparatively wealthy *City* of Buenos Aires, where the Peronists had less political power.

The provinces of Buenos Aires and Córdoba developed their own policies for implementing the reform under political leaderships determined to be different from, and even compete with, national authorities. Both provinces are politically powerful, and technically competent; as they generate around 30% and 7% of the GNP, respectively (CFI, n/d), they can depend less on federal funding.

These two provinces represented two opposite models, in the way they localised the reform, saw the role of the TC, and articulated it with the *Polimodal*. The MOE (Argentina. MOE, 1994) intended that the TC be located either with the other two EGB cycles (supervised by former primary principals), or with the *Polimodal* (supervised by former secondary principals); in any case it was to have “its own identity”, separate from either EGB or *Polimodal*. The province of Buenos Aires (PBA) decided to implement an “institutional model” of EGB that included the three cycles, from grades 1 to 9; meanwhile Córdoba decided that the TC and the *Polimodal* should constitute two cycles of the new “middle schools”. While Buenos Aires seemed to focus on including more students, designing a TC more in primary school style, Córdoba’s model seemed closer to the traditional secondary.

Other provincial governments chose mixed models, placing the TC in new buildings or in schools offering either the other two cycles of EGB or the *Polimodal*, depending on the availability and location of classrooms, and on negotiations with various actors: community members, supervisors, school principals, unions, parents (Argentina. MOE, 2000b).

Provinces also made significantly different choices on curriculum. For example, Córdoba's TC offered 13 subjects (more in line with a "secondary" profile), while PBA offered only seven "curricular spaces." Most provinces increased the number of class hours for traditional curricular areas (language, math, etc.), but some did not respect the minimum the FC established (Argentina, MOE, 2000c, p. 7).

In extending compulsory education to grades 8 and 9, most provincial governments faced financial problems and challenges in finding and relocating teachers. It was not always clear who should teach at this level (primary *maestros* vs. secondary *profesores*) and what kind of retraining they needed, so many teachers did not have the necessary training, and many jobs were not filled at all (Argentina, MOE, 2000b). In most provinces, both primary and secondary teachers were included in the TC, causing tensions; also, teachers were placed in the new positions of cycle coordinator and TC tutor without training (Argentina, MOE, 2000d, p. 18). Finally, some EGB principals could not manage the new structure, especially the TC (Krichesky & Cappellacci, 1999).

Other strong barriers to implementation included low teacher salaries and union opposition to reform. Teachers' unions saw the reforms of the Menem administrations as part of a neo-liberal policy that attacked public schools and tried to weaken union power (CTERA, 1997). And because national authorities excluded teachers' unions as they discussed and negotiated educational policies, they could not create broad public support for the proposed changes (Braslavsky, 1998).

Teachers and the public did generally agree on the "educational opportunity" for changes, given the perception of crisis; but this consensus evaporated in the context of neo-liberal economic restructuring and rising unemployment, which teachers saw as threatening their job stability (Dussel, 2001, pp. 44–45). In a 2000 survey, about 60% of teachers said the reform negatively impacted their working conditions (Tedesco & Tenti Fanfani, 2001). And some researchers we interviewed said educators had no opportunity to participate authentically in the reform's design, and that the reformers could not accept critiques or redesign policies. Suasnabar (2000) found that provincial authorities generally saw the reform negatively; they agreed with the need for changes, but questioned the "abrupt" implementation style, and had serious doubts about modifying the academic structure.

Reform in the Province of Buenos Aires: structural change and the third cycle

As we said earlier, the PBA was quite autonomous in implementing the reform, for reasons of tradition, resources, and politics. Buenos Aires is the most populated province in Argentina (in 1998, 13 million inhabitants out of Argentina's total of 36.1 million), and has the oldest provincial education system. Basic and secondary education includes

around 300,000 teachers and 4 million students (35% of the country's students); about 70% attend public schools (Fiszbein, 1999).

The province includes wide variations. Over 90% of the population lives in urban areas, but 40% of primary/EGB schools are rural, serving a much dispersed population; 20% of its primary schools have 10 or fewer students. Two-thirds of the student population is concentrated in the *Conurbano*, 24 counties around the *City* of Buenos Aires including both rich and poor areas, with the worst social problems in the counties farthest from the city.

In 1991, the Peronist Eduardo Duhalde, who had been vice-president since 1989, was elected governor of PBA. In 1995, while Carlos Menem was re-elected president, Duhalde was re-elected governor and set his sights on the presidency for 1999. Menem tried to maintain his hold on the Peronist Party, and eventually ran for president again. This political tension between the leaders accentuated the province's independence on national policy, and led to some difficult dealings between national and provincial educational authorities. But the province did accept the reform outlined in the FLE, though appropriated many of its elements in non-standard ways. And given the province's political and educational weight, national policy-makers were eager to see it implemented, in whatever form.

