

# Public–private convergence and the special case of voucher-receiving schools

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Many arguments in favour of school voucher programs are based upon libertarian free agency principles. Viewed at the organizational level, allowing persons to exercise choice in education would seem to offer incentives for all educational organizations within that framework to improve overall product quality and thus more effectively obtain the education good for both individual and society. However, analysis from the transcending institutional level shows that *supra*-organizational forces will progressively reduce choice and quality as both private and public organizations relinquish their distinctive curricula and philosophies as a *de facto* requirement for participation within the broader educational institution or ‘market’. Acknowledging the costs of, and designing policy to maintain, particular information are both essential to effectively producing the education good within a competitive institutional structure.

## Introduction: convergence and the division of information

The goal of libertarian agency for parents and students has occupied the attention of economists, political scientists, and educational theorists for decades (Friedman, 1955; Chubb & Moe, 1990; Brighouse, 2000). One public policy strategy designed to enhance libertarian agency for the educational consumer is the educational voucher. In theory and in practice, many voucher systems offer the consumer public–private choice amongst schools. The emphasis of consumer choice lies in the warranted belief that consumers possess a greater awareness of individual educational aims than do bureaucracies, i.e., parents and their adolescent children know best what sorts of knowledge and skills are desirable. However, as state and private

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schools (categorized herein as ‘organizations’) together adopt policy based on overarching institutional incentives—such as uniform rules, curricular frameworks, and testing and assessment procedures—how differentiated is choice in reality? How substantive are the educational options for consumers?

This paper uses institutional analysis (North, 1990; Rodriguez *et al.*, in press) to investigate how educational organizations participate in what we identify as a process of convergence. To our knowledge, this is only the second occasion of applying institutional analysis to the field of education. Our argumentation arises from the recognizable reality of public–private convergence occurring within all sorts of institutions, such as health care and justice, in addition to the field of education. This paper will explore the process of convergence in education in a global context, then it will examine the institutional setting for voucher-receiving schools in the US, and finally the paper will show the effects of this process on the rational calculation of educational participants. As will become evident, the case study of educational vouchers reiterates the larger phenomenon of convergence occurring throughout society—a process facilitated by a new economic principle at work: the division of information (Rodriguez *et al.*, in press).

The division of information is a dynamic and reflexive process resulting partly from actions of individuals when encountering the myriad institutional rules, regulations, values, etc, at various choice events, such as choosing which school to attend. The institution (the larger environment within which individual organizations operate) may generate a division of information wherein individuals are faced with choice scenarios that increasingly privilege use of universal (sometimes referred to as codifiable) information over particular (or local) information. This outcome becomes increasingly likely because the present institution of education, for various reasons, is oriented toward expansion.

As it occurs amidst institutional expansion, information is divided based upon the following two factors: (1) its cost effectiveness—that is, its ease (lower relative cost) of handling or processing; and (2) its capacity for developing cooperation and trade on an impersonal level. Expanding institutions prefer universal information because it has the characteristic and function of lowering the cost of production; it consists of properties that are mostly shared, measurable, predictable, consistent, and order-generating. All such attributes tend to make communication easier, enabling calculation and trade to move forward toward lower-cost, impersonal, and (preferably) rapid exchange.

With cost (in money, time, or other terms) as a guide, the trade-offs decided upon by individuals and organizations induce aggregate change in the very content of rules, the direction of learning and policies, the discourse and logic—essentially all the existing formal and informal contours and constraints of the institution. Higher cost particular information—as represented by individual and local preferences in missions, curricula, resource allocation, organizational structure, and property rights—yields to lower-cost universal information now dominating the public–private educational environment (Rodriguez *et al.*, in press). The factors of scale and scarcity narrow educational policy formulation at both the institutional

and organizational levels, thus circumscribing both the manner and content of decisions people make.

Our approach is unique because it recognizes that, in order to secure a clearer picture of the effects of institutional expansion, the unit of analysis should shift from the organizational level to a wider institutional level. At the level of the organization, power, politics, and loci of decision-making are key variables (e.g., as used by Chubb & Moe, 1990), whereas the wider institutional level is where the framework of rules, rights, incentives, and agenda possess their own momentum and operate largely independent of position and personality (North, 1990, 2005). We propose that an institutional framework of analysis more informatively explains the variables that drive the voluntary and implicitly-coerced choices of persons and organizations, ultimately affecting the suitability of various information within educational 'trade'.

