OECD Education Working Papers No. 25

Do Quasi-markets Foster Innovation in Education? A Comparative Perspective

Christopher Lubienski

https://dx.doi.org/10.1787/221583463325

OECD

Unclassified **EDU/WKP(2009)4**

Organisation de Coopération et de Développement Économiques
Organisation for Economic Co-operation and Development **04-Aug-2009**

English - Or. English

DIRECTORATE FOR EDUCATION

EDU/WKP(2009)4
Unclassified

DO QUASI-MARKETS FOSTER INNOVATION IN EDUCATION? A COMPARATIVE PERSPECTIVE

(Education Working Paper No. 25)

by Christopher Lubienski

In recent years, one popular policy strategy for encouraging innovation in the education sector approach has been to leverage market-style mechanisms to spur greater innovations in education sectors often dominated by state provision of services. Does the rate of innovation increase when educators are spurred on by competitive incentives? What types of innovations then appear, and in what levels of the educational organisation? This report reviews the evidence, drawing on information from over 20 countries. It pays special attention to the charter school experiment in North America, where reformers explicitly tried to create more competitive conditions in order to encourage the development of innovations in the education sector.

This report was prepared in collaboration with the OECD Secretariat for the project "Innovation Strategy for Education and Training" undertaken by the Centre for Educational Research and Innovation (CERI) (www.oecd.org/edu/innovation). It contributes to the human capital pillar of the OECD Innovation Strategy (www.oecd.org/innovation/strategy).

Stéphan Vincent Lancrin, EDU/CERI, Senior Analyst, Tel: 33(0) 1 4524 9229;
Email: stephan.vincent-lancrin@oecd.org

JT03268462

English - Or. English

Document complet disponible sur OLIS dans son format d'origine
Complete document available on OLIS in its original format

OECD DIRECTORATE FOR EDUCATION

OECD EDUCATION WORKING PAPER SERIES

This series is designed to make available to a wider readership selected studies drawing on the work of the OECD Directorate for Education. Authorship is usually collective, but principal writers are named. The papers are generally available only in their original language (English or French) with a short summary available in the other.

Comment on the series is welcome, and should be sent to either edu.contact@oecd.org or the Directorate for Education, 2, rue André Pascal, 75775 Paris CEDEX 16, France.

The opinions expressed in these papers are the sole responsibility of the author(s) and do not necessarily reflect those of the OECD or of the governments of its member countries.

Applications for permission to reproduce or translate all, or part of, this material should be sent to OECD Publishing, rights@oecd.org or by fax 33 1 45 24 99 30.

---

www.oecd.org/edu/workingpapers

Applications for permission to reproduce or translate
all or part of this material should be made to:

Head of Publications Service
OECD
2, rue André-Pascal
75775 Paris, CEDEX 16
France
Copyright OECD 2009

ABSTRACT

The education sector is often linked to innovation, particularly in its role in providing the training and skills associated with workforce innovations and economic growth. In this respect, policymakers look to schools to nurture creativity, initiative, adaptability and problem-solving. Yet it is also important to understand innovations in the education sector itself. The new imperatives of the global economy require new skills, so school must innovate to find ways of meeting these demands. Furthermore, schools need to find better strategies for educating communities and students under-served or even essentially excluded by national education systems, not only to draw on these neglected pools of human capital, but also as a matter of social justice. Finally, innovations within the education sector can improve outcomes, often without utilising greater levels of resources.

Policymakers are thus understandably interested in how to best encourage innovation in the education sector, and in particular in creating more innovative environments for teaching and learning that improve educational opportunities and outcomes for all students. While there are a number of policy strategies available for pursuing this goal, one of the more popular approaches in recent years has been to leverage market-style mechanisms associated with the private business sector to spur greater innovations in education sectors often dominated by state provision of services. While the incentives for improvement represented in more market-based approaches reflect a compelling logic of organisational behaviour and change, questions then emerge regarding how this logic plays out within the education sector. Does the rate of innovation increase when educators are spurred on by competitive incentives? What types of innovations then appear, and in what levels of the educational organisation? Do various types of organisations respond differently in pursuing or embracing innovations? And given the multiple and often competing goals for education, how do different types of innovations inter-relate in supporting or subverting their immediate objectives?

This report seeks to address critical issues such as these by synthesising the evidence on innovations in more market-driven education systems. The analysis draws on data from over 20 OECD and non-OECD countries, including both developed nations that seek to move beyond established systems of state-run schools, and developing nations where formal and de facto policies promote more free-market approaches to educational expansion. In doing this, the report focuses on the primary and secondary levels, where education is usually compulsory. The more universal nature of educational access at those levels provides a different set of conditions and incentives compared to the post-compulsory tertiary level. And the report pays special attention to the charter school experiment in North America, where reformers explicitly tried to create more competitive conditions in order to encourage the development of innovations in the education sector. Policy approaches such as this that use decentralisation, deregulation, greater levels of autonomy, competition and choice may have singular potential to induce innovations in the education sector, both in how education is organised and the school content that is delivered — critical concerns if the education sector is to be more effective and reach under-served populations.

Organisation of this report

This analysis is organised as follows: The first section considers the imperatives for innovation in the education sector, focusing on policy goals and expectations for innovation from reforms that leverage increased autonomy and choice. The range of policy approaches is then described, highlighting commonalities and areas of overlap in various countries, suggesting some general policy patterns embraced to induce or otherwise encourage innovation. Then, we survey some of the patterns resulting from such approaches, and identifying emergent themes from the range of outcomes. The second section of the report discusses these outcomes in view of various meanings of the concept of "innovation." The OECD offers a useful framework for understanding various types of innovation. This report also considers issues of the effects, nature, pace, inter-relationships, and sources of innovations, drawing on evidence from the multiple nations surveyed in this analysis, but with a particular focus on charter schools in the United States and Canada. Finally, the third part of the report turns to a discussion of causes of, and constraints on, innovation in the education sector in order to better understand the patterns of innovation in and across different educational organisations. This discussion includes considerations of conditions in which various types of innovations are likely to occur, and implications for further research and policymaking around this issue.

RÉSUMÉ

Le secteur de l'éducation est souvent associé à l'innovation, notamment lorsqu'il s'agit de proposer des formations et des compétences liées aux innovations touchant à la main-d'œuvre et à la croissance économique. Dans ce domaine, les responsables publics veulent que l'école favorise la créativité, le sens de l'initiative, la capacité d'adaptation et l'aptitude à résoudre des problèmes. Toutefois, il est également important de comprendre les innovations intervenant dans le secteur éducatif lui-même. Les nouveaux impératifs de l'économie mondiale demandent des compétences nouvelles, et l'école doit donc innover pour répondre à ces attentes. En outre, les établissements scolaires doivent trouver de meilleures stratégies pour éduquer les groupes et les élèves moins bien desservis, voire quasiment exclus, par les systèmes éducatifs nationaux, non seulement pour pouvoir puiser dans ces réserves négligées de capital humain, mais aussi pour une question de justice sociale. Enfin, les innovations dans le secteur de l'enseignement peuvent en améliorer les résultats, souvent sans mobiliser de ressources supplémentaires.

Les pouvoirs publics souhaitent donc naturellement savoir comment favoriser au mieux l'innovation dans le secteur éducatif et, en particulier, comment créer des cadres pédagogiques novateurs, qui permettent d'améliorer les perspectives et les résultats scolaires de tous les élèves. Plusieurs stratégies sont possibles à cet égard, mais l'une des plus répandues ces dernières années consiste à exploiter des mécanismes inspirés du marché et associés au secteur privé afin de stimuler des innovations de plus grande ampleur dans des services éducatifs souvent assurés par l'État. Si les mesures d'incitation à l'amélioration présentes dans les approches axées sur le marché traduisent une logique incontournable du comportement et de l'évolution des organisations, se pose alors la question de savoir comment cette logique s'inscrit dans le secteur de l'éducation. Le rythme des innovations s'accélère-t-il lorsque les éducateurs sont encouragés par des incitations fondées sur la concurrence ? Quels types d'innovation apparaissent alors, et à quels niveaux de l'organisation du secteur éducatif ? Différents types d'organisation répondent-ils de manière différente à la recherche ou à l'adoption des innovations ? Compte tenu des objectifs multiples et souvent opposés de l'enseignement, comment différents types d'innovation agissent-ils les uns sur les autres pour soutenir ou au contraire saper leurs objectifs immédiats ?

Le présent rapport a pour objet d'étudier des questions fondamentales telles que celles-ci, en faisant la synthèse des informations disponibles sur les innovations ayant trait à des systèmes éducatifs qui reposent davantage sur les mécanismes du marché. L'analyse s'appuie sur des données tirées de plus de vingt pays membres et non membres de l'OCDE, y compris des pays développés cherchant à dépasser le stade du système établi des établissements scolaires gérés par l'État, et des pays en développement où les politiques officielles et effectives encouragent des approches plus libérales de l'expansion du secteur éducatif. Dans cette perspective, l'étude privilégie l'enseignement primaire et l'enseignement secondaire, où la scolarité est généralement obligatoire. Le caractère plus universel de l'accès à l'éducation à ces niveaux présente des conditions et des incitations distinctes de celles de l'enseignement supérieur post-obligatoire. Ce rapport prête en outre une attention particulière à l'expérience des établissements scolaires à financement public et à gestion privée (les *« charter schools »*) en Amérique du Nord, où les responsables de la réforme ont tenté de manière explicite de créer des conditions plus concurrentielles afin d'encourager les innovations dans le secteur éducatif. Les approches de ce type, qui utilisent la décentralisation, la déréglementation et le développement de l'autonomie, de la concurrence et du choix, pourraient singulièrement encourager les innovations dans le secteur éducatif, tant au plan de l'organisation de l'enseignement qu'au niveau du contenu des programmes scolaires – des préoccupations essentielles si le secteur de l'éducation veut être plus efficace et atteindre les populations moins bien loties.

Structure du rapport

L'analyse se présente comme suit : la première partie porte sur les exigences de l'innovation dans le secteur éducatif, l'accent étant mis sur les objectifs stratégiques et sur ce que l'on attend en matière d'innovation dans le cadre des réformes visant à renforcer l'autonomie et le choix. L'éventail des approches existantes est ensuite décrit, en soulignant les points communs et chevauchements dans plusieurs pays, qui semblent indiquer des cadres d'action généraux employés pour stimuler ou favoriser l'innovation. Certains modèles découlant de ces approches sont ensuite étudiés, de même que les questions qui se font jour au vu de leurs multiples résultats. La seconde partie du rapport étudie ces résultats à la lumière des diverses interprétations du concept d'« innovation ». L'OCDE propose un cadre utile pour comprendre les différents types d'innovation. Ce rapport aborde également la question des effets, de la nature, du rythme, des liens réciproques et des sources des innovations, en s'appuyant sur des données provenant des nombreux pays étudiés pour cette analyse, mais en s'attachant plus particulièrement aux établissements scolaires à financement public et à gestion privée aux États-Unis et au Canada. Enfin, la troisième partie du rapport examine les moteurs de l'innovation, ainsi que les contraintes qui lui sont associées dans le secteur de l'éducation, afin de mieux comprendre les modèles d'innovation au sein et entre différentes organisations éducatives. Sont également étudiées les conditions dans lesquelles différents types d'innovation sont susceptibles d'apparaître ainsi que les implications au regard de la recherche future et de l'élaboration des politiques dans ce domaine.

TABLE OF CONTENTS

DO QUASI-MARKETS FOSTER INNOVATION IN EDUCATION? A COMPARATIVE PERSPECTIVE 8

1. Introduction 8
2: Quasi-Market Mechanisms in Education 9
2.1. The Logic of Quasi-Markets for Educational Innovation 10
2.2. The Global Movement towards Quasi-Markets for Education 12
3: Innovation, quasi-markets and education 19
3.1. Understanding Innovation 19
3.2. Evidence of Innovation in Education Markets 21
3.3. Patterns in Innovation in Educational Quasi-Markets 27
3.4. The Case of North American Charter Schools as Engines of Innovation 28
4: Policy implications 36
4.1. Opportunities and Barriers to Innovations through Education Quasi-Markets 37
4.2. Quasi-Markets, Pathologies and Incentives for Innovation 37
4.3. Consumer Markets and Education Markets 38
4.4. Corporate Models for Innovation in Education 39
4.5. Position, Emulation and Duplication in Competitive Education Markets 40
4.6. Other Considerations for Further Research 41
5. Conclusion 43

REFERENCES 49

DO QUASI-MARKETS FOSTER INNOVATION IN EDUCATION? A COMPARATIVE PERSPECTIVE

by Christopher Lubienski[1]

1. Introduction

1. Reformers around the globe have noted the need for innovations in the way children are currently educated. Particularly in view of the more competitive global economy and the technological demands of the increasingly integrated information society, school systems developed in response to industrial or even agricultural socioeconomic models appear to be insufficient for preparing all students with opportunities to succeed. And the recognition of the need for innovation is widespread. Policymakers hoping to strengthen their country's economic competitiveness look to more innovative education systems to produce the skills and training needed for success in the global economy. Reformers concerned about equity point to populations marginalised in traditional school structures as evidence of the need to try new approaches. Many reformers want to find different ways of teaching in order to raise academic achievement in state-funded school systems. Others resist the uniformity associated with the antiquated industrial model of schooling. Consequently, policymakers in many countries seek to encourage substantially greater rates of innovation in educational practice.

2. But education reformers have too often been discouraged by the slow pace of change, and frustrated in their attempts to directly dictate improvements in educational processes in state systems that are famously resistant to change and quite comfortable with bureaucratically enforced standardisation. In view of the apparently inherent lack of external incentives for innovation in state-run school systems, policies in a number of nations have leveraged market-style mechanisms such as consumer choice, decentralised school governance, increased operational autonomy, and competition between schools as the means by which to create the environment and the motivation for schools to develop educational innovations. That is, rather than mandating specific curricular programs, policymakers have adopted innovations in educational governance in order to foster innovations in education — often in curriculum and instructional practices. Indeed, concerned about the apparent deadening uniformity imposed by monopolistic education bureaucracies, policymakers in many different countries endorse "quasi-market" mechanisms of consumer choice and competition between autonomous providers as the key factors that emulate the efficiency, effectiveness and entrepreneurial tendencies of the private sector (Bartlett, 1993; Walford, 1996; Whitty, 1997; Wolff *et al.*, 2005). The motivating premise of this more market-oriented approach holds that, by deregulating schools and freeing up entry for new education service providers to create opportunities and incentives for schools previously shielded from competitive forces, and by liberating consumers on the demand side as well, schools will respond to the threat of losing students and funding by innovating or otherwise improving their effectiveness (on "incentivists, see Greene *et al.*, 2008; Stern, 2008). Presumably, families will choose schools with superior academic quality, and schools that fail to perform may face budgetary consequences or even the prospect of literally "going out of business" (Bast and Walberg, 2004; Boldt, 1999; Carpenter, 2005; Finn, 2008; Gilder, 1999; Ladner and Brouillette, 2000).

3. This report focuses specifically on this issue of innovation in primary- and secondary-level school systems that use quasi-market mechanisms — appraising this relationship between such mechanisms and innovation. The analysis synthesises evidence on educational innovation in such school systems in a number of OECD- and non-OECD, developed and developing countries where policies promote at least one of three factors: (1) more consumer choice of schools, (2) more school-level autonomy, and/or (3) more competition between schools. These systems utilise a number of models, including publicly funded and privately administered schools, schools run by corporations, newly autonomous established schools, and schools created to be free of bureaucratic constraints specifically in order to develop innovative practices.