Duhalde made educational reform a pillar of his administration. In 1995, a new provincial law of education adapted the system to the FLE's requirements, including the new structure of EGB and *Polimodal*. Adopting a very "top-down" approach to policy making (UNESCO, 1998, p. 2; Feijóo, 1998), the provincial government stressed compensatory and remedial social programmes with a clientelistic orientation. The "dozens of compensatory programmes" ranged "from nutritional supplies to vacations at the beach" (Dussel, Tiramonti & Birgin, 2000, p. 159). From 1993 to 1998 the province increased its educational expenditures by around 80% (World Bank, 2000b). In 1996, Duhalde announced the province's "educational transformation"; his goals were to keep children in the education system, and improve the quality of teaching, "responding to the new realities of the labour market and world trends" (PBA, 1996).

The PBA reform targeted the entire education system, consistent with the view of national authorities, with the most radical changes at the secondary level. It designed several of its own policies, sometimes even before a national policy was implemented. But it adopted a "low profile" with regard to national programmes, using only limited resources from them, and adapting them to provincial needs (Senén-González, 2000).

The implementation of the new structure was rapid and massive. In 1995 the initial level became compulsory; in 1996 EGB implementation began. Apparently the speed was a response to various needs, mostly political: to avoid resistance from teachers and unions; to differentiate Buenos Aires from other provinces and demonstrate its leadership; to gain visibility both internally and nationally; and to increase social inclusion by enrolling youth who would otherwise be on the streets. Provincial policy-makers recognised that this strategy would unavoidably lower quality; many aspects of the new structure were poorly planned (e.g. Suasnabar, 2000).

The availability of financial resources – and the weakness of intermediate structures – facilitated considerable centralisation in the decision making. In PBA, education has

traditionally been administered through different branches: Initial Education, Primary (or EGB), Secondary (or *Polimodal*), Special Education, Physical Education, etc. The province was divided into 16 regions, each including a variable subset of the total 134 districts. Regions did not have centralised leadership; a chief supervisor for each branch directed supervisors (*Inspectores*) in charge of one or more districts. Thus, only those at the province's most central level can have a global vision of each region's situation – and plan coordinated action. This situation also leads to institutional fragmentation at both regional and school levels. Within school units, “staff belong to different branches (e.g. school counsellors to the ‘psychology’ branch, physical education teachers to their own branch, etc.)”; this is “an important barrier” to effectively integrating “the teaching community under the leadership of school directors” (Fiszbein, 1999, p. 7).

Traditionally, supervisors transmitted and enforced the system's centrally developed legal norms, an important job when educational policy was expressed through ministerial resolutions. But they rarely had decision-making power and often had responsibility for “too many schools”, so could not “become substantially involved in pedagogic matters” (Fiszbein, 1999, pp. 6–7). Still, their intermediate position between central authorities and schools sometimes let them mediate and establish negotiation channels. Indeed, during implementation they defended the proposed changes and helped schools to adapt to them (UNESCO, 1998).

Using an “institutional model” of EGB (grades 1 to 9) as an administrative and pedagogic unit under the direction of primary principals, the provincial government chose to integrate the TC into the primary level. Its main rationale was that because primary schools were more inclusive than secondary, they could better engage and promote students, and thus would be more effective in extending compulsory education to the ninth year. The political logic in the model was to include and retain low-SES students to allow for focused social policy. But infrastructure problems forced it to implement two basic modalities, the “*puras*” (or “*completas*”) and the “*articuladas*”, as we describe below.

Institutional fragmentation at the regional level complicated the implementation, particularly of the TC, which required attention from both primary and secondary branches. At the same time, the decision to place the EGB under primary principals was seen as strengthening the primary branch at the expense of the secondary. Although primary principals and supervisors spoke of the work “overload”, they generally welcomed it as recognizing their work and the potential of the primary level to engage and promote students (UNESCO, 1998). In addition, 7th-grade primary teachers who moved to the TC became secondary “*profesores*”, with improved salaries and status; EGB principals also got raises.

During 1996 the minister and other authorities met first with 7th-grade parents, and then with principals, to explain the changes, and to help the schools prepare (Feijóo, 1998). Many parents supported the “institutional model” of EGB because they saw secondary schools as dangerous places with more risks of violence and drug consumption, according to one principal. Primary, but not secondary, teachers, seemed to share this view.

At first, the political opposition and the teachers' unions resisted the reform. In 1995–1996, in Bahía Blanca, an important urban centre, they organised a resistance movement, which eventually died out, partly because supervisors actively defended the new policies. The unions especially criticised the change in the academic structure and its pedagogical effects. One wrote that the EGB “deepened the fragmentation of the education system and caused fractures in the school organization”; moreover, the reform failed to “consider the characteristics of teenagers, of institutional cultures, of work conditions and of teacher training ... One of [its] most harmful effects is the break-up and disappearance of middle, technical and agrarian schools” (SUTEBA, 1999, p. 4 & p. 6, our translation).