The principal concern is how the phenomenon of public-private convergence that we characterize influences the complex development of human capital. We will explore this effect by first looking briefly at the global context of convergence, then specifically at the institutional context of the US from which educational vouchers as deployed.

### **Global examples of public-private convergence**

Policy researchers in both developed and developing nations advocate systemic integration of private institutions and their assumed concomitant efficiencies into Governmental provision of public services. Concerns of largesse and inefficiency due to non-existent or ineffectual incentive structures in wholly public, non-competitive institutions drive much of the policy push underwriting convergence.

In recent years, international development groups (such as the World Bank, UNESCO, and IFC) have focused research toward facilitative investment and policy that capitalizes on existing educational networks in developing countries (Tooley, 1999). Contrary to prior history, most modern education provision worldwide is under the auspices of a Governmental authority. This is more the case at the primary level, while at the secondary level public and private sectors tend to offer an equal level of services (Lockheed & Jimenez, 1994). Given the corpus of work identifying the operational advantages and superiority in speed of obtainment of stated goals found in private organizations, investment and promotion of the extant private educational sphere seems to offer the most promise of robust and rapid improvement in resident human capital, particularly in developing countries. Even further, divesting Government provision of education into a private market is financially attractive for cash-starved Government, primarily because of the prospect of increased per capita educational return in Government outlays.

Private organizations are necessarily subject to collective interests when viewed as integral providers of education for a society. It is important to note that nearly all Governments retain some form of legal discretion over all types of formal schools under their geographical jurisdiction for economic, philosophical, moral, and ideological reasons. We suggest that public-private convergence accelerates as these

collective interests are expressed formally through systems of rules for accreditation, licensing and degree-attainment standards. The emerging educational trends in under-resourced countries illustrate the importance of methodological analysis of institutional rule sets and how they influence the successes and failures of educational organizations. A prime example is the trajectory of educational franchises.

In many developing countries, the most rapidly expanding private organizations that provide the 'safest' target for financial investment by foundations and international development groups are franchised educational outlets. The literature identifies these as attractive means for facilitating human capital development because their quality-control standards provide a clear means by which to gauge success, often defined as financial sustainability. A theoretical connection exists between the financial solvency of an educational organization subject to market forces and the quality of the education good it provides. These franchises are particularly committed to maintaining their brand-identity, which serves as the primary mode of communication to the public regarding quality of services they offer.

For a franchise, maintaining brand identity usually involves standardizing procedures and curricular materials across branches to make the franchises as uniform and controlled as possible. Franchises, by nature, have a more or less centralized authority in the franchisor, who maintains primary discretion of operation procedures (human resources) and product (curriculum). The National Institute for Information Technology (NIIT) of India has 400 campuses in India and is expanding to other Asian countries and the US. Organizationally, it specifies the curriculum down to the minutes spent on provided overhead transparencies. Teachers are technicians delivering the instruction. Educor (Damelin) of South Africa operates in a similar manner, centrally specifying facilities layout, curriculum, work assignments and assessments for its 43 branches. Many franchises focus on developing technical skills in students (NIIT) or preparing them for post-secondary education, such as the Objetivo/UNIP franchise in Brazil, with 450 branches as of 2001.

By choice, Tooley (1999) minimizes the actual educational outputs of the franchise school and focuses, rather, on the sustainability of the organization and its capacity for growth, measured appropriately in financial performance. There is, again, an assumed correlation between growth of the organization and obtainment of the education 'good' in a market system, i.e., expansion correlates directly with the quality of product offered. Since growth of the private educational market will require investor funds, reducing volatility and ensuring measurable outcomes becomes important in shaping an organization's commitments. As a result, these franchise organizations (by conscious decision) structure themselves in a hierarchical, centralized manner. Efficiencies realized by franchises begin to dominate the market, particularly when resources are scarce, and can have a homogenizing influence on the market. The particular contexts of the students (and families) involved are not structurally maintained in the curriculum or organization of the school; including such particular information is inefficient, costly and complicates growth of the franchise.