4. This review of the evidence indicates that quasi-market mechanisms are succeeding in a number of areas. But a closer examination of patterns of continuity and change suggests significant distinctions in how innovations can be generated at different levels of educational organisations, and — in addition to the role of incentives — points to the importance of the institutional conditions in which incentives may be more effective. It highlights areas requiring further investigation in order to better understand the full potential of quasi-market mechanisms for spurring innovations to improve education. The concluding discussion weighs the accumulated evidence on educational innovations in quasi-market systems, showing that issues inherent to the educational enterprise may make the question of applying market-like incentives to schools much more complex than is indicated in incentivist logic.

2. Quasi-Market Mechanisms in Education

5. In understanding the role of quasi-markets in education, it is useful to note that there are in fact a number of compelling arguments for families to select between competing schools in deciding where to send their children. For instance, a case could be made that children from marginalised communities should be allowed to attend higher quality schools that are superior due to competition, or at least schools that more closely match their preferences and cultural assumptions. Others hold that parents have an inherent right to choose the education for their children that best fits their values — an idea enshrined in the United Nations Universal Declaration of Human Rights. Choice and competition could also offer opportunities for teachers to create new schools or otherwise implement a new or alternative vision for schooling. And economists point to benefits from competition in terms of increased innovation, responsiveness to consumers' preferences, and gains in productivity.

6. This last view holds particular appeal for policymakers concerned about stagnating school performance, particularly in state systems administered by bureaucracies. Concerned about both equity and economic competitiveness, starting in the 1980s and 1990s, policymakers in a number of countries have cast a cold eye on the top-down dynamics of centrally administered educational systems, which are associated with standardisation and uniformity. For instance, in the 1980s, New Zealand officials sought to counter the "overcentralised" and "rigid" educational bureaucracy that was seen to be thwarting "good management practices," "responsiveness," "flexibility" and "adaptability" for schools, and in particular holding back "initiative, independence, personal responsibility, entrepreneurial abilities" for individuals working in schools (Picot and Taskforce to Review Education Administration, 1988, pp. xi, 4, 20, 22). Similarly, Chilean reformers expressed concerns that centralization associated with top-down administration structures inhibited classroom innovation and, therefore, achievement (Gauri, 1998, p. 39; Parry, 1997b). While the education sector has, in a sense, always been innovating as it gradually adapts to new social conditions and requirements, state-run systems often appear to be more adept at *conforming* to new conditions, often for the benefit of bureaucrats, rather than *developing* the "disruptive" types of innovations that can lead to substantive improvements in system performance, integration with economic imperatives, driving economic growth, access, and efficiencies (Christensen *et al.*, 2008). This has probably been most evident in discussions of lagging achievement in state-administered systems in post-industrial nations, where policymakers explicitly linked mediocre academic performance, or even stagnant

economic growth, to the failure of the state school sector to evolve along with or ahead of changing social and economic conditions (OECD, 1994; St. John-Brooks, 1995).[2]

7. The way this problem is framed also points to an obvious policy solution. Reformers associated with Public-Choice theory critiques of public administration argued that this malaise is a natural result of monopolistic (or, in some cases, quasi-monopolistic) state control over educational administration (e.g., Peterson, 1990). While state administration of public or social services is often premised on the idea of market failures in these sectors, Public-Choice theorists point to *government*-failures inherent in bureaucratically controlled systems shielded from competitive incentives (Buchanan and Tullock, 1999; Tooley, 1995). For instance, according to this line of thought, since centralized bureaucracies exercise control over local schools, there is little opportunity for teachers or school administrators — those with the most knowledge about local community preferences and contexts — to innovate. Similarly, since top-down administration relies on rules and regulations, rather than experimentation and rewards, in this logic there are few if any incentives — and in fact there may be sanctions and disincentives — for trying new ideas that are "outside the box" of bureaucratically permitted approaches.

8. Inasmuch as this is the primary factor inhibiting innovation in education, the solution then centres on breaking up the state's monopolistic control over publicly funded schools, or otherwise compelling the state schools to complete and adopt organisational orientations and behaviours not aligned with their monopoly status. While some systems have gravitated more toward private or privatised models of education, other policymakers have sought to use market-style mechanisms within the state sector and between state entities and non-state actors, as has been done for other public services (Whitty and Power, 2000b). Such policy schemes draw on market mechanisms such as consumer choice and competition for clients, yet typically maintain a substantial role for the state in areas such as funding, compelling consumption of school services, and — to varying degrees — curriculum, assessment, or regulation of employees and institutions. Therefore, despite efforts by some to move schooling into more of a purer, laissez-faire market model, market mechanisms in education in many cases is best thought of as a "second-best" or "quasi-market" (Lubienski, 2006b).

2.1. The Logic of Quasi-Markets for Educational Innovation

9. Quasi-markets have, in recent decades, become a popular approach with policymakers for addressing delivery, access, innovation, effectiveness and efficiency problems with state administration of public services, including education. The approach is part of the broader policy perspective that emphasises decentralisation away from larger, centralised bureaucratic entities, which typically are input-oriented. Like Public-Choice theory's use of economic assumptions and analyses of the state sector, this "new public management" perspective draws on the Public-Choice critique of state administration of public services, arguing that market mechanisms offer a more suitable alternative for providing local services that are efficient, effective, and innovative in responding to varied consumer preferences. Although important aspects of many public service sectors — such as universal access or equity — defy more comprehensive applications of purer market arrangements, market-like approximations can still be arranged in providing more efficient services tailored to individual or community preferences.

10. The quasi-markets promoted by new public management are created through a number of policy elements (St. John-Brooks, 1995):

- As noted, quasi-markets are premised on *decentralising* authority away from large, input-based bureaucracies to smaller, local organisations, which are then measured on outcomes.

- This decentralisation is accomplished largely through *deregulation*, where local organisations are given substantially more operational autonomy, often under the implicit understanding that they can then find more effective ways of improving services.

- Moreover, not only are the decentralised state organisations then expected to compete with each other for funds based on the number of clients they attract, but private sector organisations are also allowed to enter the quasi-market and compete for funding, thereby creating *cross-sectional competition*, and diminishing public-private distinctions.

- When service-users are then given the *freedom to choose* from a range of service providers — rather than being assigned to a local government provider — *competitive dynamics* can emerge as various providers have to strive to attract and satisfy users, or "consumers."

- Hence, quasi-markets can create competitive imperatives that *incentivise* organisational behaviour of service providers to be more innovative both in responding to consumer demands and in finding efficiencies that allow for more favourable revenue balances.

- Notably, quasi-markets put the *focus more on local organisations as output-driven entities*, rather than large input-driven bureaucracies to which the local organisations had previously been accountable.

- Instead, local organisations are *accountable to consumers*, having to demonstrate effectiveness and responsiveness to users, while users indicate preferences through market-style signals such as the threat of exit (Hirschman, 1970).

11. In education, this could take the form of "public," "private," and/or various hybridised organisations administering local schools. Regardless of their institutional type, these autonomous entities are financed largely by competitive, per-pupil funding, rather than through budgeting by centralised ministries, or regional or local educational authorities. They therefore have the opportunities and incentives to innovate to find more efficient ways of responding to varied family preferences for education. Meanwhile, families can choose options that more closely reflect their preferences from a range of what may be smaller-scale schools. Since there may be myriad preferences for competing outcomes, schools should be accountable to the users who choose them for different reasons, rather than to centralised bureaucracies, which may measure outcomes on only one dimension such as completion rates.

12. This logic on quasi-markets for incentivising change in education is associated with various thinkers, including many economists, who have taken an interest in economic analyses for reforming the organisation of education and improving its outcomes. The late E.G. West, a leading critic of public provision, noted that, since innovation tends to originate outside the state sector in education, competition would undermine the bureaucratic education monopoly, thereby "reducing costs, increasing quality, and introducing dynamic innovation" (cited in Carnoy, 1998a; see West, 1982, 1995, 1997). John Chubb and Terry Moe's (1990a, 1992) influential perspective — drawing on their background in Public-Choice theory and energy market regulation — posits that liberating both consumers and providers will diversify options (see especially, 1990, pp. 221f.) Before his death in 2006, Nobel laureate economist Milton Friedman (1994), the intellectual author of market-based education, focused on how innovation would lead to new options, predicting "many more choices, there will be a whole rash of new schools that will come into existence" (p. 101); the consequent "competition would do much to promote a healthy variety of schools" (Friedman, 1955, p. 130).

13. This line of reasoning is compelling in its predictions on innovation, or lack thereof, in different types of schools, because it draws on a strong and established theoretical presumption that public provision

(and, therefore, regulation) is fraught with anti-innovative constraints caused by "provider capture" (B. Levin, 1997; B. Levin and Young, 1999) — the Public-Choice theory of a system directed toward the needs of its bureaucrats, which in this case represents the "education establishment" of teachers unions, administrators, etc.. Therefore, entrepreneurial freedom is thought to be best positioned to achieve innovation, which would be most evident in a more diverse range of educational options. Thus, Friedman (1980, p. 163) believes that, by allowing easy entry on the supply side, a market-oriented plan

> would produce a much wider range of alternatives — unless it was sabotaged by excessively rigid standards for approval. The choice among public schools themselves would be greatly increased.... And most important, new sorts of private schools could arise to tap the vast new market.

14. Fellow Nobel laureate economist Gary Becker (1999) proposes market mechanisms "to bring the innovations and competition of the private sector into a government-funded school system. Competition not only would better match education to student needs, but also would induce a more rapid rate of innovation into curriculum and teaching." Likewise James Tooley, director of the E. G. West Centre at Newcastle University, sees the purpose of parental choice of state sector schools to "encourage some diversity of provision" (Tooley, 1999a, p. 9). This view is not limited to economic fundamentalists. In arguing for market mechanisms for organising education, Marxian economist Herbert Gintis (1995), of the University of Central Europe and Siena University, maintains that regulated systems tend to be slower in adopting many types of innovations.

2.2. The Global Movement towards Quasi-Markets for Education

15. In order to foster quasi-markets in education, a number of nations have adopted policies or reforms that adhere in varying degrees to the prescriptions for decentralised autonomy, deregulation, and competitive incentivisation for education systems. These policies are then thought to promote innovation in education: within classrooms, in governance and management, in content, in information and delivery systems. The examples of nations moving to, or using, various approaches to quasi-market in education in the last three decades are numerous. (These have been described in great detail elsewhere, so here I only summarise some of the main pertinent features.) And, despite differences, these policy approaches can be represented in general categories reflecting the ways in which they embody the use of market models, from more ad hoc to more concerted efforts to embrace aspects of quasi-markets, to even more explicit efforts to adopt purer market models. While distinctions between these categories are rather blurred, they are nonetheless useful in understanding how quasi-market mechanisms can be leveraged to reform education.

2.2.1. Decentralisation, Deregulation, and Consumer Choice

16. In recent decades, policymakers in the United Kingdom implemented explicit policies of decentralised autonomy (despite concurrent policies of centralisation in assessment and curriculum) and choice within the publicly funded sector that effectively created what a leading proponent of these reforms calls a "virtual voucher" system.[3] In response to perceived "anti-entrepreneurial" tendencies in the state system, choice reforms expanded with the 1988 Education Reform Act and the establishment of City Technology Colleges (CTCs) and Grant-Maintained (GM) schools (Walford and Miller, 1991, p. 6). CTCs represented an effort to create "centres of innovation" for curriculum, pedagogy, funding and management, and thereby diversify options for consumers (Department for Education, 1992; Department of Education and Science, 1986; OECD, 1994; Walford and Miller, 1991, p. 95; Whitty *et al*., 1993).[4] GM schools (later "foundation schools" under Labour) would "opt out" of control of local educational agencies (LEA), and received funding directly from the central government; new entrants established by independent and religious groups could "opt-in" to state funding as autonomous schools. State-funded schools fall into different categories of regulation and government funding, but government incentives mean that the vast

majority of state-funded schools specialise in particular subjects, within a national curriculum framework. Overall, this system elevates market accountability through consumer preference into the state-funded sector — about 93% of the market. The 1993 Education Reform Act encouraged diversification in education by further decentralising governance away from LEAs to individual schools competing with each other for students and per-pupil funds (Vann, 1998; Walford, 2008). For the most part, more recent New Labour governments have maintained these general quasi-market approaches as a way to improve education.

17. The United States has a far more decentralised system, which has traditionally drawn a stark distinction between public and private sectors in education. Previous choice schemes existed in the form of magnet (specialist and/or selective) schools and open-enrolment options in some districts, and further decentralisation was pursued in site-based decision-making (SBDM) reforms in several states. As in other nations, though, policymakers have been moving towards quasi-markets since the early 1990s, in this case using both federal/national as well as state and local policy strategies. While the private (mostly religious) sector has stayed just above 10% of the market share for years, over the last two decades, legislators have created publicly funded voucher programs for disadvantaged students attending private schools in three major cities, including Washington, DC and post-Katrina New Orleans, and across two states; tuition tax credits in six other states allow parents or organisations to write-off some of the costs of private education (Welner, 2008), with the US Supreme Court ruling in 2002 that such programs were constitutional. In the public sector, open-enrolment plans have expanded, and 41 states and the District of Columbia have authorised charter schools, as alternatives to district-controlled schools and laboratories for the public school system (see below).

18. Other nations have also embraced policies associated with quasi-market mechanisms to varying degrees. In Germany's federal system, policymakers have promoted deregulation and school-level autonomy in various German *Länder* — all *Länder* allow parents to choose public or private schools, and since entry into the sector is constitutionally guaranteed for new providers so long as they do not replace public school services, they tend to offer differentiated programs which are relatively unregulated (Reuter, 2004; St. John-Brooks, 1995; Tooley, 2002). Japan also provides partial subsides for private high schools, and both public and private schools charge fees; choice is being introduced in many areas in the state sector, but it is already firmly a feature of the private *Juku* or cram schools (Dierkes, 2008; West, 1997).

2.2.2. Comprehensive Marketisation Efforts

19. In many ways, Australia and New Zealand have led the policy movement by embarking on more concerted efforts to adopt comprehensive quasi-market systems, but in distinct ways. Since the early 1970s, Australia has incrementally expanded differentiated public subsidies for private schools, and has thus substantially expanded the private sector's share of the education market so that one of three students attends what are typically Catholic or more affluent private schools; more recently, quasi-market elements have become greater policy priorities, with ease of entry for new providers, comparative information for consumers, specialised and selective programs in the public sector, and devolution of management to more autonomous or even self-governing schools, specifically to nurture innovative schools (Angus, 2003; Forsey, 2008; Glenn, 2003; Hirsch, 1995; OECD, 1994; Kober, 2000a, 2000b). On the other hand, New Zealand quasi-markets were formed largely in the state sector as part of a wider market-oriented approach to social services, starting in the early 1980s by successive Labour and National governments (Mikuta, 1999). This approach to education emerged in the commissioned Picot Report (1988), *Administering for Excellence,* which proposed decentralising governance toward a market-style model for schools in order to liberate the entrepreneurialism of educators, and was the basis for the policies framed by the Treasury in *Tomorrow's Schools* (Treasury, 1987). Consequently, New Zealand's education system is driven by parental choice and competition between autonomous schools (predominantly within the state sector) governed by councils of parents, teachers, and businesses people (Williams *et al.*, 1997). They are

responsible for attracting "consumers," charge user fees (or "donations") in some instances, and are legally recognised by the state through contracts or "charters" between a school's board of trustees and the central government in order to set performance standards (Fiske and Ladd, 2000, 2003; Lange, 1988; Lauder *et al.*, 1999; Mikuta, 1999; Picot and Taskforce to Review Education Administration, 1988).