Equity and quality implications in implementing the third cycle in PBA

As the PBA implemented the EGB “institutional model” it encountered significant problems. Despite large investments, it could not transform all the primary school buildings (which had served grades 1 through 7) to absorb the 8th and 9th grade students – and doing so would have left empty classrooms in secondary schools. Moreover, with fewer students, secondary principals and supervisors feared losing power, and secondary teachers did not want to move into different buildings (Feijóo, 1998). In response to these complaints, two general models were implemented starting in 1997. In the EGB “*puras*” or “*completas*”, all nine grades were located in the old primary building. In the EGB “*articuladas*,” the 8th and 9th grades (sometimes also the 7th grades) remained in the secondary school buildings, but under the direction of the EGB principal; administrators tried to connect buildings a few blocks apart. About 30% of PBA's 8th and 9th graders in “*articuladas*” attended a school different from the EGB in which they were formally enrolled.

Almost all of the secondary buildings kept the 8th and 9th grades, often “*articulating*” with more than one EGB. The position of “*co-ordinator*” for their 8th and 9th grades was created to help the EGB principal supervise and facilitate the work of teachers and students in these schools. A few schools include both the EGB and *Polimodal* (usually former national schools), in a variation of the “*puras*.” Rural schools found it harder to implement a complete EGB model; most had the 8th and 9th grades functioning in a nearby Agricultural *Polimodal*, or students commuted to EGB or secondary schools in nearby towns.

Moreover, a “*cultural encounter*” soon became a “*cultural clash*” between former primary teachers (“*maestros*”) and former secondary teachers (“*profesores*”). Official documents mentioned “*encuentro de culturas*,” but we heard principals and researchers say “*choque de culturas*.” This cultural encounter should have given birth to a new, specific culture for the TC. The law said that primary teachers could continue teaching (after a “*reconversion*” through specific training) in the 7th grade, and that former secondary teachers (also retrained) would teach the 8th and 9th grades. The differences between the groups are rooted in their different training in separate institutions, and contrasting school cultures. The primary school culture stresses caring, while the

secondary culture values intellectual development and stricter discipline. Primary teachers were used to working in a single school, and to supervising students during lunch and breaks. Secondary teachers often worked in several schools (“taxi” teachers) and had one responsibility: teach their subject (UNESCO, 1998, p. 171 ff.). Secondary teachers working in the 8th and 9th grades apparently had to adapt to the culture of primary.

The issue of student assessment at the TC is closely related to these differences between cultures. Secondary teachers are used to evaluating students based on their knowledge of subject matter; primary teachers think more about children’s learning processes. It is not clear how much pressure came from central authorities to relax evaluation standards and promote more students; some teachers sensed a subtle message to this effect (UNESCO, 1998, p. 148). The ways the “cultural encounter” and the evaluation problems were addressed indicate that the TC may be considered part of primary education; critics (e.g. Puiggrós, 2000) and our informants argue this occurred in several places. They say it decreases the quality of teaching and learning, and ignores the particular needs of young adolescents.

Another challenge was incorporating students who were overage, had already failed in school, and belonged to social groups unaccustomed to secondary education, the so-called “new pedagogical subject”. Official documents and educational authorities, including supervisors, articulated a “discourse of diversity”, urging teachers to adapt their teaching styles to the reality of low-income students, and perhaps teaching less content. Others warned that too much awareness of diversity leads to inequity if teachers water down the curriculum.

Apparently, teachers and principals were not adequately trained to respond to that diversity, and to other challenges from the TC. The new training system emphasised subject matter, not the specific learning needs of teenagers or strategies for keeping them in school. Nor did it specifically prepare them to teach the TC (Tiramonti & Seone, 2000).

All these problems played out differently in “puras” and “articuladas.” In general, in “puras” the TC had “no identity,” since 7th grade was not integrated with 8th and 9th as one teacher said. TC teachers felt they were working in a primary school and lowering their earlier standards. In “puras”, former secondary teachers struggled to adapt to the new curricular structure, particularly in social studies and science where three former subjects were now supposedly combined into one area. Some teachers have to work in more institutions to get enough teaching hours, and some EGB “puras” lack laboratories, and even regular classrooms, and were overcrowded (UNESCO, 1998; Tiramonti & Seone, 2000).