Existing private educational organizations, by entering into the evolving educational market, face increasing pressure to justify costs and prove the quality of the

product that they offer due to requirements for information exchange. Ecuador's EDUCO program, though 'getting families and communities more involved in their children's schooling', was faulted for not having a significant impact on students' test scores. This is attributed in the same paper to a lack of structural incentives for increased test scores (Jimenez & Sawada, 1998). Assessment becomes integral to proving product quality.

State subsidization of non-state educational systems exists in many countries throughout western democracies. Government distributed subsidies for private schools tend to come with intrusive strings tied to curricula, attendance, admissions, accountability rationales, and, in some cases, the certification of teachers and specific forms of school buildings. In other words, the trade-off of particular organizational features for public funds tends to be the price of entering or remaining within the institution, often managed by Government. In Ireland and Belgium, for example, the receipt of state subsidies authorizes broad regulation of non-Governmental schools. In the Netherlands, state funding of private schools is conditional on state regulation over the content of instruction. In Scandinavia, as in New Zealand, states subsidize private schools, though in the former, private schools tend to retain less autonomy and in the latter private schools allegedly retain greater autonomy.

Denmark has had significant state subsidies of private education since at least 1899. Notably, the Danish system currently has no formal mode of distributing information about respective schools' methods, academic accomplishments or programs; in fact, law does not permit dissemination of such information. Information, rather, travels by word of mouth between parents and throughout a community about a school's benefits. Market demand is increasing for this type of information to be readily available, much of which arises out of a desire to push the organizations to become increasingly internationally competitive on institutional terms and to use state resources effectively (Patrinos, 2001).

From these few examples, it becomes apparent that, given time, private organizations experience a real pull toward the information and organizational structure of their public counterparts when their status within the educational market is dictated from a higher institutional level. Even in an apparent 'free choice' market, the unavoidable fiscal and other performance requirements can conspire to create a trading environment dictated by rules which bear striking resemblance to those a central authority might create. Importantly, creating systematic incentives can be a means of recentralizing authority, which may often counteract the libertarian motivation of many reforms (Savedoff, 1997). The market variety itself would seemingly also retract and offer less high-quality providers as general trading rules become established.

### **Convergence as both a cause and effect of the global institutional framework**

Initially, standardizing forms of production helps organizations adapt their processes to obtain the expansion of educational attainment institution-wide. Attainment

serves as a proxy for the agreed policy (and thus institutional) end: individuals with desired skills and knowledge who are able to develop to their fullest potential. This is good insofar as attainment and its associated credential remain tightly linked with what individuals actually obtain. Earlier we have shown that expansion of the institution causes a division of information, and thus the cost inflates to undertake or maintain certain educational activities and priorities. The information used in these activities is high-cost in part because it cannot be exchanged easily. In order to continue to move the system towards the end—the collective ‘ought’ of more people climbing the ladder of attainment—incentives are instituted that encourage organizations to pursue the policy end. An organization’s reasonable economic behaviour is to alter those production factors that have the highest costs. Due to the division of information, the flexible, high-expense factor in this scenario is the particular information that appears to matter most to the real knowledge and skills development of individuals.

Willingly or unwillingly, when private organizations enter the trading market of the greater institution, they necessarily adopt the institutional rules of exchange. Private organizations rarely have the luxury of retaining their particularities unaltered. As a state or market-body manages the expansion of the institution, it must unify and flatten measures and rules across public–private boundaries. This suggests a liberal turnover in property rights. Property rights are person-held rights of access, use, and trade within an economic, political, or social activity. The withering away of local control occurs because institutional expansion—the granting of increased access to higher levels of attainment—carries with it a requirement for more standardized rules of production that must be made by an authority managing the enlarged zone of trade.