2.2.3. State Funding of Private/Religious Schools

20. Other nations have even longer experience with government subsidies for private or independent schools. The Netherlands has provided financing for both public and private school sectors for almost a century; currently, private schools, which are typically church-affiliated but funded on equal footing with public schools, enrol almost seven in ten students. Dutch schools — public or private — have control over pedagogical matters, and the right for individuals or groups to enter the school quasi-market is constitutionally guaranteed (Amelsvoort and Scheerens, 1997; Dijkstra *et al.*, 2004; OECD, 1994; Mouw, 2003; Vermeulen, 2004; West, 1997). Similarly, Belgium dealt with the problems of pluralism (although with a more established tradition of decentralisation) through a strong commitment to educational freedom in the form of subsidies to non-state schools; for instance, two of three Flemish students attend such schools (De Groof, 2004; Glenn, 2003). Ireland, on the other hand, with a single dominant denomination that essentially ran state schooling, responded to calls for decentralisation in the mid to late 1990s by establishing mechanisms for various *patrons* to authorise new schools, and implemented regional and site-based school authorities; the idea of parental choice of schools is widely accepted (Fox and Buchanan, 2008; Lennon and White, 1997).

21. Likewise, the centralised French education traditionally reflected Napoleonic state-building concerns, as well as tension with the strong, Catholic, alternative system. Since the Education Act of 1989, France has devolved responsibility to regional and local authorities, and secondary schools have been given more operational autonomy; private schools can choose what level of subsidy and state regulation they receive, and there are high rates of mobility between sectors (Kober, 2000a; Meuret, 2004; St. John-Brooks, 1995). Spain is similar to the French case in some ways, but used independent schools to aid expansion of access to education after the Franco years; private schools can specify the level of funding and regulation they receive. There has also been a fair degree of decentralisation, with all 17 regions in Spain having gained control of schools by 1997, and the 1990 Education Law giving schools budgetary autonomy as well as the ability to develop their own curricula within a national framework (Center on Education Policy, 2000; St. John-Brooks, 1995). The ten provinces in Canada take varying approaches to education policy, but different provincial systems offer partial or full coverage for private/religious schools, often in exchange of greater levels of regulation, and Alberta is similar to many states in the US in that it has embraced charter schools (publicly funded but independently managed) to promote innovation (Davies and Aurini, 2008; Glenn, 1989; Kober, 2000a; West, 1997).

2.2.4. State Funding for Vouchers

22. In the 1980s, Chile moved to a voucher system as part of the Pinochet government's broader move toward markets. Notably, these measures followed from perception that an overly centralised system constrains classroom innovation and, therefore, achievement (Parry, 1997b). Chilean education reformers — influenced by Public-Choice theorists — then focused on user-based public funding and decentralising governance (Carnoy and McEwan, 2003; Gauri, 1998; McEwan and Carnoy, 2000; Parry, 1997a). A decade later, Sweden embraced public-sector choice and vouchers for private schools in the early 1990s as part of broader move away from welfare state,[5] with both independent and public schools enjoying substantial control over budgets and curriculum decisions in many administrative municipalities, and school management companies expanding their presence. Swedish parents have a legal right to choose a private school, with the private school share of the market increasing from 1% at the start of the reforms to 17% of secondary and 9% of primary students in 2008, and most municipalities encourage choice and

differentiation in the public sector as part of an effort to make schools accountable to parents — with "full competition between schools" in urban areas (Daun and Siminou, 2005, p. 31; see also van Amelsvoort and Scheerens, 1997; Daun, 2003; OECD, 1994; Rising, 2008; St. John-Brooks, 1995; West, 1997).

2.2.5. Other Examples of the Global Movement toward Quasi-Markets

23. Many other nations have also adopted elements of quasi-market approaches to education. Poland provides a partial subsidy for accredited, typically non-sectarian schools (West, 1997), as does Russia, although gaining accreditation there can be difficult (Glenn, 2003). The recent establishment of private international schools in Singapore gave parents a choice not previously available under the centralised, exam-based, government system, and advanced the idea of a consumer-oriented market (Vidovich and Sheng, 2008). The controlled-choice plan in Tel Aviv was created by reformers out of non-market impulses, although market-style behaviour of consumers and providers appears to be emerging (Oplatka, 2008). In India, quasi-markets realise some of their purer manifestations in the low-fee schools for poor children, although non-profits and for-profit companies are entering the market as well (Sarkar *et al.*, 2008; Srivastava, 2008; Tooley and Dixon, 2003, 2005). As China has opened up to market forces, a private school sector has emerged, often to serve urban and rural poor with little real access to the state schools, and they are associated with innovative approaches to education (Tooley, 2005; Tsang, 2003). Post-apartheid South Africa allows for choice in the context of school markets, where schools — the vast majority of which are public despite growth of fee-charging private schools — have more autonomy but must compete for resources and charge fees (Fiske and Ladd, 2004; Hofmeyr and Lee, 2004; Ndimande, 2007, 2008). In Korea's relatively regulated system, private schools — which make up approximately half of all high schools[6] — have about 50% of their costs covered at the high school level, and 80% at the middle school level, and there has recently been an effort to modify the "equalisation principle" that regulates public and private schools and to encourage choice between schools (Kim, 2003; Lee, 2004; Ministry of Education and Human Resources Development, 2008).

24. Of course, these countries represent a substantial range in terms of the degree to which they leverage quasi-market mechanisms for the organisation, production and distribution of educational services. Building on the work of earlier researchers at the World Bank and the Center on Education Policy (Kober, 2000a; E. G. West, 1997), we can make some generalisations on overall patterns of state support and oversight of the independent school sector. Table 1 offers such an overview in terms of level of funding as well as state oversight in areas subject to regulation such as curriculum, teaching, and administration.

Table 1. State Subsidies and Regulation of Non-State Schools in Selected Countries

	Funding	Regulation
Australia	High	Low
Austria	High	High
Belgium	High	High
Canada	Moderate	Moderate to High
Chile	High	Low
England / Wales	Low	Low
France	High	High
Germany	High	High
India	Low	Low
Ireland	High	Moderate
Japan	Moderate	High
Korea	Moderate	High
Netherlands	High	High
New Zealand	Moderate	Low
Norway	High	High
South Africa	Moderate	Low
Spain	High	High
Sweden	High	Moderate
United States	Negligible to Moderate	Negligible to Low

Source: Kober (2000a), E. G. West (1997) and author's own research

In this representation, it appears that there is often, but not always, a correlation between the level of state support and regulation of the independent sector.

25. Yet there is much diversity within these general patterns. Some countries such as India and China now rely extensively on the fee-based private sector to provide choice or extend educational services, while others such as New Zealand provide comprehensive choice primarily within the public sector. Some policymakers in Europe and Asia directly fund the private school sector, albeit to varying degrees, while voucher programs in places like the United States and Chile tie funding more directly to the consumer — the student — rather than to the provider. Although many of these policies emerged in the 1980s and 1990s, the Netherlands has been funding schools outside the state sector for almost a century, and countries like Singapore and Korea are just starting to embrace quasi-markets for education. And some nations such as England/Wales and the United States have purposively sought to cultivate key elements of quasi-markets to change school sectors, while other countries appear to be embracing policies associated with quasi-markets without necessarily endorsing a general strategy of moving toward quasi-markets for education.

26. In that regard, policies in countries that have intentionally adopted quasi-markets as an organising model for education also appear to be more likely to explicate a connection between those mechanisms and educational innovation as a policy objective. For example, the CTCs in England, and charter schools in the US were both advanced as R&D centres for the wider educational system. Yet the logic of quasi-markets and educational innovation would apply even where this causal link was not made explicit: the logic reformers and theorists have articulated clearly indicates that policies such as decentralisation of authority, deregulation, consumer choice, and/or competition between providers produce incentives that will drive innovations.

27. Furthermore, there are other critical differences in the policy approaches and contexts. The level of competition — a dynamic force and incentive for change — that is generated from these policies can vary dramatically, depending on policy and other social factors such as density of school-aged population, geographic barriers, balance of supply and demand, and physical space available to accommodate potential entrants into the market (Lubienski *et al.*, in press). (Indeed, researchers have not yet even arrived at a

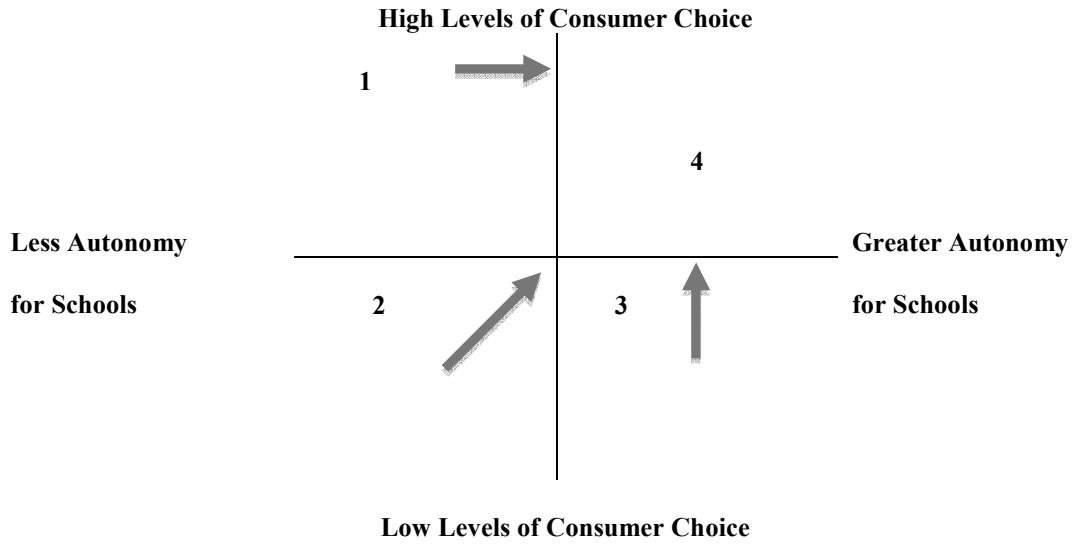
consensus on how to best measure school competition.[7]) Moreover, levels of regulation can differ drastically, to the point that categories are less helpful in understanding policy variations across different countries. For example, it is difficult to make comparisons between private schools in the United States and those in many other nations where private schools are more regulated than public schools are in the US.

28. While certainly the specifics of each reform program are embedded in their own cultural and policy landscape, the assumptions of quasi-markets are universal, transcending context. That is, incentivist derives from assumptions of universal human nature and relationships. Therefore the quasi-market approach to education is, in a very real sense, a-contextual. Thus, while not ignoring the problems inherent in cross-national research, this analysis focuses on one aspect of the wide diffusion of quasi-markets across contexts. Indeed, there are significant differences in contexts and policies in these different cases. Yet, inasmuch as that is true, diverse conditions and policy approaches allow us to assess assumptions of a universal theory under diverse conditions. This helps in understanding which of the different contextual and policy variables impacts the relationship of choice and competition to innovation, and how they might influence that relationship. (For the sake of brevity, this paper does not go into detail on specific policy points of the reforms in these various countries; references to sources on such information are cited in the endnotes.)

29. Nevertheless, despite the diversity in policy structure and specific intent, important commonalities across these nations indicate general policy patterns that deserve to be considered together. Most importantly, these policies are premised on the idea of consumer choice of schools — whether between public, religious, independent, or profit-oriented schools. And that choice can be active, in the form of intentional selection from among various options, or it may simply be a matter of state subsidies for multiple — including independent, non-state — providers. Secondly, most of these cases indicate schools have or are gaining greater degrees of autonomy over operational and internal policy issues, often as a result of explicit decentralisation and deregulation strategies for educational governance and administration. Consequently, in many instances, there are indications of substantial competition between schools to attract students.

30. Perhaps more relevant than the differences and similarities in these policies at a point in time is the *movement* of policy approaches in similar directions in recent years.

Figure 1. Policy patterns



31. Figure 1 offers a general, two-dimensional representation of education policy approaches with regard to school administration and orientation. In this schema, the horizontal axis indicates differences in the distribution of formal authority for schooling, where more highly concentrated, uni-modal systems would fall toward the left end of the axis, while multi-modal systems where power is localised, typically within the school or community, would fall more toward the right. In these cases, nations with more autonomous schools would tend toward the third and fourth quadrants. At the same time, the vertical axis differentiates between systems that place the onus of control with providers (whether they be centralised ministries or decentralised schools) toward the bottom of the axis, while systems that put more control in the hands of consumers would chart toward the top of the range. Thus, for example, many European countries such as the Netherlands that have a strong regulatory apparatus through education ministries, but encourage consumers to be the ultimate arbiters in making choices about schooling, would fall in quadrant #1. Some nations such as Singapore (especially before 2005) that use centralised administration and leave little latitude to consumer input would be placed in quadrant #2. Systems where power is largely in the hands of decentralised educational authorities, such as in the US, would tend toward the third quadrant.

32. But what is notable here is the degree to which national educational policy strategies from these various starting points are often moving - at varying rates - toward the fourth, upper-right quadrant, which represents quasi-market approaches to educational provision and access. In that arrangement, local authorities and more autonomous schools are situated in ways that they can respond more directly to consumer preferences, and often diverse consumer demands for quality drive improvements in schooling, largely by creating incentives for innovation.

33. And there have been innovations emerging from these quasi-markets. As we will see, the move toward the quasi-market has forced educators in a number of countries to be more sensitive and responsive to the demands of stakeholders. Without monopoly control over local educational resources, school leaders have had to assume more of a business mentality in considering the services they offer relative to other providers or competitors in the area — leading to a more diverse range of programmatic options in many localities. There is also some evidence of new and different types of organisational models emerging in some local educational quasi-markets. Moreover, many quasi-markets have seen the rise of school marketing, as schools assess their strengths and convey such information to potential consumers.

34. There are myriad examples of innovative practices in education quasi-markets. Researchers report a new emphasis on image management and marketing in schools in New Zealand and the UK, for instance (Fiske and Ladd, 2000; Gewirtz, 2002; Lauder *et al.*, 1999; Oplatka *et al.*, 2002; Whitty *et al.*, 1998; Woods *et al.*, 1998). Whole sectors of new, low fee-based schools have started in Brazil, China, and India, where for-profit schools run their own research and development units for curricular innovation. Educators in Belgium indicate that they must be more innovative, effective, and responsive to consumers or they will lose students to the school's competitors (Stossel, 2006). Charter schools in North America — themselves a notable innovation in school governance — have been successful at bringing new, different, and often more relevant curricular programs to marginalised communities, and finding new ways of engaging parents.