In implementing the “articuladas” key problems were communication and coordination, and teaching styles resembling those of the old secondary schools (Krichesky & Cappellacci, 1999; Argentina, MOE, 2000b; Suasnabar, 2000). In addition, disciplinary criteria were not consistent, and some parents, unhappy about the secondary school with which the EGB would “articulate”, moved their children. Some “articuladas” apparently witnessed open conflict between directors of EGB and secondary/*Polimodal* schools. Indeed, how can principals and teachers cooperate in “articuladas” if EGB principals have

little real authority over 8th and 9th grade teachers? Nor were the co-ordinators able to facilitate much communication between the EGB directors and the 8th- and 9th-grade teachers. The situation seemed to confuse both students and teachers in the 8th and 9th grades. Some students attend classes at the secondary school, but go to the EGB building for lunch and other activities. Many teachers also teach at the *Polimodal*, which makes it harder for them to feel they belong in the EGB.

The EGB “pura” is much more common amongst schools in low-SES areas, which may reinforce social segmentation; in fact, of the urban schools serving middle-SES students, more than 50% were “articuladas” (UNESCO, 1998, pp. 198–199). Many say the middle class sends its children to the supposedly higher-quality “articuladas” which can select the better students. Many middle-class PBA students attend secondary school in the *City* of Buenos Aires, which has preserved more traditionally structured secondary schools. And “articuladas” teachers seem to maintain a teaching style that emphasises subject matter and upholds the traditional learning standards of secondary schools. Members of the provincial TC Team said that even when “puras” represent a better model in organizational terms, “articulada” students tend to get better grades. But is this higher level of student achievement related to the middle-class composition of “articuladas”, to the “secondary” teaching style, or to both?

One provincial policy-maker told us the province’s ultimate goal was to achieve a “pura” for every student. But the TC was implemented in the old primary schools under the direction of primary principals for three main reasons: to increase coverage and keep disadvantaged students enrolled, to avoid having to transport them to central schools, and to avoid forcing them to adapt to the social climate of high schools, structured around middle-class norms and forms of discrimination. In this sense, the system’s segmentation partly responds to the rationale of central policy-makers: without strong and specific measures to improve quality, the emphasis on incorporating more students was likely to increase segmentation.

Profiles of three schools in Avellaneda illustrate the situation of “puras” and “articuladas.” One of the *Conurbano’s* 24 educational districts, Avellaneda is predominantly middle-class. The schools we visited in June 2002 are close to the city centre, and include few students from marginalised neighbourhoods.

The first school, offering Initial through *Polimodal* levels, is a former national school and considered very prestigious. The principal reports few problems in adapting to the new structure, especially since they could concentrate the TC on one floor of the building, and the TC Coordinator and the Orientation Team worked closely with the principal and vice-principal. Many students from other schools in the district apply to this one, particularly for 7th grade, resulting in a highly selective admissions process. Still, a veteran 8th-grade teacher says the quality of instruction has suffered since the new structure came in, and that the teachers recently trained for the TC are less well prepared than traditional secondary teachers.

The second school is a “pura” with a considerable proportion of low-SES students. In 1996 the central authorities decided it would be an “articulada”, but the principal, supported by parents, raised funds to prepare new classrooms and adapt the building, and got permission to run it as a complete EGB. She feared that if the school became an

“articulada” she could not guarantee safety and academic attainment for the students in the *Polimodal* building. She saw few problems in incorporating the secondary teachers, but acknowledged low achievement in the school’s TC. The best students transferred in 7th or 8th grade to more prestigious local schools to assure themselves a place in their *Polimodals*. Meanwhile, new students who come from other schools have less motivation and more learning difficulties. She says that the system’s teacher training has been inadequate. In addition, the school has no orientation team – an important disadvantage given the students’ problems with alcoholism, smoking, and eating disorders.

The third school was an “articulada”. The smallest of these three, it has the most students of lower SES; many come to school hungry. The principal, only two years there, does not understand what criterion was used to decide on the “articulation” with a secondary technical school 19 blocks away. Moreover, the school was completely rebuilt in 1997 but without spaces for the 8th and 9th grades. Although they had good personal rapport with the *Polimodal* principal, neither principal nor vice-principal felt they could adequately supervise 8th and 9th grade students and teachers. Moreover, the TC co-ordinator did not have the power that would allow her real coordination of 8th and 9th grade (since they are physically in the *Polimodal* branch), making collaboration more difficult; a legal snag kept the school’s orientation team from working with these grades for some years.

The directors sensed that the 8th and 9th graders did not know what school they belonged to and do not feel that they are taken care of, while teachers have trouble learning to work with non-traditional secondary students and in changing their evaluation methods. But the principal of the *Polimodal* to which these students move on does not seem to see these as problems. She is more concerned with the drop in quality since the reform and the extra demands on teachers who must now teach both general and technical subjects without enough preparation.

We heard many themes and concerns in our conversations with various educational actors in Avellaneda; these are some key ones.