Institutional rules move uniformity along a flattened directional path. Truly centralized sets of institutional rules help to lower the costs of production making everything more uniform and more efficient: the disordered and non-uniform environment of professional judgment, which may look differently in different locations and schools, are seen as an obstruction to efficiency (e.g., they can’t be quantified or measured), and thus are formally and informally removed and have less operative force over time. All incentives for action and belief are lined up with the new and more precise rules as these control institutional costs. In agreeing with the view held by Adam Smith, R. H. Coase (1994) said, ‘the extent to which we follow any course of action depends on its cost’ (p. 99).

Both the receipt of public money and organizational gains to be had through prioritizing attainment act as strong incentives for private schools to trade in terms of the wider institutional sphere. Glenn and de Groof (2002), for example, report that a new generation of legislation is ‘sweeping across Europe as well as the American states and elsewhere, stressing core curriculum, common standards, education objectives and profiles, [and] final attainment targets’. Independent schools are far from immune or exempt from this development. For the sake of efficiencies of trade, the direction of human capital production in both public and private sectors is conceived increasingly in standardized and lower-in-cost terms.



## The institutional context for voucher-receiving schools in the US

In the US, the trajectory of standardization closely follows the history of assessment. Charles Eliot of Harvard University established uniform curricular and examination standards for college entrance by creating the College Entrance Examination Board (the College Board) in 1900. By setting uniform rules, the College Board instituted expectations and incentives for both public and private schools, creating a collective idea of what students ought to know and be able to do prior to entering college. The development of (normed) standardized examinations during the 1920s and 1930s, such as the new intelligence tests developed by psychologists, measured ‘not what students had learned but what they were capable of learning’ (Ravitch, 2006) in time-saving and cost-effective manners. By providing evaluation and prediction, assessment schemes and their successors morphed into the currency of educational exchange occurring amidst school organizations, public or private. Lower-in-cost systems of assessment oriented around educational attainment—both for students and the educational staff who interact with them—initiate the convergence between public and private, imputing differential costs upon an independent school’s traditional (or non-traditional) curricular and co-curricular emphases in comparison to its public counterparts.

During the 1980s, 1990s, and into the twenty-first century, immense institutional momentum emerged for applying undifferentiated, flat information across public and private boundaries. As of 2000, the US Department of Education reported that US states had requirements for *private* schools in matters including (i) the length of school year (37 states); (ii) teacher certification (13 states); and (iii) mandated curricular subjects (36 states). Federal legislation going forward is bound to advance the universal framework of rules thus facilitating a tighter convergence. For example, in 2005, the secretary of the US Department of Education was granted the authority to define the necessary and sufficient conditions as to what qualifies as a ‘rigorous’ high school curriculum (The Deficit Reduction Act of 2005, title VIII, section 8003). With \$3.7 billion in Pell Grants for college attendance for low-income students hinging on how this term is defined, this new central authority has the ability to alter curricula in public schools, charter schools, private schools, and home schools.

We have seen this information pattern already reaching maturity in large urban public school districts within the US (e.g., Los Angeles, California), where students are treated as interchangeable and indistinguishable units of production, perpetuating ‘lifelong’ student consumerism in an ever-expanding market. Yet many students do not quite fully bridge their education in directions that lead to responsible individual autonomy (Brighouse, 2000) and complex human development (Rodriguez *et al.*, in press). Private-independent schools may not decline to this level, but they will no less respond to the shifting incentive structure and will come to look and operate similarly to their public counterparts.

Higher education itself even exhibits these tendencies. The private Carnegie Foundation helps to regulate US higher education through its classification system (June 2006). The Mexican Government is increasingly regulating their higher

education to keep out 'junk universities' (Lloyd, 2006). China's 2002 'Law on the Promotion of Non-Government Education in China' regulates and constrains its private higher education. Further, the creation of the European Higher Education Area serves to synchronize (standardize) cross-border degree structures (Labi, 2005). Regardless of educational level, some sort of Government or quasi-Government registration, approval, accreditation, and licensing of private schools will increase, perhaps dramatically, in coming decades both in the US and elsewhere, as voucher schemes gain wider use and the forces of globalization exert more influence. Even without public-private voucher systems, informational convergence is clearly proceeding on its path. Where used, voucher systems can only accelerate this process of convergence by giving voices outside an organization effective power to initiate changes within it via financial means.