35. But simply listing innovations emerging from education quasi-markets tells us little about how quasi-markets actually foster innovation, or what types of innovations are more likely to be encouraged, or inhibited. Indeed, since quasi-markets establish only the opportunities and incentives, rather than directives for how those incentives should specifically change organisational behaviour, the exact nature and location of innovation is unpredictable, except to say that innovation is predicted. However, while the idea of "innovation" appears to have an inherent appeal in policymaking circles due to the widespread desire for improvements in educational outcomes, the term is often quite nebulous in how it is used — a tendency that makes it difficult to assess how policy objectives are being met, and how successes can be replicated.

3. Innovation, quasi-markets and education

3.1. Understanding Innovation

36. In order to assess the relationship between market mechanisms and innovation, it is important to have a sense of what constitutes "innovation" - a question sometimes lost in the rhetoric and assumptions about how mechanisms should work. But there are actually differing perspectives on how to perceive and understand innovation. For economists, innovations are changes that lead to improvements, as evident in areas such as productivity, communication, or service.[8] Innovation is also generally considered to be part of a process of invention and scaling up to be commercialisability, although the scale can be substantial, as with the development of a new vaccine, or smaller, as with improvements to cell phone service (Lubienski, 2003). Scholars studying innovation have added important insights on the distinction between "sustaining" and "disruptive" innovations — the former being improvements on products and services within a field, while the latter represent changes that take a product or service into a new dimension or create a new market, as in cell phones or iPods (Christensen *et al.*, 2008).

3.1.1. Innovation and Diversification

37. Despite these differing perspectives, there appears to be a consensus that competition, autonomy and choice will encourage "innovation," leading to a wider range of school options. While the development of innovative and diverse options is central to the arguments for education quasi-markets, innovation and diversification of options are not necessarily the same concepts. Innovation is often associated with two different meanings. In one sense, innovation refers to something newly created or invented, or a new and significant alteration of a pre-existing creation or invention. In another sense, its meaning is more contextual — when something is new to a specific locality, for instance.[9] Therefore, an entrepreneurial educator may invent a new curricular or pedagogical approach, which would be considered innovative in the broader range of educational practices. However, introducing an established practice such as a Montessori approach to a community would appear to be an innovation from the vantage point of that local context. Therefore, school choice is often said to be advancing "innovation" by bringing a new option to a local community, even if the approach is not new in the broader sense.

38. It is useful, then, to distinguish these two meanings for "innovation." In view of the expectation for new and experimental educational practices in many nations using quasi-market mechanisms, *innovation* can generally be understood to produce something "new or significantly improved" in the broader context of education (OECD, 2005). (Since this analysis is concerned primarily with national education policies, a practice may be considered innovative if it is new in a national context, often due to "policy borrowing.") On the other hand, *diversification* (or differentiation) can be defined as an increase in the number of options available locally — in schooling, usually from the parents' perspective. In this sense, the two concepts are somewhat distinct but inextricably related. Innovation can lead to diversification when new ideas or improvements are implemented into practice (and henceforth implementation is assumed since this analysis draws on practices currently in use). But successful innovations can also produce standardisation when a field conforms to a new, popular model (think, for instance, of VHS over Betamax tapes and videodisks, or now Blu-ray surpassing HD DVD). But while innovation may lead to diversification, not all diversification is an immediate consequence of new innovations; diversification could also be a result of emulating, spreading, replicating or reviving a pre-existing practice. Consequently, a lack of diversification might indicate a lack of innovation.

3.1.2. Defining Innovation

39. But if innovation is not the same as diversification, what exactly is it? Drawing from biology, we can think of innovation as somewhat akin to mutation. Changes take place, but those changes are not in

and of themselves "good" or "bad." Most changes are essentially meaningless — absent intentionality, the idea of "improvement" is relevant only in light of environmental and other contextual circumstances. Some mutations may have detrimental or beneficial effects for an individual organism, but the impact might be quite different for the broader population, for competitors, or for the environment. And those changes can lead to an overall diversification of varieties, or to standardisation (Gould, 1989).

40. This analogy may be useful in thinking about how change takes place in organisation as well (Hannan and Freeman, 1977). However, with organisations, change is initiated in order to bring about improvements. Thus, reforms or alterations in practices often have a specific or general goal as a positive objective, although the possibility of unintended or unanticipated consequences suggests that multiple measurable results could span the range from more to less beneficial. Thus, we can think of innovation as intentional change — that is, change initiated through intention for something substantively different, although the end results of innovation themselves might be unpredictable. And with regard to innovation in organisational contexts, those innovations can happen in a number of areas.

41. Following the OECD definition in the *Oslo Manual for Measuring Innovation*, there are two general categories of innovation with regard to schooling, encompassing four different types. First, what can be called educational innovations include both product innovation and process innovations. These typically occur at the classroom level, involving teaching and learning. In education, **product innovations** often include a new or substantially different service offered to students, such as a curriculum package or other programmatic option. *Process innovations* in education focus on production and delivery techniques, such as on-line learning. These might be less evident to parents, but are important because they can produce gains in efficiency, as with an improved pedagogical approach. Many reformers advocating for innovation in education tend to focus on changes in teaching and learning. For instance, the use of charter schools as "Research and Development Centers" in the United States and Canada has explicitly targeted the development of "different and innovative teaching methods" as a primary purpose of the reforms (Lubienski, 2003).

42. A second category of innovations in the school sector involves what have been referred to as administrative innovations, which include both marketing and other organisational innovations (Lubienski, 2003). These innovations have less direct relevance for the classroom, but instead involve substantive changes in the structures or organisational behaviour of schools. In education, many *marketing innovations* useful to firms in other sectors, such as pricing strategies, are unavailable to schools in publicly financed education.[10] Marketing innovations are those that affect the position of a school within a school market, such as new advertising or semiotic strategies, or admissions policies (Lubienski, 2007b). Other *organisational innovations* in education occur in the areas of management, administration, governance, or other institutional practices, and can include things such as contracting, employment, or lines of authority.

3.1.3. Additional Considerations in Studying Innovation in Education

43. Furthermore, there are at least four other critical issues to consider in studying innovations in education. First, the *pace of change* is a central consideration for policymakers. Incremental innovation is typical in many sectors, and appears to occur naturally in educational organisations (Christensen *et al.*, 2008). Schools have adopted routines to support societies moving from agricultural to industrial bases, for instance, and have adopted curricula, technology, communications and transportation and professionalised teaching forces that deal with contemporary societal needs. However, the *adoption* of such practices may reflect a process of *adaptation* by schools to new environmental conditions, rather than the creation of new processes and practices to change those conditions. Policymakers concerned about school productivity and economic competitiveness seek educational innovations that lead — rather than simply respond to — educational and social change. Indeed, this is an ethical issue, since allowing the natural evolution of practices in an inherently conservative institution such as schooling may essentially "write off" whole

communities of students in failing, stagnant systems. Thus, although some see education as too innovative because of its tendency to embrace trends, policies promoting innovation in education attempt to speed up the rate of innovation.

44. Second, although the outcomes of innovative process can be unpredictable, it is important to give serious attention to those effects once they can be measured, particularly in view of the stated *purposes* cited for pursuing innovations. This is because education often involves competing or even conflicting goals, and since reforms leverage innovation to promote improvement towards specific goals, it is crucial to determine how innovations intended to address an issue impact that and/or other issues. So while innovations may induce improvements, the question is really: Improvements (or innovation) to what ends? Economist Henry Levin (2002) lists four main criteria in evaluating choice plans in education: freedom of choice, productive efficiency, equity, and social cohesion.[11] Thus, it is important to note whether innovations geared at, say, productive efficiency actually raise achievement levels or lower costs (or both), or if they impact other areas as well, or instead. For instance, innovations from choice and competition may encourage schools to serve more homogenous populations with a shared vision for a school — an attribute associated with "effective schools" (Chubb and Moe, 1990b). But such innovations may come at the cost of equity, social cohesion, or freedom of choice for those not sharing that vision. Similarly, it is important to note where in the educational enterprise innovations are directed. Can reforms targeted at the system- or organisational-levels result in changes in the technical core of the organisation — the classroom? Likewise, can innovations in the classroom lead to wider systemic changes?

45. Third, the idea of "innovation" can be a relative attribute, dependent largely on the scope or *scale of perspective* one uses in considering the innovative nature of a product or practice (Lubienski, 2003). For example, a service that is relatively familiar in a broader institutional field may be innovative in a particular local context. Indeed, the OECD notes that an innovation may be "new to the firm/educational institution, new to the market/sector or new to the world." So just because something is well established in one context does not preclude it from representing an innovation in another. However, policymakers interested in promoting innovation also have to consider how new practices come to a given context — are they imported, duplicated, or invented? The dissemination of innovative practices is important, so we should not diminish the replication of innovative practices from one context to another. Yet policymakers also have to take into account the "re-inventing the wheel" issue. Because of the various costs that go into developing innovations, creating conditions where the same innovation emerges in multiple local contexts is likely to be a less efficient use of resources. But if those conditions can encourage a diversity of innovations, that may hold more potential for creating a range of more effective practices.

46. Thus, a fourth and final consideration involves the source of innovation. Change happens, sometimes gradually, sometimes more suddenly. And in organisations such as schools it occurs at different levels, and toward various effects. But from a policymaking perspective, it is important to determine the cause or source of both beneficial and detrimental changes in order to generate more desirable innovations, while avoiding more harmful consequences. But those sources could be from multiple causes, including choice and competition, but also from government policies and initiatives, demographic forces, institutional priorities, or individual initiative.

3.2. Evidence of Innovation in Education Markets

47. So, inasmuch as these are the key considerations to bear in mind when assessing innovation in education, we now return to the question of how innovation occurs in education quasi-markets. In fact, the evidence on this question is notably uneven and spotty. For example, precious little work has been done on the question of innovations producing greater cost-efficiencies in educational provision. Indeed, relatively few studies have focused primarily on the question of innovations in education quasi-markets in a systematic manner.[12] And much of the extant evidence is drawn from qualitative or small-scale studies.

48. Still, despite these limitations, a handful of studies have reported relatively few educational innovations emerging from various quasi-markets (e.g., Bodovski and Farkas, 2007; Center on Education Policy, 2000; Dierkes, 2008; Fiske and Ladd, 2003; OECD, 1994). However, an overall assessment in this regard depends largely on how innovations are perceived. Although the record is mixed and somewhat uneven, there are indeed abundant examples of some types of innovations in several education quasi-markets. For instance, some school managers have explored new ways of marketing their services. Officials have introduced new contracting and employment practices, and schools have experimented with different grade and calendar configurations. Defying the comprehensive model popular since the 1960s, schools have emerged that emphasise specific subject material, or focus on particular populations of students. Policies have encouraged new organisational forms and structures for schools, raising the possibility of new educational opportunities for marginalised populations.

49. Here, using the OECD categories of innovation — in reverse order (for reasons that will soon be apparent) — we offer some examples of different types of innovation in education quasi-markets. This list is by no means meant to be exhaustive or even comprehensive, but simply illustrates the patterns in innovation in education based on the typology established by OECD. After providing some examples of these different innovations, we will return to the issue of patterns, including questions of pace, purposes, scope and sources of innovation.

3.2.1. Organisational Innovations

50. "Organisational innovation involves introducing a new organisational method in the firm's business practices, workplace organisation or external relations. In education, this can for example be a new way organisation of work between teachers, or organisational changes in the administrative area" (OECD, 2008).

51. Because quasi-markets typically involve innovations in policy to promote innovations in other areas, there are myriad examples of organisational innovations in education quasi-markets. For example, New Zealand policymakers sought to promote organisational innovations by granting substantially more autonomy to schools. Similarly, the charter school movement in North America has been recognised as an outstanding innovation in government (Center for Education Reform, 2000a). The same could be said for policies that move school systems toward more quasi-market models in places such as the UK and Australia, and the introduction of voucher plans in Sweden and Chile.

52. In turn, these policy changes have shaped a number of innovations within educational organisations, in how schools are organised and administered. For example, reforms in both the UK and the US mandate that schools failing to perform at a sufficient level be re-organised, which can include conversion to charter school status, or turning the school over to private or independent administration (C. Brown *et al.*, 2004; J. Kim, 2004; Rafferty, 1999). In the charter schools in North America, schools have introduced new forms of employment relations into the publicly funded sector, such as hiring part-time, non-union, and uncredentialed teachers, or enabling groups of teachers to start their own school based on a cooperative model (Dirkswager, 2002; Kahlenberg, 2008; Miron and Nelson, 2002; Podgursky and Ballou, 2001; Rofes, 2000).[13] For example, in interviews with charter school administrators in Massachusetts, Triant (2001) found the administrators used their autonomy to hire uncertified teachers who brought other skills such as the ability to work as a team. Similarly, charters and other forms of contracting with private providers allow schools to create unique relationships with businesses, or use different forms of authority models for teachers (Public Policy Associates *et al.*, 1999; Whittle, 2005). And these arrangements can have the desired effects. For instance, in comparative analyses of school revenues, processes, and achievement in public and subsidised (voucher) private schools in Chile, Parry (1997a, 1997b) documented notable instances of entrepreneurial behaviour from administrators in the voucher-subsidised secular schools, with innovations in hiring and teacher salary arrangements.

3.2.2. Marketing Innovations

53. "Marketing innovation involves a new marketing method involving significant changes in product design or packaging, product placement, product promotion or pricing. In education, this can for example be a new way of pricing the education service or a new admission strategy" (OECD, nd).

54. While organisational innovation is associated with quasi-market reforms — almost by definition — as the vehicle that moves these policies forward, the area where competitive incentives generated by these reforms appear to have sparked the most innovation is in terms of marketing. A wide spectrum of observers in a number of nations have pointed to the rise of a range of promotional activities (sometimes juxtaposing these to a perceived paucity of other kinds of innovation).[14] For instance, research from several countries highlights the use of uniforms in schools to shape a public image of the school (Gewirtz *et al.*, 1995; Meadmore and Symes, 1997; Whitty *et al.*, 1998); attention to other physical features of a school are also increasingly important (Fiske and Ladd, 2000; Mikuta, 1999; Whitty *et al.*, 1998; Wilgoren, 2001). Lauder *et al.* (1999) interviewed principals regarding the ways that reforms have impacted their schools, particularly in terms of marketing and its effects on operations. Schools made efforts to present themselves as middle-class institutions in appealing to middle-class parents: for example, publicising discipline policies and school uniforms, and employing educational consultants (a feature that demonstrates a school's commitment to business-style practices such as "Total Quality Management"). However, marketing innovations differed by intake type. Whereas schools with students of lower socio-economic status (SES) tend to be undersubscribed, they attempt to appeal to every possible customer, while schools with higher SES student bodies tend to be oversubscribed, and consequently do not have to divert resources from other areas in order to mount marketing campaigns. Parry (1997a) found Chilean schools were marketing themselves often by adopting English-sounding names. Schools in Sweden have been giving away free laptops and iPods to attract prospective students (Rising, 2008). Both research and journalistic reports indicate that schools in a number of contexts have also created more commercial-style brochures to promote themselves, and are using the Web as well (Cohen, 2002; Copeland, 1994; Kates, 2001; Mathews, 2009). While many schools have produced brochures about their services for years, it is worth considering how the competitive incentives of quasi-markets may be shaping such activities. Using content analyses of brochures, Hesketh and Knight (1998) reveal new emphases on professionally produced school prospectuses, and find these promotional materials appealing to a uni-modal conception of good schooling. In similar studies of information schools provide to prospective families in competitive environments in the US, Lubienski (2006a, 2007a, 2007b) found that information required by the state offered basic, direct evidence on school performance, while non-mandated materials produced to compete with other schools tended to provide "softer" information based on emotional appeals, "brand loyalty" and affinity grouping.