- The reform came in too quickly, without input from principals and teachers.
- The quality of schools has deteriorated, and the Third Cycle has been made part of primary education, even in “articuladas”.
- The new curricular areas are often ignored; teachers continue to teach the traditional disciplines as separate subjects.
- The teacher training system failed in many ways.
- People perceive a deep social crisis. Families find it increasingly hard to contribute financially to “cooperadoras”, and to participate in school activities and support students’ learning.
- The state does not support schools; it barely pays teachers’ salaries.
- The education system is deeply fragmented. Students of different social backgrounds attend different schools – or even different shifts at the same school – and thus get a very different quality of education.

In response to some of these problems, in 2000 the PBA’s Under Secretariat of Education formed a special team to review the implementation. It aims to rework the TC into more of a unit, with all 3 years in the same building, and improve its quality.

TABLE 1. Net enrolment rates by level of education in Argentina, 1960–1997

Year	Pre-Primary	Primary	Secondary
1960	16.0	82.6	24.5
1980	57.5	90.5	38.8
1991	72.7	95.7	59.3
1996	96.5	99.4	67.2
1997	98.0	99.8	70.2

Source: Tedesco & Tenti Fanfani, based on data from national MOE, 2001.

The reform's quantitative effects

In Argentina, in the 1990s, enrolments generally increased at all levels, particularly in secondary education (see Table 1). The greatest increases were in the TC and for economically disadvantaged students (Tedesco & Tenti Fanfani, 2001). Until 1997, however, this expansion did not benefit the most disadvantaged. Between 1992 and 1997, for example, gross secondary enrolment rates fell by around 7% for the bottom quintile of the population and rose around 15% for the top quintile (Etchart, 1999), possibly reflecting the context of increasing unemployment and income inequalities. But between 1997 and 1999, enrolment rates amongst the poorest groups seemed to rise significantly as the compulsory TC was introduced along with scholarships (Herrán & Van Uythem, 2001). Overall, as Table 1 shows, expanding secondary enrolment during the 1990s seems to be a long-term trend.

For the PBA specifically, the reform increased secondary enrolment, but problems with repetition and dropout continue. In 1997 the number of students in 8th grade (previously 1st year secondary) increased around 13.5% (Morduchowicz, 1999) and the retention rate increased about 17%; indeed the retention rates for “puras” and “articuladas” were very similar that year (UNESCO, 1998, p. 45). But the repetition rate for 7th grade increased significantly, from 0.4% to 5.2% in 2000, possibly because 7th grade is no longer the terminal year of primary; meanwhile the repetition rates for grades 8 and 9 have stayed high, at 10.8% and 7.1%, respectively for 2000 (Balduzzi, 2001).

Analysing the apparent enrolment increases in PBA, Balduzzi and Suárez (1999) say many students were formally enrolled rather than actually engaged: conditions did not encourage student learning and keep them in the system. For example, only 26.7% of students enrolled in 8th grade in 1997 met the minimum learning requirements, while around 11% dropped out, and attendance rates were poor.

The reform had the most impact – increasing coverage and lowering dropout – amongst youth from the *Conurbano*, including those who had left school earlier after completing the 7-year primary school (Miranda, Moragues & Sendón, 2000). But Balduzzi (2001) sees a historical trend towards increasing coverage at the secondary school, so the observed enrolment increase might not be directly associated with the

reform; moreover, despite some improvement in comparison with earlier figures for old secondary schools, the dropout levels at 8th and 9th grades in 1998–1999 still seem very high, especially since these years have become compulsory. Researchers generally say that since 2001 dropout rates have been increasing in the province and nationally, particularly amongst teenagers, in the context of severe budgetary restrictions and the growing social crisis.

Conclusion

Our analysis highlights the complexity of the policy process in a decentralised system, as well as the limitations of comprehensive and top-down reform strategies at both national and provincial levels. The variety of provincial responses to the change of structure shows how political, technical and financial factors intervened as the province appropriated national policies, further fragmenting the system. And the PBA case illustrates the dynamics of policy formation and the problems and challenges that evolved as the structure of secondary education was reformed.

A critical element in the implementation is the increasing poverty and social exclusion. This social context had a strong impact on the reform: tough teaching situations at school, combined with economic difficulties at home, conspired against teachers' performance (Tedesco & Tenti Fanfani, 2001). This has made it even harder for principals and teachers to be creative in taking on the reformist policies, or even applying them mechanically. But some schools, especially those with skilled leaders and local resources, had enough autonomy to appropriate the reform in novel ways.

Despite indications of increased coverage, we also saw serious problems that affect the quality of education. The new academic structure, including the TC, was meant to address the difficult transition from primary to secondary level, and to respond to the specific needs of young teenagers. But the new structure has created new problems for provinces, and has probably further fragmented the national system, increasing the inequities amongst provinces and amongst schools within provinces.

The TC in the PBA illustrates shortcomings in the national reform: increased coverage at the expense of quality, rapid and massive implementation without sufficient resources, and neglect of negotiation and consensus-building. We found an emphasis on top-down strategies, and insufficient attention to and investment in teacher education both locally and nationally, limitations typical of reform efforts in Latin America and elsewhere (Fullan, 1993).