It is within this institutional context today that voucher-receiving schools in the US operate. Milton Friedman (1955) had argued that voucher-receiving schools could remain largely exempt from the centralizing informational tendencies of Government. Because money is itself an institution and represents rules, we are not as certain that private schools can avoid the effects of the division of information. As research begins to accumulate around private-independent education both globally and specifically in regards to the voucher movements, researchers may begin to recognize a twofold pattern. First, researchers will observe that independent schools operating within a western-style, flattened framework of education will trade-off their particular preferences and move closer toward universal standards defining what public and private gains are produced. As developed and developing societies embark deeper into the processes of the 'flat world' of globalization (Friedman, 2005; Stiglitz, 2003), these educational organizations will move deeper into the orbiting pull of the uniform, standardized environment of education where greater organizational gains can be achieved, informational costs may be lowered, and fewer trading disadvantages and penalties encountered.

Second, researchers may increasingly find in the coming decades a unification of ends and means oriented around educational attainment (i.e., attainments increasingly detached from actual knowledge and skills development). Examples will likely show in independent schools, which will incrementally adopt modes, methods, and missions oriented around mere attainment, including textbooks, standards-based curricula, quantitative testing and assessment procedures, and lower-cost pedagogical exchanges between students and faculty. They also will begin to adopt management practice and theory from the wider institution in a transition from managers of virtue to managers of demand (Tyack & Hansot, 1982). Will there remain some heterogeneity in private schools? Yes, but these differences will likely be micro in nature and at the margins of production activity.

### **A different kind of human capital**

There appears to be a common assumption that the information exchanged within the global institutional framework of education is costless or tends toward zero cost.



It is assumed that, since the trading environment is competitive and open, most rules implemented within it will necessarily be neutral in regards to maintaining collective and individual interests, or (put differently) global and local preferences. However, the reality is that this framework itself is incapable of sustaining or securing a just balance between the collective and the individual. Why?

What has seemed to elude theorists until recently is the cost differential and direction to information within the expanding institution and how its effects alter the rationality of educational policy and production. While increased competition may serve to increase the flow of information, the specific kind of information generated within systems of education tends to reduce in depth, lower in quality, and become almost entirely oriented in the direction of standardization. On the institutional level, states or trading organizations standardize competition and educational trade across public and private boundaries. The subsequent cost effects continually emphasize attainment (the universal) over specific and locally-informed knowledge and skills acquisition (the particular). The purpose for this universal direction is to manage more trade. Private-independent schools and voucher-receiving parents are unlikely to escape the effects of expansion as had been predicted by some economists and political theorists. At the organizational unit of analysis, the libertarian agency of individuals and the decision-making of organizations both appear functional. Under institutional analysis, however, theorists will begin to see that fewer options, choices, and directions shape educational decisions made under Government and markets. Standardization becomes the criterion and motivation of institutional rationality. In turn, managers of universal information identify personal or local preferences of individuals and organizations as irrational. These particulars appear to jam the educational exchange and trade network because of their inefficiencies and so are of little use within the wider institution.

As the basis for institutional rationality drifts from realizations of individual liberty in authentic educational choice, it becomes clearer that the problem of human capital development will not be resolved from within the present theoretic framework. Neither markets (e.g., the World Trade Organization) nor Government (e.g., the United Nations Education, Scientific, and Cultural Organization) today offer a theoretic super-framework that ensures an educational environment of the quality that maximizes the development of human capital in its full complexity (Becker, 1964; Rodriguez *et al.*, in press). It is a given from 25 centuries of educational history that the production of a complex human good requires a sizeable volume, quality, variety, and depth of information exchanged between school and pupil. Indeed, the production of an educated person (students and their teachers) is amongst the most complex and costly type of good that an institution can produce. Yet institutional scale and scarcity will have a progressively debilitating and costly effect upon the quality of human capital produced by schools over time. Privately held preferences of individuals and organizations gone unrealized within the system of production are one of the principal social costs of institutional expansion, not to mention the possibly billions of dollars in value which are not obtained due to educational under-development (Levin, 2005).