55. In areas in the US that have seen greater market penetration by charter schools, traditional school practices are now assuming a marketing function, such as school performances and field trips (Wilgoren, 2001). Furthermore, a number of novel — at least for the education sector — promotional practices have emerged, including radio, television, and cinema advertising, with both teachers and administrators often expected to take on promotional efforts (Lubienski, 2005); one school has teachers skydiving at airshows to promote the school (Wilgoren, 2001). In interviews with teacher in England, Oplatka and colleagues (2002) found teachers were expected to contribute to marketing efforts, but that they still lacked a coherent vision of marketing for schools.

56. But marketing innovations can appear in other areas besides promotional activities. "Marketing" can also refer to more general efforts to position an organisation within a market through efforts such as price competition, product placement or packaging. According to the OECD framework, marketing innovations in education can include "*a new way of pricing the education service or a new admission strategy.*" Of course, in most educational quasi-markets with relatively high levels of government funding

and a commitment to universal access, schools do not usually have the options of adjusting the price of their services as charged to the user — instead they must use other competitive strategies such as product or process innovations. However, some quasi-market policies do afford some schools a degree of latitude in adjusting price by allowing schools to charge an additional fee in addition to the government subsidy — keeping with Milton Friedman's (1995) argument that schools must have the autonomy to "top up" a subsidy and control their own admissions. Furthermore, even without price strategy options, many subsidised schools in places such as France and the US have the ability to impose additional direct or informal costs on consumers through innovations such as admissions interviews, required parental contracts, location and privatised transportation (Glenn, 2003).

57. There are differing perspectives on the ability of schools in quasi-markets to impose such costs on consumers, or to otherwise shape or maintain the character of the school through admissions. Some have argued that giving schools control over enrolment offers them the means to preserve a distinct character and community ethos, and that serving a more coherent community with a shared sense of mission for the school allows the school to be more effective (Brandl, 1998; Chubb and Moe, 1990b). Thus, several nations, including Australia, Chile, England/Wales, the Netherlands and Ireland have policies that afford schools the opportunity to select student intake in support of a theme or deny admissions to students in cases where their attendance might threaten the character of the school (Angus, 2003; Carnoy, 1998b; Glenn, 2003). On the other hand, other observers have pointed to evidence of segregation patterns when schools have greater autonomy in quasi-markets, fearing that competitive incentives cause schools to develop marketing innovations that may effectively exclude segments of the population. For instance, research has identified patterns of flight in Dutch and Swedish choice systems as native-born families move their children out of schools with higher immigrant enrolments (Center on Education Policy, 2000; Dryler, 1998). Similar dynamics have appeared around US charter schools, where researchers have suggested that marketing innovations by those schools may be contributing to such patterns through innovative efforts in advertising or locational decisions (Eckes and Trotter, 2007; Garcia, in press-a, in press-b; Garcia *et al.*, 2008; Rapp and Eckes, 2007). For instance, in geospatial analyses of school location and type in Detroit, Washington, and New Orleans, researchers at the University of Illinois and Brown University found more competitively oriented schools locating in more affluent neighbourhoods or using admissions policies to dissuade or exclude more difficult-to-educate students (Lubienski *et al.*, in press). However, one could also argue that such communities may be better served when schools are allowed to focus on needs specific to those learners, rather than being all things to all people (Fitzgerald, 1995; P. Hill, 2007).

3.2.3. Process Innovations

58. "Process innovation involves a new or significantly improved production or delivery method. This includes significant changes in techniques, equipment and/or software. In education, this can for example be a new or significantly improved pedagogy" (OECD, 2008).

59. Evidence on the success or pitfalls for quasi-markets in promoting innovations is perhaps most difficult to discern in the area of process innovations. This is a relatively challenging endeavour in part because school processes themselves are notoriously opaque (although there are other important reasons, as described later). That is, the acts of teaching and learning produce results through complex and inter-related factors including pedagogy, peer effects, assessments, motivation and persistence — many of which are simply unobservable and may not be easily influenced through policy.

60. Nonetheless, we can point to some evidence of process innovations in education quasi-markets. In a comparative study of national voucher plans Carnoy (1998b) identified organisational innovations in the area of cost-cutting measures such as increased class-size, which could also be considered process innovations. Technology also offers a number of examples of process innovations. For example, computer-

assisted learning, online learning and distance learning all represent potentially significant changes in delivery systems for schooling — although there is some dispute on the degree to which some of these technologies have really penetrated educational processes to represent substantive improvements in teaching and learning (Cuban, 1986, 2001).

61. Still, quasi-markets appear to have served as an effective vehicle for transposing different pedagogical practices, representing a potentially important process innovation. Because of the autonomy granted to schools, and the competitive incentive to differentiate services from rivals, schools can adopt alternative pedagogical and curricular approaches not before seen in various local contexts. For example, although it had previously appeared in very isolated instances in North America, the charter school movement helped widen access to the Reggio Emilia approach of child-centred teaching, bringing the model to communities (Lubienski, 2003; Shores, 1999). When the charter movement was emerging, only one public school was identified using this approach (Lubienski, 2003). Now, dozens of charter schools use this model.[15] Other pedagogical philosophies such as the Montessori method and Steiner-Waldorf education, while not initially created within quasi-markets, have enjoyed increased growth due to the opportunities and incentives for diffusion in quasi-markets (Edwards, 2002; Manno *et al.*, 1998b; Stout and Garn, 1999; Vanourek *et al.*, 1997). So, too, have movements to adopt more traditional, "back-to-basics" approaches to education. Researchers in a number of countries have reported trends toward more traditionalist approaches to education, sometimes cast as a reaction to the trendiness and faddishness in a sector that is too focused on education (Dronkers, 2004; Ravitch, 2003). In these cases, researchers examining quasi-markets in the UK and the US have indicated that the autonomy and incentives of the quasi-market may encourage schools and parents to embrace proven methods (e.g., Nathan, 1996a; see Lubienski, 2003; Woods *et al.*, 1998).

62. However, while many pedagogical innovations may be difficult to perceive in themselves, another way to examine the question of process innovations is in terms of measurable improvements in outcomes. In fact, this may be quite an appropriate measure of such reforms, since policymakers put the onus on schools in quasi-markets to come up with more effective educational processes, presumably in areas such as pedagogy. Indeed, in a sense, curriculum (see below) is more of a "product" that can be observed and is therefore subject to explicit diversification, while pedagogy is less apparent as a process (and therefore perhaps even more diffuse), but its effects can be immediately apparent in academic outcomes. This is the assumption of a number of reform movements associated with quasi-markets, where policymakers seek to subject schools to external incentives to force them to improve, without dictating the specific means by which this improvement will occur. Instead, they assume that those incentives will force improvements in areas such as pedagogy, which will then produce measurably better academic outcomes. The reforms beginning in the Thatcher years in England/Wales represent a prime example of this logic, since curriculum was effectively centralised through national assessment policies, but schools were expected to compete on factors such as pedagogical effectiveness. The No Child Left Behind reforms in the US also exemplify this thinking.

63. While we look at the US context in more detail below, a number of nations have embraced this logic more or less explicitly to varying extents, and, according to incentivist logic, one would expect greater improvement in outcomes in schools more subjected to competitive incentives. There is some evidence that this is happening (although a crucial consideration for researchers is to isolate the effects of pedagogical effectiveness, making sure that results are not simply reflecting demographic differences in different types of schools). In summarising quantitative studies comparing independent schools with public schools in Australia, Angus (2003) reports on an apparent consensus of greater gains in academic achievement for private schools (presumably more subjected to competitive incentives), even after controlling for differences in intake. A comparative study of academic outcomes for French students who had spent their careers in public or independent schools found that the latter were more effective at reducing gaps in academic outcomes between different groups of students (Langouet and Leger, 1991,

cited in Glenn, 2003; Meuret, 2004). Studies of school achievement in the Netherlands and other European nations have also indicated an advantage for private schools, presumably because of more effective school processes induced by their more competitive positions outside the state sector (Dijkstra *et al.*, 2001, 2004; Dronkers, 2004). In studies of TIMSS data, Woessmann (2003) concluded that achievement is higher in countries where a larger portion of students are in private schools. Using multi-level hierarchical models of this same data, Rutkowski and Rutkowski (2009) found mixed results on the relative performance of private schools in different nations, with no apparent correlation to the size or degree of competition in the private sector. Controlling for demographic differences in a number of countries, two separate studies of PISA data found some advantages for private schools, presumably because they are forced to compete for students (Fuchs and Woessmann, 2007; Vandenberghe and Robin, 2004).

64. But additional findings from other nations including Chile, India and elsewhere do not suggest a clear pattern of superior results for schools in more competitive circumstances. Kingdon (1996) found an advantage for non-state schools in India in terms of future labour market earnings. McEwan and Carnoy (2000) found tendencies toward student sorting, rather than academic improvements resulting from Chile's voucher system. And using multi-level modelling to examine school effects in ten Latin American countries, Somers and colleagues (2004) found little evidence that private schools were more effective. Together, this literature attempts to distinguish the value-added effects of school processes from other influences on achievement, but the record is mixed on the extent to which competition one would expect in quasi-markets actually produces more effective processes, and thus greater gains in academic achievement (this issue is explored in more depth below).

3.2.4. Product Innovations

65. "This involves a good or service that is new or significantly improved. This includes significant improvements in technical specifications, components and materials, incorporated software, user friendliness or other functional characteristics. In the education sector, a product innovation can be a new or significantly improved curriculum, a new educational software, etc." (OECD, 2008).

66. Firms in competitive environments have the strategic option to either focus innovation efforts on improved processes or improved products. Process innovation could lead to a better product, or might also result in more efficient productive processes that could lower the price of a product or provide additional resources for R&D. Typically (but not necessarily), process and product innovations can be distinct for goods, but the two kinds of innovation may be indistinguishable for services, where the product is itself a process. To a significant extent, education reflects this dynamic. Although curriculum packages are distinct and identifiable, the "product" students consume is also its pedagogical processes, which are often inextricably linked by philosophy to the curriculum. Therefore, things like Reggio Emilia or "basics" might also be considered as a pedagogical approach (process innovation) as well as a curricular program (product innovation).

67. In fact, as opposed to the old comprehensive model, schools in many quasi-markets appear to be recognising the incentive to focus on a specific theme or curriculum. The curriculum might centre on the culture of a specific group, or it might highlight a specific theme such as a vocation, sports, or fine arts. And a number of schools in quasi-markets in different countries have developed individualised curricula tailored to the needs of individual students (Miron *et al.*, 2002; Rising, 2008).

68. But research in this area suggests an important distinction between themes and curricula, with the possibility that competitive incentives encourage schools to highlight a specific aspect of the school in shaping its public image, while what is taught remains relatively constant.[16] For instance, in their examination of the impact of competition in New Zealand, Fiske and Ladd (2000) note the trend toward themes for school missions, including athletics, vocations (including construction, performing arts, early-

childhood education, hospitality and tourism), a school for teenage parents, and one school based on Howard Gardner's theories of multiple intelligences. They also describe an elite, academically oriented boys school, which is privately sponsored but has opted in to public funding. Lauder et al. (1999) point to ethnic language programs, and one school that added an additional year before matriculation examinations. Many analyses describe the rise of Maori-oriented schooling — in line with one of the stated intentions of the reforms. Yet, despite competitive incentives, Mikuta (1999, p. 155; citing Wylie, 1994) observes that schooling in New Zealand remains a "'standardised' product, as schools are not attempting to adopt innovative approaches to teaching, curriculum or assessment in order to fill a niche in the market that will distinguish them from their competitors." Fiske and Ladd (2000) concur, finding few examples of schools responding to competitive incentives through product innovation: "Examples of schools going after niche markets are unusual. The Tomorrow's Schools reforms have led to relatively little supply-side diversity, and it is fair to say that while the reforms permit innovation, they do not promote it in a systematic manner" (p. 249). Likewise, exhaustive studies in the UK quasi-market find little evidence of academic innovations, despite this being an explicit policy objective for quasi-markets (Glatter et al., 1997; Halpin et al., 1997; Power et al., 1994a; Power et al., 1994b; Woods et al., 1998). Quite often, as in other contexts such as North American charter schools and proprietary schools in the Chilean voucher program, schools use their increasing autonomy to adopt aspects of elite or traditional education (or "re-worked traditionalism") in areas such as uniforms and academics (see also Fitz et al., 1993).

3.3. Patterns in Innovation in Educational Quasi-Markets

69. In reviewing the research on innovation in educational quasi-markets, there appears to be a consensus regarding how change is likely to occur across different contexts. Overall, three key generalisations may be useful for summarising the patterns evident in the research. First, there is substantial evidence of organisational and marketing innovations in schools. In a sense, this finding is not surprising. Policy changes and competitive incentives provide not just the opportunity and motivation for change, but sometimes the change itself, as with innovations in governance arrangements. In general, these innovations tend to appear at the structural level, in the area of administration, for instance. These are sometimes referred to as "first-order" changes in that they represent only the initial stage of more profound changes that can occur deeper within the organisation, at the "technical core." Even though such innovations can seem radical on the surface, such changes reflect more incremental improvements in the organisation, and are not associated with more fundamental change that disrupts practices at the technical core.

70. However, secondly, while some policymakers and incentivists posit a logical connection between quasi-market mechanisms and innovations in "teaching and learning," we are seeing fewer new product and process innovations than might be expected, especially of the disruptive, "second-order" type (Eyal, 2008). Again, there is some reason to anticipate this finding. Scholars have noted the remarkable resiliency and resistance to disruptive change in education systems — especially to reforms implemented at the structural level (Tyack, 1974). However, the introduction of quasi-market forces was intended to change the logic of the equation, moving schools to respond to external incentives (Coleman, 1997). On the other hand, quasi-market policies such as increased autonomy appear to have been markedly successful in disseminating practices, so that they represent innovations in new contexts. Thus, even though classroom-level innovations have tended to be more incremental and sustaining, the spread of these practices is innovative, even if — as with the Montessori method — they were not initially *generated* by quasi-market forces.

71. Finally, it is far from clear that quasi-market forces such as increased autonomy, competition and choice have led to improved outcomes, which would indicate that educational innovations are occurring. Evidence of improved academic outcomes is mixed, and improvements in academic performance may result from factors other than quasi-market incentives — for example, professional efforts, technocratic

knowledge, policy alignments, or funding. If quasi-markets offered some type of elixir for educational performance, we might, over time, expect to see nations with more market-like systems outperforming countries where the state plays a more direct role in educational provision. But it is hardly clear that this is the case. Some countries such as Sweden that have more fully embraced quasi-markets have seen their scores on international tests remain in the middle of the distribution or even decline somewhat, relative to other nations without vouchers. Meanwhile, more regulated systems such as that in Singapore have continued to perform well above the norm. Similarly, recent longitudinal studies examining gains in academic achievement in state schools and independent schools that must compete for students in the US have not found greater productivity gains in independent schools, and have often found greater academic growth in public schools (Lubienski *et al.*, 2008; Reardon *et al.*). This is not to say that regulation is necessarily preferable to markets (indeed, other factors are obviously at work), but that there does not appear to be an obvious correlation between the use of competitive quasi-markets and academic improvements indicating innovation.