As compulsory schooling was extended, massive numbers of students were brought back into the system, and the retention rates in PBA improved. The quality of teaching and learning deteriorated significantly, however, and confusion about the TC's pedagogical role increased as two modalities ("puras" and "articuladas") evolved. These two modalities may also represent a deepening of previously existing inequalities between schools serving different social classes. While some provincial policy-makers may have conceived the reform as an effort to increase educational opportunities, it can also look like a strategy of social control: keeping low-SES youth off the streets in an era of rising unemployment.

Given Argentina's current social context, including poverty and high unemployment, it will be very difficult to maintain or increase enrolment and retention rates, let alone improve the quality of teaching and learning. The nation needs specific policies to prevent dropout and preserve the schools' pedagogical functions. And all parties must become involved in assessing the new policies, to identify ways to enhance both quality and equity in the short and long term.

Postscript

Major changes have occurred due to a new government and recognition of the previous shortcomings of the reform:

1. At the end of 2005 the Province of Buenos Aires decided to replace the Third Cycle by a Basic Secondary Cycle with its own directors at each school. In addition, there has been a process of curriculum integration between the two secondary cycles with a special effort to set up technical schools again;
2. At the national level, a new Educational Law adopted in December 2006 abolishes the EGB and Polimodal and establishes a structure for primary and secondary education in each province. The secondary level, which may last either 5 or 6 years, will be compulsory and will have two cycles (basic and specialised).

Notes

1. This study was funded in part by the Center for Latin American Studies, University Center for International Studies, University of Pittsburgh.
2. We thank Inés Aguerrondo and Susana Xifra (IIPE/UNESCO, Buenos Aires), Mario Carpinetti (National Ministry of Education), Guillermo Ferrer (GRADE, Perú), Graciela Frigerio and Margarita Poggi (Centro de Estudios Multidisciplinarios), Daniel Galarza (Unidad de Investigaciones, National MOE), Mariano Palamidessi (FLACSO Argentina), Mónica González Gaviola (Dirección de Información y Planeamiento, Under-Secretariat of Education, PBA), Aurora Mazás, Víctor Meckler (Programa de Gestión Curricular y Formación Docente, National Ministry of Education), Gustavo Sánchez (National Ministry of Education), Cristina Tomassi, Vilma Crucemio, Graciela Nordi and Mirta Serafini (Third Cycle Team, PBA), and the principals and teachers of four schools in the province for their collaboration. We also thank Helen Snivel for efficient editorial services.
3. In Argentina, the national government collects most taxes, and then distributes funds amongst the national and provincial administrations; this system has long led to conflicts and negotiation between the federal government and the provinces (Senén-González, 2000).

References

- Aguerrondo, I. 1996. *La escuela como organización inteligente* [The school as a rational organization]. Buenos Aires: Troquel.
- Argentina. Ministry of Education. 1994. *Propuesta para la aplicación gradual de la ley 24.195. Borrador de trabajo* [Proposal for the progressive enforcement of law 24.195. Working