When all relevant causes and effects are considered, institutional expansion and its division of information is ultimately incompatible with the local, individualized and complex development of human beings. Institutional scale so alters educational production, orienting information toward uniformity in rules, curricula, and policy, that the human complexities and diversities of nature, nurture and willing are simultaneously depleted and simplified. By coupling production to the efficiencies of standardization, human development deteriorates as aims of production shift almost entirely toward collective, homogenous interests. The education good is thereby reducible to the undifferentiated social whole—a criterion familiar to members of the European Union as ‘social cohesion’. Contrary to what many social contract theorists assert, the collective interest imposes a severe cost on the individual and his or her complex development (and his or her liberty). More options are substituted with fewer, forcing persons unlike in talents, interests, and desires into like units of production. At its core, the principle of public–private convergence exhibits why it is difficult to retain individuality (and negative liberty) within collectivity (and positive liberty) (Berlin, 1969).

## **Conclusion**

The theoretic case of voucher-receiving private–independent schools sufficiently illustrates how educational freedom and property rights embedded within particular information are ultimately reconciled to the claims of society in universal or standardized information. We have argued the irregular point that public–private convergence in educational production attempts to resolve problems of scale and scarcity almost universally in the direction of collective interests. We line up with Hayek (1948) in respect to Government, but depart from his view of inherent efficacy of the market because of its subjection to the phenomenon of information division. This Government and market direction toward collective interests simply fails to harbour substantive advantages thought to exist for voucher-receiving individuals (parents and students) and private–independent schools. Rather, as institutional rules disperse the particularities of private schools, such organizations become less private and less inclined (or able) to shield from convergence their higher-quality varieties of rich educational exchange needed for individual human development.

The problem unavoidably surfaces when a parent or independent school voluntarily enters into the larger trading zone of education through the mechanism of a state-funded voucher. At this point, universal information can significantly alter the individual preferences of a parent or voucher-receiving independent school by circumscribing rational options. With respect to the private school, parents will likely insist that their son(s) and daughter(s) acquire education goods associated with the competitive market. Parents are likely unaware, however, that the market is altering their perceptions of the education good in the collectivist direction. The greater market of education under expansion adjusts the means to meet ends, altering the thought and aims of its producers and consumers. Thus education goods are altered by characteristics of universal information. That testing as ‘high stakes’ is seen as an

end—not as a means—is one ready example. Recognizing the shift in parents' preferences, private school leaders set their agenda within the framework of universal information. The chief idea here has been that it is very difficult for the private school to operate altogether outside of that dominant institutional framework governing educational trade. Even 'home schools' are being brought within the framework as states in the US (e.g., in California) and elsewhere find new ways of capitalizing upon tightened regulation of educational activity.

Institutional scale and scarcity so influence trade that virtually all elements of educational trade become oriented around cost (Coase, 1994), the features of which enforce conformity under the weight of expansion and its evolving rules and agenda.

It is intuitively plausible that voucher schemes in lower forms of education (primary and secondary schools) are unlikely to reveal significantly substantive alterations of student outcomes when all relevant variables are controlled (e.g., Witte, 2001). As the present institutional framework fails to lodge value in the types of higher cost exchange activity esteemed by (for merely one example) progressives such as John Dewey, the framework attenuates individualized preferences. In other words, theorists studying the individual-collective problem in education (or 'public choice', e.g., Buchanan & Tullock, 1962) appear to have overlooked the important fact that independent schools necessarily carry out their productive functions within the very institutional framework (and thus its information network) inflating their higher cost exchange activities. On the organizational level of analysis, independent schools may appear different from public schools in any number of ways, e.g., governance, curricula, teacher input, parent participation (Chubb & Moe, 1988, 1990). By focusing the lens of analysis outward to the broader sphere of trade—to the institutional level of analysis—both private and public schools will show they are operating within and adopting characteristics of the expanding institution and its network of information.