72. Overall, these general patterns support an apparent consensus emerging from a number of different sources and contexts on the predilections for innovation from quasi-markets in education. Writing for the OECD in the mid-1990s (OECD, 1994; Hirsch, 1995), Hirsch found that choice has not promoted diversification of options, except for some niches; much of the innovations in Sweden, for example, appeared to focus more on image management than productive processes. While Tooley (1999b, 2002) sees abundant innovations in the private sector in a number of developing countries, others note different patterns in developing and developed systems, finding the subsidised private sectors in Canada and the Netherlands rather un-innovative (Center on Education Policy, 2000). In an analysis of interviews and observations of teaching practices in a nationally representative sample of public and private schools in the US, Bodovski and Farkas (2007) found teachers in Catholic and other private schools to be more likely to use traditional teaching methods. Despite the fact that Chilean policymakers promoted "pedagogical decentralisation" over the last decade by funding curricular initiatives, few schools have successfully reconfigured their curriculum, particularly in the subsidised secular sector (Gauri, 1998, p. 39). Parry (1997b) notes that this largely privatised system of school choice has not led to a flowering of new options, writing that "publicly supported private schools did not exhibit greater innovation."[17] Likewise, Carnoy and McEwan (2000) note virtually no classroom innovation, particularly in the private sector. Finally, Espínola (1993) sees little innovation in her sample of public and private schools in the Santiago area. Similar patterns have been observed by researchers in other countries, such as England/Wales and New Zealand, which have also moved substantially toward quasi-markets for education (Whitty *et al.*, 1998; Woods *et al.*, 1998).

3.4. The Case of North American Charter Schools as Engines of Innovation

73. The fact that innovation in quasi-markets is uneven and that the patterns differ substantially from what the logic of competitive incentives might indicate suggest the need for a closer look at how this logic plays out in a system that is embracing quasi-markets for education. To examine this question in more detail, it is instructive to consider the case of charter schools in North America, which were established specifically to produce innovations in processes and product. All US presidential administrations, from Clinton, to Bush, to Obama, have endorsed the innovative potential of charter schools, with President Obama (2009) recently calling them "laboratories of innovation." However, these expectations stand in contrast to the research on these schools, and it is worth considering that disconnect.

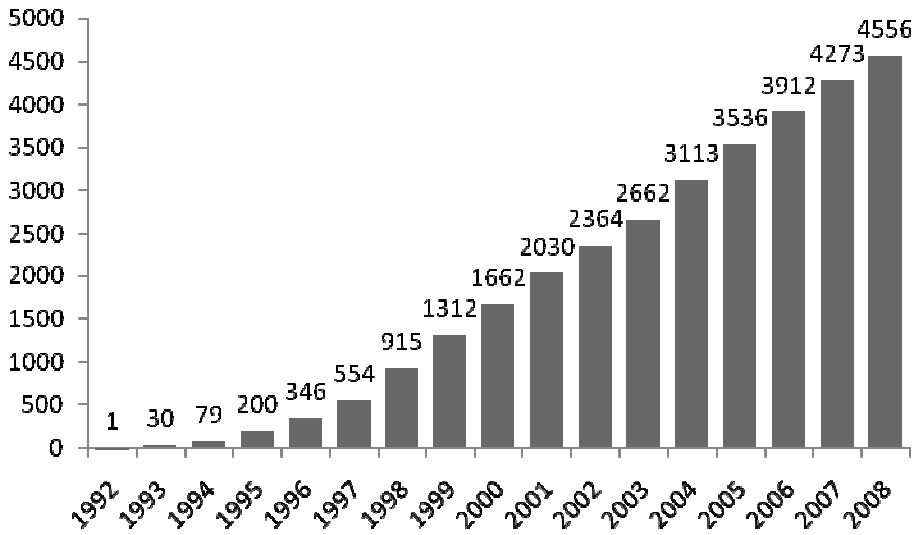
3.4.1 Policy Context of Charter School Growth[18]

74. The largely decentralised education systems in the United States and Canada devolve much policy autonomy to states and provinces and, in turn, to Local Education Authorities (LEAs). Many states and provinces have adopted a number of strategies to promote market mechanisms in education. For

instance, in the US, several states have authorised voucher plans or tuition tax credits in order to provide public support for private schools (Welner, 2008) — a more accepted and traditional arrangement in Canada. City-wide voucher programs exist in Milwaukee, Cleveland, and Washington, DC, with Florida and Ohio using state-wide voucher plans. Similarly, Canadian policymakers have tended to focus on liberating the supply side in order to increase competition between schools, as with Toronto's quasi-market (Davies, under review). Many LEAs use open-enrolment plans to promote choice within and across districts (Lubienski, 2005) — a strategy also encouraged by US federal government's more recent foray into educational policy in the No Child Left Behind Act of 2001.[19] Yet, the reform strategy most explicitly linked to innovation since the early 1990s has been the rise of charter schools.

75. Charter schools represent one of the fastest growing education reform movements in North America. In the US, forty of the fifty states, plus the District of Columbia, have approved charter school legislation, and approximately 4600 such schools were in operation in the US and Canada in 2008.[20] As indicated in Table 2, the number of charter schools in the US has grown dramatically since their inception almost two decades ago.

Figure 2: Number of US Charter Schools Open/Operating, by Year



Source: Center for Education Reform

76. Democratic and Republican administrations have endorsed the idea, and the schools are popular with state legislators (Clinton, 1997, 1999; Ivins and Dubose, 2000; Penning, 1997). Indeed, a diverse array of activists across the political spectrum embrace them as a way of deregulating and inducing competition between schools — thereby infusing innovation into public education (Nathan, 1996a, 1996b; Nathan and Power, 1996; Rofes, 1996). Unlike vouchers (where the threat of exit is meant to increase academic achievement), magnet schools (for integration or to stem exit), or other forms of school choice in North America, charters are appropriate for this review because they are intended specifically to foster innovation.[21]

77. Essentially, charter schools are public-private hybrids — publicly funded and privately managed (Lubienski, 2003). Based on the tenets of consumer choice, liberated (extra-governmental) provision, and both private and public accountability, these schools are run by managers who have been granted a contract or "charter," usually for a period of three to five years. Although details of the states' authorising

legislation vary, the schools are generally given a waiver from many regulations in the hope that the resulting autonomy will lead to experimentation and innovation in increasing student achievement (Garn, 1998; Nathan, 1996a; Wells *et al.*, 1998). Perhaps no word is more closely associated with the charter school concept than "innovation." As a policy approach, charter schools advance from the premise that "over-regulation of traditional schools has stultified educational innovation and responsiveness" (H. Levin, 2000, p. 3). The Hudson Institute's research team on charter schools, Manno, Finn, Bierlein, and Vanourek (1998a), note: "Automatic exemption from nearly all federal and state laws and rules, and the streamlining of compliance-related paperwork, are necessary preconditions that policymakers must establish if innovative charter schools are to flourish."

78. The popularity of charter schools emerges largely out of the perception from both conservatives and liberals that bureaucratically run district monopolies impose uniformity across the continent. Paul Peterson (1990) advanced this notion and — along with former US Education Department official Denis Doyle (1994) and other proponents of market models for education (e.g., Harmer, 1994) — argued that diverse societal wants and needs require an entrepreneurial spirit which necessitates private sector participation in public education (see also Friedman and Friedman, 1980). Reagan's Secretary of Education, Bill Bennett and his colleagues (1998) also castigate a "one-size-fits-all" system of public education. Speaking at the White House conference on choice in education, then-Secretary of Education Lauro Cavazos observed "a remarkable national uniformity in the methods and organisation of our schools" (Paulu and United States. Office of Educational Research and Improvement, 1989, p. 11). In an historical overview of different approaches to educational governance, Coulson (1999, p. 318) describes an "almost total lack of innovation" in non-profit schools. Chubb and Moe (1990) also embrace this image of monolithic public schools as their basis for comparing public and private sectors; they believe that the lack of differentiated options can only be explained by institutional environments — that is, public schools are not responsive due to their location in the public sector (see also Lehman, 1997).[22] Hanus (with Cookson, 1996) suggests that public institutions are preoccupied with equality, while (classically) liberal economic models for education can meet diverse preferences. Essentially, market advocates argue against the old "common school" as an antiquated approach in a society now characterised by pluralism and diverse parental perspectives on what constitutes good schooling (e.g., Coleman, 1990).[23]

79. In reaction to this perception of the public sector, charter schools are intended as laboratories to improve options and learning for all students in the public school system (Nathan, 1997). The consistency of this expectation is remarkable. For example, Wohlstetter and Griffin (1997, p. 1) point out:

> ...most importantly, charter schools are meant to encourage *innovation in teaching and learning* practices in order to improve student performance. A 1995 survey of charter school founders, conducted by the Education Commission of the States, reported that "better teaching and learning for all kids," "running a school according to certain principles and/or philosophy," and "innovation" were the top three reasons for starting a charter school. (see Education Commission of the States and Nathan, 1995; emphasis added)

Consequently, charter schools are thought to be in a good position "to implement innovations in teaching and learning" because they are freed from accountability to the local district (p. 6). The centrist Democratic Leadership Council (DLC) observes that

> The charter school movement is based on a set of simple principles. Public education must be expanded to offer more choices for students and parents. To create these choices, innovators must be freed from the bureaucratic restrictions of traditional schools. In return, these innovators must be held accountable for results and required to measure up

> to the standards they set for themselves. (Halpern and Culbertson, 1994; cited in Vanourek *et al.*, 1997, pt. 4, p. 1).

80. The Education Commission of the States recommended making all public schools into charter schools, because, as Democratic Party figure Al From suggests (1999), charter schools are "oases of innovation in a larger desert of monopolistic and cookie-cutter schools" (National Commission on Governing America's Schools, 1999). Similar expectations are evident in Canada. In Alberta, Canada, these schools are established with the expectation to "encourage innovative teaching" (Canadian Charter Schools Research and Professional Development Centre, n.d.). The Fraser Institute argues that they provide "innovations in successful education practice" (Raham, 1996, p. 36). After extensive interviews with charter school operators in several states, the Hudson Institute's research team called them "genuine centres of innovation" (Manno *et al.*, 1998b, p. 490). Price (1998, p. 41) contends that charter schools will "develop innovative curriculums designed to meet student-achievement goals set forth in their charters." Hassel (1999, p. 69) calls innovation in classroom practice "one of the core purposes" of these "laboratories" of the public system. Indeed, structural changes in governance are thought to liberate experimental and entrepreneurial tendencies, so the "charter concept invites innovation" (Vanourek *et al.*, 1997, pt. 5, p. 9).

81. If charter schools are "genuine centres of policy imagination and educational innovation," then the "major purpose of the charter movement is to inspire the development of innovative and effective approaches to public education" (Vanourek *et al.*, 1997, pt. 6, p. 1). Even teachers unions — a purported enemy of school choice — see potential for this "genuine laboratory from which schools and school districts can learn" (Arizona Education Association, 1998, p. 15). The Hudson Institute team portrayed charter schools as the research and development laboratories for the public school system:

> From the perspective of American education as a whole, a better analogy might be to an R and D centre where new ideas are tried out. They won't all succeed, and some that do succeed might appeal to only "niche" markets. However, others are likely to be so good as to warrant wide dissemination. *This R and D potential is an important part of any policy-oriented appraisal of the charter phenomenon.* (Manno *et al.*, 1998b, p. 490, emphasis added)

The flexibility of charter schools allows them to provide diversification within the publicly funded sector:

> This consumer-driven system creates diversity and widens choice. It starts with the conviction that the needs and priorities of the clients differ. The schools are created to fit the needs of families and students — not those of system planners, state and local regulations, or union contracts. Families (and teachers) are then free to choose the schools that best meet their needs. (Manno *et al.*, 1998b, p. 497)

Advocates of the for-profit charter school sector also advance this claim of charter schools serving as a laboratory for the good of all public schools. Edison chairman Benno Schmidt takes credit on behalf of for-profit endeavours for innovations in public schools: "We provide R and D, private sector capital, technology and training: all of which strengthen the state education system" (quoted in Bilefsky, 1998, p. 18).

82. Finally, the legislation that authorises these schools also embraces the promise of charter schools as laboratories of innovation. California charter schools are to "Encourage use of different and innovative teaching methods;" Massachusetts established charter schools to "Stimulate the development of innovative programs in education," "Provide opportunities for innovative learning and assessment," and "Provide teachers with a way to establish schools having alternative, innovative methods of instruction, school

structure and management;" Minnesota — the first state in the US to authorise charter schools — seeks to use them as vehicles to "Encourage use of different and innovative teaching methods" (Wohlstetter and Griffin, 1997). Michigan's legislation notes that charter schools will "Stimulate innovative teaching methods." Many charters in Michigan require that the schools "be pillars of innovation in instruction" (Khouri *et al.*, 1999, pp. 7 and 25). The third goal of New York's (1999) charter school law declares that they "Encourage the use of different and innovative teaching methods." Hence, the promise of classroom innovations to be provided by charter schools is enshrined in law.

83. Thus, according to the theory behind charter schools, these schools are meant to be "innovative, lightly regulated" entities largely freed from bureaucratic constraints (Bolick, 1998a, p. 43). They are viewed as better positioned to pursue classroom innovation that will enhance teaching and learning for all public schools.

3.4.2. Innovations in Charter Schools

84. The charter school movement represents an interesting case for studying the effects of choice and competition explicitly directed toward classroom innovation. Unlike the choice programs in the UK and New Zealand, the supply side is largely liberated due to the fact that most charters are start-ups, rather than pre-existing schools opting out of LEA control.

85. Referring to the OECD framework for innovations, charter schools essentially fit the same patterns as other such autonomous, subsidised schools in other quasi-market contexts. Charter schools are, by most accounts, producing substantive marketing and organisational innovations, although the other function assumed in their design — of creating product and process innovations in classroom practices — has produced mixed results. Charter schools have developed and advanced an array of innovations. Anderson and Marsh (1998) found innovations in teacher employment, seniority structure, finances, requiring parental involvement, and in the "controversial" area of home-based instruction (see also Zimmer *et al.*, 2009, on charters and home-schooling). Others such as the Center for Education Reform (CER) point to innovations *caused* by the competitive effects of charter schools (Center for Education Reform, 2000b)[24] — local changes made by districts in response to competition from charters, such as advertising (Gifford *et al.*, 2000; Glassman, 1998), entrepreneurial management practices and grant-seeking (Vanourek *et al.*, 1997), or the addition or extension of programs such as all-day kindergartens (Plank and Sykes, 1997). However, it is not clear the extent to which these reported changes were caused by charter competition, although it is important to note that these changes tended to land mostly in the areas of marketing and organisational responses.

86. However, a closer analysis of these reports finds fewer product and process innovations, particularly at the technical core — in the classroom. As with other educational quasi-markets, charter schools appear to be less adept at generating new options, but instead seem well situated by virtue of their autonomy and incentives to promote the diffusion of options to new contexts. For instance, after extensive observations in five states, Rofes (1996) reported charter school innovations that were also evident in the wider public school sector — technology-focused instruction, year-round schedules, an emphasis on safety and order, and "alternative" options such as Montessori or a "back-to-basics" approach. But the charter schools are bringing these practices to communities that previously lacked them, or are focusing such practices on specific populations. Charter schools also provide such a vehicle for other innovations such as small class size (Kane, 1998), multi-age grouping and integrated curricula (General Accounting Office, 1995), and character and citizenship training (Rosenblum Brigham Associates, 1998).[25] Thus, charter schools appear to be making their greatest contribution in terms of disseminating alternative practices and thereby increasing the range of options from which parents in a given community may choose.