- draft]. Buenos Aires: Ministerio de Cultura y Educación, Secretaría de Programación y Evaluación Educativa.
- Argentina. Ministry of Education. 2000a. *El Tercer Ciclo desde la mirada docente: avances y desafíos frente a la extensión de la obligatoriedad escolar* [The third cycle from teachers' perspectives: progress and challenges related to the extension of compulsory education]. Buenos Aires: Ministerio de Educación, Unidad de Investigaciones Educativas.
- Argentina. Ministry of Education. 2000b. *Implementación y localización del Tercer Ciclo de EGB: las prescripciones y su impacto en los actores institucionales* [Implementation and contextualization of the EGB's third cycle: prescriptions and their impact on institutional actors]. Buenos Aires: Ministerio de Educación, Unidad de Investigaciones Educativas.
- Argentina. Ministry of Education. 2000c. *La estructura curricular básica del Tercer Ciclo de la EGB en ocho jurisdicciones* [The basic curricular structure of the EGB's third cycle in eight jurisdictions]. Buenos Aires: Ministerio de Educación, Unidad de Investigaciones Educativas.
- Argentina. Ministry of Education. 2000d. *El trabajo docente en el Tercer Ciclo de la EGB: la normativa y las instituciones* [Teacher's work in the EGB's third cycle: legislation and institutions]. Buenos Aires: Ministerio de Educación, Unidad de Investigaciones Educativas.
- Balduzzi, J. 2001. *Desigualdad y exclusión educativa en el "Tercer Ciclo" de la Provincia de Buenos Aires* [Educational inequality and exclusion in the Third Cycle of the Province of Buenos Aires]. Buenos Aires: SUTEBA. (Cuadernos de informes e investigaciones, no. 2.).
- Balduzzi, J.; Suárez, M. 1999. *La implementación del octavo año en las escuelas bonaerenses* [The implementation of the eighth year in the Buenos Aires schools]. Buenos Aires: SUTEBA. (Cuadernos de informes e investigaciones, no. 1.).
- Braslavsky, C. 1998. Restructuring the Argentine educational system, 1984–1995. In: Tulchin, J.S.; Garland, A.M., eds. *Argentina: the challenges of modernization*. Wilmington, DE: Scholarly Resources Inc.
- Braslavsky, C. 2001. Los procesos contemporáneos de cambios de la educación secundaria en América Latina: Análisis de casos en América del Sur [Contemporary change processes in secondary education in Latin America: analysis of cases in South America]. In: Braslavsky, C., ed. *La educación secundaria. ¿Cambio o inmutabilidad?: análisis y debate de procesos europeos y latinoamericanos contemporáneos*. Buenos Aires: Santillana.
- Consejo Federal de Cultura y Educación. 1993. *Resolución 30/93–XV Asamblea Extraordinaria del CFCyE, 8 de setiembre de 1993. Apoyo al acuerdo de las provincias relativo a la Estructura del Sistema Educativo Nacional. Caracterización de los Niveles, Ciclos en la estructura y gradualidad de la implementación del Sistema Educativo Nacional* [Support to the agreement between provinces concerning the structure of the national education system. Description of the levels, cycles and smooth implementation of the national education system]. Buenos Aires: Ministerio de Cultura y Educación.
- Consejo Federal de Cultura y Educación. 1994. *Pacto Federal Educativo* [Federal Education Pact]. San Juan, Argentina: Consejo Federal de Cultura y Educación.
- Consejo Federal de Inversiones (CFI). n.d. *Federal databases*. Available at: <www.cfired.org.ar/ingles/indices/f_prov.htm>.
- Confederación de Trabajadores de la Educación de la República Argentina (CTERA). 1997. *Situación de la educación en Argentina* [Overview of education in Argentina]. *Diagnóstico* (Buenos Aires: CTERA).
- Dussel, I. 2001. *Los cambios curriculares en los ámbitos nacional y provinciales en la Argentina (1990–2000): elementos para su análisis* [Curricular changes at the national and provincial levels in Argentina (1990–2000): elements for analysis]. Buenos Aires: Ministerios de

- Educación de Argentina, Chile y Uruguay, Grupo Asesor de la Universidad de Stanford/ BID.
- Dussel, I.; Tiramonti, G.; Birgin, A. 2000. Decentralization and recentralization in the Argentine educational reform. *In: Popkewitz, T.S., ed. Educational knowledge: changing relationships between the state, civil society, and the educational community.* Albany, NY: SUNY Press.
- Etchart M. 1999. *Educación y distribución del ingreso* [Education and income distribution]. Buenos Aires: FIEL.
- Experton, W. 1999. *Desafíos para la nueva etapa de la reforma educativa en Argentina* [Challenges for the new phase of the Argentine educational reform]. Washington, DC: The World Bank. (LCSHD paper series, no. 46.).
- Feijóo, M. 1998. La política de los hechos [The policy of facts]. Mimeo.
- Fiszbein, A. 1999. *Institutions, service delivery and social exclusion: a case study of the education sector in Buenos Aires.* Washington, DC: The World Bank. (LCSHD paper series, no. 47.).
- Fullan, M. 1993. *Change forces: probing the depths of educational reform.* London/New York: Falmer Press.
- García de Fanelli, A.M. 1997. Reformas en la educación básica y superior en la Argentina: avances y restricciones en su implementación [Basic and higher education reforms in Argentina: progress and limitations in their implementation]. *In: Centro de Estudios de Política, Administración y Sociedad, ed. Los desafíos para el Estado en la Argentina actual.* Buenos Aires: Universidad de Buenos Aires.
- Herrán, C.; Van Uythem, B. 2001. *Why do youngsters drop out of school in Argentina and what can be done against it?* Washington, DC: Inter-American Development Bank. (Working Paper: Education and Human Resources Training Network.).
- Krichesky, M.; Cappellacci, I. 1999. Gestión curricular y riesgo pedagógico en EGB3: un análisis de casos en Lomas de Zamora y La Matanza [Curriculum management and educational risks in EGB3: a case analysis in Lomas de Zamora and La Matanza]. *Propuesta educativa*, 21 December, pp. 66–79.
- Levinson, B.; Sutton, M. 2001. Introduction: policy as/in practice—a socio-cultural approach to the study of educational policy. *In: Sutton, M.; Levinson, B., eds. Policy as practice: toward a comparative sociocultural analysis of educational policy.* Westport, CT: Ablex.
- Miranda, A.; Moragues, M.; Sendón, M.A. 2000. Tercer Ciclo de EGB. Análisis del impacto de la extensión de la obligatoriedad: principales indicadores [The third cycle of EGB: analysis of the impact of extending compulsory education: main indicators]. *In: Tiramonti, G., et al., eds. Proyecto Estado de situación de la implementación del Tercer Ciclo de EGB en seis jurisdicciones.* Buenos Aires: FLACSO/Ministerio de Educación.
- Morduchowicz, A. 1999. *Una mirada desde los costos del sistema educativo argentino* [The national education system of Argentina from the perspective of costs]. Buenos Aires: Informe presentado a la Comisión de Ecología y Desarrollo Humano del Honorable Senado de la Nación.
- Province of Buenos Aires. 1996. *Hacia la educación secundaria obligatoria: mensaje del Gobernador Dr. Eduardo Duhalde* [Towards compulsory secondary education: message from the Governor Dr. Eduardo Duhalde]. La Plata: Gobierno de la Provincia de Buenos Aires.
- Puiggrós, A. 1997. *La otra reforma: desde la educación menemista hasta el fin de siglo* [The other reform: from “menemist” education to the end of the century]. Buenos Aires: Galerna.
- Puiggrós, A. 2000. Educación básica y media en la Argentina de Comienzos del Siglo XXI [Basic and secondary education in Argentina at the beginning of the twenty-first century]. *Revista aportes*, no. 15.