The division of information—the trade-off of the particular for the universal—occurring under expansion may occur at a different pace for public than private, but there should be little question that the division of information operates throughout all levels of the educational institution. Policy must recognize the costs the educational institution assigns to various educative activities if we hope to retain those aspects that we widely recognize are critical for communities to develop each person to his or her fullest capability and desire.<sup>1</sup>

## Notes

1. This essay is adapted from the forthcoming work by Rodriguez *et al.* (in press).

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## References

- Becker, G. (1964) *Human capital: a theoretical and empirical analysis, with special reference to education* (New York, National Bureau of Economic Research).
- Berlin, I. (1969) *Four essays on liberty* (Oxford, Oxford University Press).
- Brighouse, H. (2000) *School choice and social justice* (Oxford, Oxford University Press).
- Buchanan, J. & Tullock, G. (1962) *The calculus of consent* (Michigan, The University of Michigan Press).
- Chubb, J. & Moe, T. (1988) Politics, markets, and the organization of schools, *The American Political Science Review*, 82(4), 1065–1087.
- Chubb, J. & Moe, T. (1990) *Politics, markets, and America's schools* (Washington, DC, Brookings Institution).
- Coase, R. (1994) *Essays on economics and economists* (Chicago, The University of Chicago Press).
- Friedman, M. (1955) The role of government in education, in: R. Solo (Ed.) *Economics and the public interest* (New Brunswick, NJ, Rutgers University Press).
- Friedman, T. (2005) *The world is flat* (New York, Farrar, Straus & Giroux).
- Glenn, C. & J. De Groof (2002) What next for school vouchers?, paper presented at the *Educational Freedom and Accountability: An International Overview* conference, Kennedy School of Government, Harvard University, 17–18 October.
- Hayek, F. A. (1948) *Individualism and economic order* (Chicago, The University of Chicago Press).
- Jimenez, E. & Sawada, Y. (1998) Do community managed schools work? An evaluation of El Salvador's EDUCO program, *Working Paper Series on Impact Evaluation of Educational Reforms, Paper No. 8*, Development Research Group, World Bank.
- June, A. (2006) College classifications get an overhaul, *The Chronicle of Higher Education*, 52(26), March 3, p. A25.
- Labi, A. (2005) Europe's effort to standardize higher education now includes 45 nations, *The Chronicle of Higher Education*, 51(40), June 10, p. A34.
- Levin, H. (2005) The social costs of inadequate education. Available online at: [www.tc.columbia.edu/centers/EquityCampaign/symposium/resources.asp](http://www.tc.columbia.edu/centers/EquityCampaign/symposium/resources.asp) (accessed 15 January 2006).
- Lockheed, A. & Jimenez, E. (1994) Public and private schools in developing countries: what are the differences and why do they persist?, *ESP Discussion Paper Series No. 33*, Education and Social Policy Department, World Bank.
- Lloyd, M. (2006) Mexican lawmakers take steps to require accreditation in bid to root out 'junk' universities, *The Chronicle of Higher Education*, 52(1), January 4. Available online at: <http://chronicle.com/daily/2006/01/2006010043.htm>.

- North, D. (1990) *Institutions, institutional change and economic performance* (Cambridge, Cambridge University Press).
- North, D. (2005) *Understanding the process of economic change* (Princeton, NJ, Princeton University Press).
- Patrinos, H. (2001) *School choice in Denmark*, Author's preliminary report, distributed but not expressly endorsed by The World Bank, Washington, DC.
- Ravitch, D. (2006) The fall of the standard bearers, *The Chronicle of Higher Education*, 52(27), March 10, p. B44.
- Rodriguez, J., Loomis, S. & Weeres, J. (in press) *The cost of institutions: information and freedom in expanding economies* (New York, Palgrave-Macmillan).
- Savedoff, W. (1997) Social services viewed through new lenses: agency problems in health and education in Latin America, *InterAmerican Development Bank Research Network, Working Paper R-318*, Washington, DC, InterAmerican Development Bank.
- Stiglitz, J. (2003) *Globalization and its discontents* (New York, W. W. Norton Press).
- Tooley, J. (1999) *The global education industry: lessons from private education in developing countries* (London, Institute of Economic Affairs).
- Tyack, D. & Hansot, E. (1982) *Managers of virtue: public school leadership in America, 1820-1980* (New York, Basic Books).
- US Department of Education (2000) *State regulation of private schools* (Washington, DC, Office of Non-Public Education).
- Witte, J. (2001) *The market approach to education: an analysis of America's first voucher program* (New Jersey, Princeton University Press).