87. In fact, it appears that charter schools are markedly more successful in disseminating than generating innovations in classroom practice (Lubienski, 2003, 2008). For example, while charter schools are indeed diversifying options for families in local communities, in one of the first national studies on the topic, Good, Braden, and Drury (2000) found little evidence that charter schools overall produced new innovations in classroom practice not already evident in the wider public sector, suggesting that charters were better suited as a vehicle than an incubator for process and product innovations. Similarly, Anderson and Marsh (1998) reported very few innovations in teaching and learning following teacher interviews and classroom observations in California charter schools, although charter schools again are bringing new options to that state. In Arizona and Michigan — the two states identified by charter advocates as having the "strongest" charter laws based on ease of entry and autonomy for providers (Center for Education Reform, 2003; Viteritti, 1999) — research questions the assumption that choice and competition itself produces classroom innovation. Due to the perception that bureaucracy inhibits innovation, and unable to pass voucher legislation (Bolick, 1998a, 1998b), Arizona has taken lead in the charter school movement in terms of the numbers of schools and the autonomy they enjoy (Garn, 1998). While Arizona has created what is probably the most "market-like" environment for charter schools, a comprehensive study of 75 Arizona charter schools, found little evidence of new curricular innovations (Stout and Garn, 1999), although charters are indeed providing options that are new to Arizona communities. And in the most exhaustive examination of this issue to date, Lubienski (2003) reviewed all evaluation reports on charter schools in the US, noting areas nominated by charter leaders as innovations. Many of the organisational and marketing innovations, such as advertising, contracting for services and hiring non-credentialed teachers are practices that are new to the public sector overall. Product and process innovations reported in charter school classrooms tend to be new to a given community, but are usually already in practice in a wider context. Such patterns are represented in Figure 2.

Table 2. Familiarity of charter school classroom practices, by context

Degree of familiarity	Context		
	Local	State	National/ Sector
Familiar (replication)	4	4	4
Not new, but different in context (adoption)	4	4	
New (invention)	4		

Source: Lubienski, 2003

88. In this representation, the innovativeness of a practice is largely a function of perspective. Charter schools (like all schools) are using practices such as age-grouping and core curricula that are quite familiar in every context. The bottom row represents new classroom practices invented in charter schools. While there may very well be such innovations (although they have not been reported), since they have not spread from their local origins, any innovative qualities they evince are only a matter of local perspective at this point. Other practices — represented on the middle row — are known to be in use elsewhere, but offer a different and new option within a local or a state context. For instance, the Waldorf schooling and computer-assisted instruction are both relatively well-known concepts throughout the United States and Canada, but are not in use in most communities. Charter schools have served as a vehicle for the spread of these innovations to areas where they were not previously in use, as indicated by their popularity with

charter school providers (see, e.g., Edwards, 2002). This appears to be the major contribution of charters to educational innovation: in the dissemination of such innovations.

89. Smaller-scale studies focusing on more market-oriented state policies appear to confirm these patterns. In Michigan, a state where inter-district choice and charter schools have substantially empowered parents as consumers and schools as quasi-autonomous providers, several reports appear to shift expectations for innovation from the idea of invention to that of diffusion. Even charter advocates are decrying a perceived lack of innovation in these schools (P. Hill, 2007). Although Khouri, Kleine, White, and Cummings (1999), Horn and Miron (1999, 2000), Arsen, Plank, and Sykes (1999), and Reynolds (2000) demonstrate that charter schools are not inventing new classroom innovations as some had predicted, they all found diverse offerings in a broad array of charter schools. For instance, some charters were offering multi-age groupings, forging partnerships with the higher education sector, and offering year-round schedules. Yet, conceiving of innovation in the sense of invention, Horn and Miron (1999) began their study of Michigan's charter schools assuming "that innovative practices would be frequent and widespread. However, such is not the case. We found unpredictably few clear innovations.... In fact, we found the charter schools to be remarkably similar to the regular public schools" (p. 77). After examining innovations reported by charter schools, they concluded in their final report that charter schools are not developing new practices:

> We began our study of charter school initiatives with certain expectations and assumptions that innovations would occur in charter schools, that their sheer development would be cause for innovation. Unfortunately, overall innovations are not occurring in Michigan charter schools. (Horn and Miron, 2000, p. 26)

Interestingly, they found schools often reverting to traditional instructional practices.

90. Indeed, an examination of reports on the prolific charter school phenomenon suggests that one pattern in the dissemination of innovations may be the spread of more traditional of practices in charter school classrooms. For example, Hassel (1998, p. 255) analysed the curricular and pedagogical approach of 80 charter schools in several states, and found that 54% reported a "basics" emphasis, a vocational focus, a traditional subject orientation, or a "general" approach; 9% were specific culture-centric; another 36% were "alternative," but featured familiar educational models. Furthermore, he cites studies of charter schools in California, Colorado, Texas, Minnesota, and Massachusetts that indicate charter operators are embracing "well-known" curricular approaches (Hassel, 1999, p. 85). Price (1998) echoes these findings, noting that over 40% of the 261 charter schools surveyed reported a "back to-basics" or core-knowledge approach.

91. Where organisational innovations are appearing they tend to be structural or programmatic supplements, rather than fundamental changes in classroom practice. Perhaps most importantly, teachers in charter schools shared this perception of constraints on innovation. The percentage of teachers agreeing with the statement: "The school will support / is supporting innovative practices" declined significantly — down 25% from when they were surveyed on first joining a charter school (Khouri *et al.*, 1999, p. 56).

3.4.3. Charter School Policy Outcomes

92. While the idea of innovation-as-invention might be difficult to sustain from the available evidence on classroom practices in charter schools, since educational processes are so obscure, subtle but substantial innovations may be occurring in pedagogical processes which may not be apparent in themselves, but which may represent improvements that would be evident in school outcomes. Indeed, this is probably the greatest expectation for charter schools. Returning to the different objectives for school choice plans set out by Levin (2002) and others, we might evaluate charter schools on a number of

dimensions, including freedom of choice, productive efficiency, equity, and social cohesion. However, as a relatively new reform, research on some of these aspects of charters is still relatively undeveloped. For example, charter schools were set out to do "more with less" in terms of finding efficiencies while performing at higher levels. On the first part of that equation, at least, there is simply not much good evidence available at this point. Certainly charter schools have contributed to freedom of choice in terms of the range of options available to students, although there are concerns about the equity effects of how those options are arranged (Lubienski *et al.*, in press). And although policymakers hope to bring about "new and different" practices in the classroom, the potential for increased academic achievement is probably the ultimate objective for many reformers — particularly those hoping to narrow the achievement gap between different groups of students.

93. Studies on achievement in charter schools have tended to fall into two categories: smaller-scale studies of charter schools in specific cities or states, and larger studies of national or nationally representative data on charter school characteristics and performance. Because of their scale, the different sets of studies also reflect different methodological approaches, which may speak to the confidence we can invest in their findings. Some of these studies look only at school academic scores (we ignore those studies here), other studies examine academic performance while controlling for selection bias and other factors, while still other, smaller-scale, studies look at academic gains over time.

94. Early evaluations of achievement in charter schools were typically at the state-level, and did relatively simple comparisons of achievement in charter and public schools, finding mixed results (Miron and Horn, 2002; Miron and Nelson, 2000, 2002). More recent studies by charter advocates have employed more rigorous approaches, and have tended to find advantages for charter schools in terms of their relative effectiveness. For instance, Hoxby and Rockoff (2004) used a quasi-experimental, randomised design to study the effects of attending three Chicago charter schools, finding no overall gains, but significant gains for students that started attending charter schools in the earlier grades. More recent work on Chicago and other locations estimated the impacts of charter school attendance, finding charter schools to be performing either at a level essentially similar to, or slightly below, other public schools (Zimmer *et al.*, 2009). Research by economists studying charter schools in San Diego found little impact of achievement (Betts *et al.*, 2006). Other state-level studies by economists using rigorous designs have found somewhat negative effects for students attending charter schools (Bettinger, 2005; Bifulco and Ladd, 2006; Sass, 2006).

95. Larger-scale projects have the benefit of using nationally-representative data, or, in one case, data on the national universe of charter schools. This had not been possible until the US government collected data of a sample of charter schools and students in the 2003 National Assessment of Educational Progress (NAEP). A teachers union thought to be hostile to charters — the American Federation of Teachers (AFT) — released a report finding charter school students to be falling behind students in public schools. However, the study was only able to control for rough variables, and was both widely publicised and criticised. In response, Caroline Hoxby (2004) released a study of all charter schools in the US serving early-middle grades compared to neighbouring public schools. She found a distinct advantage for students attending charter schools, although other researchers found errors with her comparison groups (Roy and Mishel, 2005). Researchers at the University of Illinois released a multivariate, multi-level analysis using the NAEP data (Lubienski and Lubienski, 2006a; S. T. Lubienski and Lubienski, 2006b). They found statistically significant advantages in mathematics achievement for students attending public schools relative to student in demographically comparable charter schools. The federal government then released a similar study confirming these findings, and extending the analysis to reading achievement as well, where similar patterns were evident (Braun *et al.*, 2006). However, these NAEP studies are cross-sectional, not longitudinal, so caution must be exercised in interpreting the results, since causation cannot be demonstrated from those data.

96. Thus, there does not seem to be clear and compelling evidence that charter schools are innovating in ways that improve academic outcomes. However, there is some concern that these schools are responding to competitive incentives by using their autonomy to select, rather than prepare, "better" students. That is, even though charter schools are, in most cases,[26] required to use randomised admissions when oversubscribed, in some cases they appear to be adopting innovations such as marketing and location to shape the pool of applicants from which they must randomly select students. Thus, there is a growing concern that charter schools may be contributing to re-segregation patterns in the US. Still, despite their middling performance and the possibility of increased segregation, charter schools are popular largely because they offer an additional set of choices to families.

3.4.4. Summary: Innovation in Charter Schools

97. The patterns of innovation evident in charter schools reflect the wider findings on innovations in various quasi-markets for education. These types of autonomous schools appear to be quite adept at developing new innovations in the areas of organisation and marketing. But product and process innovations, especially at the technical core, tend to be more of the second-order, sustaining sort, instead of the disruptive changes that would produce substantial gains in academic outcomes that some policymakers anticipated. Still, charter schools represent an important mechanism for the diffusion of diverse practices. In that respect, it might be more accurate to conceive of these schools not so much as "R&D centres" or "laboratories" of new educational practices, but as showrooms or greenhouses where different educational practices can be made available to different communities, and perhaps nurtured in different contexts.

98. Yet perhaps the most substantive innovation represented in charter schools are the schools themselves, which are the result of a significant innovation in school governance arrangements. The organisational innovations leading to the inception and diffusion of charter schools required dramatically different thinking on the relationship of public schools to local government entities, funding models, and communities. And these structural innovations have led to the diversification of options in many communities — an important element for choice to thrive in quasi-markets. However, with respect to the incentivist logic promoting quasi-markets, it is interesting to remember that charter schools are an innovation produced in the state sector by government intervention advanced primarily by public-sector policymakers, rather than by the market.

4. Policy implications

99. Overall, there is little evidence that process and product innovations emerging from the competitive incentives of quasi-markets appear at a greater rate, or deeper within the organisational structure, than do innovations emerging from other sources. In fact, there are myriad examples of substantial and beneficial innovations flowing from the public sector, including the creation of quasi-markets themselves. For instance, Parry (1997b) sees few new pedagogical or classroom practices resulting from the competitive effects generated by the Chilean voucher program; instead her survey of school programs demonstrates that "public schools were more likely to have innovative programs" (p. 249). On the other hand, sectarian and proprietary schools offered more traditional curricula and pedagogical approaches (see also Carnoy and McEwan, 2000). Similarly, Gauri (1998) and Carnoy (1998b) note curricular innovations coming from professional bureaucracies rather than competitive markets. In the US, public schools have introduced a number of innovations outside of competitive pressures from quasi-markets, including recent efforts such as a hybrid school that offers secondary and tertiary credit (Hernandez, 2009); single-gender public schooling (Mead, 2003);[27] posting school financial information online (C. Williams, 2009); and offering students monetary rewards for performance (Guernsey, 2009). While some might dispute the usefulness of innovations such as pay-for-performance or single-sex schooling, many people have applauded the rise in student achievement in mathematics in the US. And this result may be attributable to a series of curricular innovations initiated by a professional association of

teachers to focus on mathematical concepts and problem solving (National Council of Teachers of Mathematics, 1989, 1991, 2000). Findings such as these raise questions about the singular potential of quasi-markets to promote innovation.

4.1. Opportunities and Barriers to Innovations through Education Quasi-Markets

100. Based on the review of the research on the cases in this analysis, it appears that quasi-market mechanisms of consumer choice and competition between largely autonomous providers may be more successful in promoting structural changes through policy, diversification of provision, and marketing and organisational innovations than in inducing product and process innovations in classroom practice. Some of the research surveyed here questions the value and enrolment consequences of the diversification inspired by these reforms. While state-directed policy can also target options to special-needs populations and ethnic minority communities, for instance, some of the less-regulated diversification of provision emerging from marketing innovations appears to be based on sorting of students by social characteristics. That is, one hope is that schools will be arranged on a horizontal basis through a neutrally valued distribution of preferences across distinct but equally valued programmatic or pedagogical options. However, the evidence from several cases reviewed here suggests that increasing school-level autonomy may promote horizontal or hierarchical ordering based on quality or, more specifically, on selectivity of each school and the SES of its clientele. Thus, an underlying question is the degree to which this type of school diversity is an acceptable trade-off for increasing the still largely unrealised potential for greater process innovations from competitive incentives.

101. In the discussion that follows, this analysis examines in more depth some of the patterns of innovation through quasi-market mechanisms in education. The discussion examines the dynamics of how quasi-markets work in education. While no one of the following considerations is an overarching explanation for the apparent patterns in education quasi-markets, taken together, they suggest reasons why patterns of educational innovations may appear as they do. This analysis problematises the easy application of simplistic assumptions regarding how markets would work in the education sector. Furthermore, it raises more complex questions about the conditions that aid or inhibit the role of competition and choice in encouraging educational innovations.