- Reimers, F. 1999. Educational opportunities for low-income families in Latin America. *Prospects*, vol. 29, no. 4, pp. 535–49.
- Roggi, L. 2001. Esta resolución no ayudará a mejorar la situación [This resolution will not help to improve the situation]. *Novedades educativas*, año 13, no. 123.
- Senén-González, S. 2000. Argentina: actores e instrumentos de la reforma educativa. Propuestas del centro y respuestas de la periferia [Argentina: actors and tools of the education reform. Proposals from the Centre and responses from the periphery]. *Revista alternativas* (Universidad Nacional de San Luis).
- Suasnabar, C. 2000. Burocracias provinciales y estilos de gestión en la implementación del tercer ciclo de EGB [Provincial bureaucracies and management styles in the implementation of the third cycle of EGB]. In: Tiramonti, G., et al., eds. *Proyecto Estado de situación de la implementación del Tercer Ciclo de EGB en seis jurisdicciones*. Buenos Aires: FLACSO/Ministerio de Educación.
- Sindicato Unificado de los Trabajadores de la Educación de la Provincia de Buenos Aires (SUTEBA). 1999. *Una reforma que no transforma* [A reform which does not transform]. <www.suteba.org.ar> (Extracted: February 2001).
- Tedesco, J.C.; Tenti Fanfani, E. 2001. *La reforma educativa en la Argentina: semejanzas y particularidades* [Educational reform in Argentina: similarities and specificities]. Buenos Aires: Ministerios de Educación de Argentina, Chile y Uruguay, Grupo Asesor de la Universidad de Stanford/BID.
- Tiramonti, G. 1996. *Los nuevos modelos de gestión educativa y su incidencia sobre la calidad de la educación* [New models of educational management and their influence on the quality of education]. Buenos Aires: FLACSO. (Serie documentos e informes de investigación, no. 211.).
- Tiramonti, G.; Seone, V. 2000. El impacto del tercer ciclo en las escuelas y los agentes educativos [Impact of the third cycle on schools and educators]. In: Tiramonti, G., et al., eds. *Proyecto Estado de situación de la implementación del Tercer Ciclo de EGB en seis jurisdicciones*. Buenos Aires: FLACSO/Ministerio de Educación.
- UNESCO. 1998. *Estudio de seguimiento y evaluación de la Transformación Educativa en la Provincia de Buenos Aires* [Follow-up study and evaluation of the educational transformation in the Province of Buenos Aires]. Buenos Aires: Oficina Regional de UNESCO-Representación Argentina.
- Wolff, L.; Castro, C. de M. 2000. *Secondary education in Latin America and the Caribbean: the challenge of growth and reform*. Washington, DC: Inter-American Development Bank.
- World Bank. 2000a. *Argentina, AR BA Secondary Education II: project concept document*. Washington, DC: Latin America and Caribbean Region LCSHE.
- World Bank. 2000b. *Argentina, Buenos Aires Second Secondary Education Project: project appraisal document*. Washington, DC: Latin America and Caribbean Region LCSHE.



COPYRIGHT INFORMATION

TITLE: Decentralization and Structural Change in Secondary Education in Argentina: The Case of the Province of Buenos Aires

SOURCE: Prospects 37 no1 Mr 2007

The magazine publisher is the copyright holder of this article and it is reproduced with permission. Further reproduction of this article in violation of the copyright is prohibited. To contact the publisher:
<http://springerlink.metapress.com/content/1573-9090/>