4.2. Quasi-Markets, Pathologies and Incentives for Innovation

102. One explanation for the patterns of innovation and continuity in education quasi-markets is that education quasi-markets may defy some market mechanisms that quasi-market reformers, and market advocates have applied to the school sector. Thus, what may work in other sectors may not work the same way in education. Although consumer choice and competition between autonomous providers are tenets central to market dynamics, they do not, in and of themselves, constitute or create market conditions. Hence, the "market" is simply a metaphor (Henig, 1994; Margonis and Parker, 1995) on which some wish to model the provision of education because of its perceived advantages in areas such as innovation. Yet the efforts on the part of some reformers to present market models as a "panacea" for education highlights an important divide between incentivists or "market theorists" who advocate a relatively blunt application of market models in education and more nuanced and sophisticated economic understandings of how market mechanisms actually work in education (Lubienski, 2006b).[28]

103. It is important to recognise the quasi-market nature of education in understanding innovation in these cases because of three potential pathologies inherent in education quasi-markets. Unlike businesses in an idealised market, schools are in an ambiguous position for sensing and responding to market-style signals (Hirschman, 1970).[29] Particularly when bound by obligations such as open access, equity, etc., schools often do a poor job of acting like private providers in many respects, including innovation. Whereas a typical business may innovate in response to the exit of patrons, public schools fail to take such

action in the face of consumer dissatisfaction, according to incentivists. Thus, the remedy provided by market theorists is to force these schools into business-like status in terms of competition and consumer choice. However, as noted, schools in choice systems are not in pure markets either, and therefore may be limited by the same pathologies and institutional constraints as schools in state-administered systems. For instance, popular schools in the UK and New Zealand did not expand their operations, despite their autonomy and the obvious consumer demand (Whitty *et al.*, 1998). Some commentators see such non-market-like behaviour as indicative of an inherent inability of publicly funded schools to pursue business-style activities such as innovation (e.g., Lehman, 1997; Payne, 2000).

4.3. Consumer Markets and Education Markets

104. Similarly, many assumptions regarding diverse and innovative options are often premised on perceptions of innovations in markets for consumer goods — toothpaste, cars, or luxury items, for instance (Gintis in Glass, 1994; McGriff, 1996). For example, in the US, one state Board of Education president promoted charter schools by pointing to competition in such markets: "I prefer to buy from Ford, General Motors, Chrysler, or from a host of other companies that succeed — or fail — based on how well they satisfy the customer" (Durant, 1997, p. 362; see also Bennett *et al.*, 1998). In arguing for markets in education, Coulson (1999, p. 217) of the libertarian Cato Institute claims we now have a "huge range of transportation choices" thanks to the market. Coulson's solution to education stagnation is a free market as evident with consumer goods:

> The free-market innovations process may offend the sensibilities of educational egalitarians, due to the fact that innovations are usually enjoyed first by the wealthy and only afterward by the general public. Nonetheless, it is the only process that has a proven record of stimulating valuable improvements in technology, and of eventually making those improvements available on a grand scale. (p. 344)

This position echoes Friedman's (1995) insistence that innovation flows from free market forces, since that is the case with consumer goods: "As in all cases, the innovations in the 'luxury' product will soon spread to the basic product."

105. Nevertheless, this allusion to luxury goods ignores crucial differences between idealised markets for consumer goods and real quasi-markets for education services. Inasmuch as the predominant "innovation" of selection is based substantially on sorting students by SES, it is one innovation in a "luxury product" that cannot, by its nature, filter down to lower-SES communities and schools. Furthermore, the consumer market metaphor perverts the theoretical dynamics of competition as it might manifest itself in the emergence of innovative, experimental, and diverse options for consumers. For example, the guarantee of a certain level of funding \per student means that providers will compete with each other on the basis of how many consumers will choose a given school.[30] But providers cannot compete in terms of attracting more business from any one consumer — particularly "higher value" consumers — since all students bring essentially the same public funding. The exceptions here are (1) that a choice program can be partially subsidised, allowing providers to charge fees in addition to the state-funded amount (as is the case in New Zealand, and which can be arranged with the state in Chile), and (2) that some students cost more to educate than others — so, consequently, lower-cost students are more attractive to providers (Ball and Gewirtz, 1997; Gewirtz *et al.*, 1995; Lubienski, 2007b).

106. Hence, in a physically constrained setting such as a school building, revenues available for experimentation and development are necessarily limited by the set per-capita funding level. Only operations that are inherently expandable or are easy to duplicate can further profit from successful innovations, since they can increase the number of students-consumers they reach through cloning, franchising, or extending the reach of their services. This gives an advantage in innovating to large-scale

operations over independent schools. In fact, after years of portraying small-scale organisations as better positioned to develop product and process innovations (largely in view of new start-ups in the information technology sector), observers are starting to appreciate again the ability of larger organisations — especially in complex areas such as health care and education — to develop innovations, due to their scale and access to resources (Lohr, 2009).

4.4. Corporate Models for Innovation in Education

107. Since providers of consumer goods attempt to increase market share, it is reasonable to consider whether using this model for schooling will bring the corporatisation and consequent consolidation evident in many other sectors as well (see Taub and Weissman, 1998). In the UK, both Conservative and Labour governments have sought corporate involvement in schools to promote innovation, though the CTCs or through private management, and in the US, venture capitalists are increasingly interested in opening the $300 billion-a-year K-12 market to investment (D. Hill, 1999; Milken *et al.*, 1992; Symonds, 2000; Walsh, 1998; Wyatt, 1999a, 1999b). Likewise, policymakers in other nations are interested in the possibilities of private sector participation in education (Bilefsky, 1998; Dobbin, 1997).

108. This potential for corporate involvement is most apparent in the growth of for-profit management companies in the US. Corporate EMOs now manage a substantial proportion of the charter schools in states that market advocates favour for their "stronger" legislation. In Michigan, EMOs run about three-fourths of all charter schools, which tend to be larger than the remaining small-scale, independent "mom-and-pop" providers that were to generate innovation and diversity of options (Horn and Miron, 1999). Furthermore, groups like Edison hope to expand worldwide, taking advantage of opportunities such as the UK Labour government's plan to bring private managers in to run failing schools (Clare, 1998a, 1998b; Lightfoot, 1999; Walsh, 1999).

109. One idea behind private management is that corporations can bring private capital to R&D efforts (Chubb, 2001), as they do in the innovative sector of information technology, for example (as opposed to, say, the less stellar results of investment capital in fostering innovation and diversity in the entertainment of fast food sectors). However, in many cases, corporations are swayed by the incentive toward standardisation of a product or service due to enhanced economies of scale. This is an advantage available to public schools through the LEA. Charter schools can also access these advantages as a part of an EMO — in effect, privatised super-LEAs not bound by geography. But in some circumstances, corporations have an economic incentive to limit the diversity of a product to some extent because of research, development, production, distribution, and support costs; as Terry Moe notes, "innovations cost money. Sometimes a lot of money" (cited in Molnar, 1996, p. 72).

110. Thus, while critics claim that the hated "one-size-fits-all" approach to education is inherent in public control, such standardisation is also possible through the private cost-savings in the "cookie-cutter" approach. In the US, these standardising tendencies in large-scale operations are becoming more evident with the growing presence of corporations which try to increase their share of the market — all of which have a set approach to educating children (Hofman, 1998; Poole, 1998; Rhim, 1998). In the UK and US, research shows that autonomous schools shy away from using their new-found flexibility for finding ways to educate students with special needs, even when extra subsidies are available (Bagley and Woods, 1998; Feintuck, 1994; Horn and Miron, 2000; Lewin, 1999; McKinney, 1996; Zollers and Ramanathan, 1998). It appears that some schools are using their business-like autonomy not to pursue innovations, but to select consumers (or products) that most efficiently fit into a standardised and thus profitable form or provision. Indeed, Dykgraaf and Lewis (1998) found strong central control exercised by EMOs over their schools, and little openness about their activities, which hinders public assessment of pedagogical and administrative practices, although Scott (2008) notes the potential of non-profit EMOs to scale up, if not produce, product, process and organisational innovations. Horn and Miron (2000) show that charter

schools act like private schools in a number of ways, including student selection and conditions of employment. This "isomorphism" is not only evident in the types of offerings provided by autonomous schools (Bulkley, 1999), but in the types of institutions themselves (Whitty *et al.*, 1998, p. 52). Ironically, applying a business model for public-sector institutions such as public schools represents an overall standardisation of options as institutions revert to one model — undermining unique aspects of public schools as public agencies, and forcing them to conform more to the dominant "efficiency" model of a private business (see Oettle, 1997).

111. The likely growth of the corporate market model also raises questions regarding the expectation that autonomous schools — including those designed as R&D centres — will share any insights and innovations. That promise was motivated by a perception that district schools are plagued by a deadening uniformity (Peterson, 1990), and require interventions from the private sector (E. West, 1995).[31] In fact, while autonomy and competition were meant to lead to innovations, the demise of central bureaucracies and the rise of adversarial relationships down-grades the capacity for schools to share innovations with each other (Bosetti, 2000; Rosenblum Brigham Associates, 1998; Wells *et al.*, 1998). Nor is there much incentive to share an innovation with a competitor. On the other hand, if there were adequate channels set up to disseminate innovations, the "free-rider" problem suggests that many schools would not assume the costs of innovation if other schools will do so and freely share their insights.

4.5. Position, Emulation and Duplication in Competitive Education Markets

112. The consumer-choice premise of competitive schooling assumes market-like conditions, but these conditions in fact can both encourage and limit innovation. While reformers assume that markets for consumer goods create a diversity of options, an examination of the political economy of consumer markets indicate that these assumptions ignore some standardising effects of competition. Depending on the circumstances, a competitive market can also have constraining effects on experimentation, and foster duplication instead of diversity. In a system of consumer choice, the logic of markets dictates that providers should stake out positions of advantage in order to command the patronage of the largest possible group of consumers. If a provider moves to corner a segment of the market, there is some incentive also for other providers to move in that direction as well, although not quite to the same extent, in order to capture all remaining business up to and possibly including some of the market share of their rivals (Hirschman, 1970).[32] This can have the effect of standardising options available to consumers.

113. And, of course, success breeds emulation. If something is found to "work" in terms of attracting consumers, competitors will try to duplicate that success by duplicating whatever brought on that success — particularly if such a strategy is easier than engaging in one's own costly R&D. As noted earlier, this emulation is readily apparent from the research on the re-emerging traditionalism in the competitive school environment in the UK (Fitz *et al.*, 1993; Glatter *et al.*, 1997; Power *et al.*, 1994a; Power *et al.*, 1994b; Woods *et al.*, 1998). In North America, charter schools are similarly judged on academic achievement. Joe Nathan (1998, p. 502), a leading proponent, advises charter schools "to look at carefully evaluated, proven approaches." One of the most financially successful EMOs, National Heritage Academies, does not focus on innovation, but uses practices from religious schools (Golden, 1999; Schnaiberg, 1999). This points to the inherent tension facing schools with the freedom to innovate, but the requirement to be accountable for results as judged on a uni-dimensional standard of academic achievement and consumer approval. Innovation presupposes freedom to experiment (and fail). Larger operations can better afford this, but even there the predominant profit incentive, which provides a reason to minimise costs.

114. Part of the reason why quasi-markets do not foster as much innovation as expected may be the assumption that consumer demand shapes provider response. Indeed, in some markets, producers or providers can select their consumers. In education, this means that schools may sometimes choose students by embracing exclusive or narrow missions, or through locational decisions (Lubienski *et al.*, in press).

This has been the case in New Zealand and the UK, as schools set out criteria for prospective students to meet in order to better pursue the school's mission or philosophy (Edwards and Whitty, 1997; Fitz *et al.*, 1997; Walford and Pring, 1996; Whitty and Power, 1997). While this is now officially encouraged in the UK, it was initially done through covert-selection techniques — e.g., parent interviews, required allegiance to discipline codes or a school's specialised mission/philosophy, and symbolic trappings of traditionalism (Francis, 1990; Glatter *et al.*, 1997; A. West *et al.*, 1997). There is no reason to assume that the same trend would not occur in other choice systems, as many independent schools now require parent or student contracts, volunteer hours, adherence to mission statements, or other means that encourage self-segregation by parents that obscure selection of students by schools (Farber, 1998; McGhan, 1998; McKinney, 1996; Rothstein *et al.*, 1998). It seems likely that regulations to block overt selection will be challenged, as market competition implicitly encourages parents and schools to find ways of sorting themselves. This is an issue at the system level in so far as equity — such as greater access to quality options for disadvantaged students — is an overall goal, but competitive incentives are directed at individual school-level.

4.6. Other Considerations for Further Research

115. Two other related considerations regarding the use of choice and competition to spur innovation are noted here as areas for further investigation (both of these issues are discussed in more detail in Lubienski, 2003). *First,* assumptions of market theorists in education appear to *neglect the less recognized standardising influence of consumers in some markets; as applied to education, this means that the choices of parents as consumers may have a limiting effect on curricular options* — a phenomenon readily evident in all the cases in this analysis. Whereas market theorists assume rational actors work to maximise advantages in areas such as academic achievement, the cases here challenge dogmatic applications of such assumptions. In Chile, for instance, parents were "relatively uninformed" about school quality in terms of academic achievement — much less the value-added potential that schools could offer their children (Gauri, 1998, p. 102). Indeed, evidence from different contexts indicates that parents often employ other considerations besides potential academic added-value, such as convenience, proximity, costs, and social issues when choosing schools (Bell, 2008; Carroll and Walford, 1996, 1997; Glazerman, 1998; K. B. Smith and Meier, 1995). Furthermore, as "parents often do not choose schools for educational reasons," innovation — classroom or otherwise — may not be the high priority for many parents that it is for many reformers (Gauri, 1998, p. 104).

116. In fact, many parents view public schools as *overly innovative* because these schools embrace many fads and progressive reforms (Ravitch, 2003; Whitty *et al.*, 1998). Thus, in this respect, Harmer (1994, p. 172) defines school as innovative if they "emphasise reading, writing, arithmetic, and geography." Additionally, the author of California's charter school law intended to create schools where "only the academic basics are taught" (p. 67). Indeed, it is not clear that parents in the UK want more diversity than is already available (Woods *et al.*, 1998). As has been evident in past efforts at reform, schools have to limit experimentation in response to what consumers consider to be a "real school" (Tyack and Cuban, 1995).

117. Inasmuch as the definition of "good" schooling is obscure, varied, and difficult to assess, the point of educational innovation is also obscure, varied, and, therefore, difficult to assess. If consumers equate "good" education with discipline, rote memorisation, and high test scores, then in a competitive environment that equation restricts room for innovation — particularly when consumers are informed primarily through test scores, which elevate a uniform standard goal for schools. Instead, much of the evidence indicates that parents are often more concerned with "academic basics" than innovation. Kohn (1998) claims that affluent and ambitious parents in the US do not want innovations in their children's education, but, instead, want what are commonly seen as solid, tried-and-true educational practices (see also Arsen *et al.*, 1999; Lauder *et al.*, 1999). Gordon and Whitty (1997) note that while parents in New

Zealand support academic and social goals, academics means basics, not innovation. Indeed, "If anything, parental pressure is making it difficult for such schools to be different" (p. 459). This is the case in the UK, where popular conceptions of education mean that more traditionalism may be the only "innovation" welcome in the marketplace. Nevertheless, insofar as parents want academic "basics," the space for innovation in a competitive environment is limited. Perceptions of a "good" product or service — whether for material goods or schooling — provide incentives for standardising options.

118. Therefore, presumptions about the deadening conformity in public schools that have motivated many market advocates to call for choice may, in fact, have it backwards. Indeed, the popularity of "traditional," "basics," and "core" curricula in autonomous schools may indicate that many parents are rejecting what they see as overly innovative public schools for tried and true approaches that they feel are more appropriate for their children. Thus, it may be that if reformers want to empower parents as consumers, then either (1) consumers do not want innovation, despite reformers' wishes; or (2) consumers cannot be trusted in their preferences because there is a real need for innovation — so reformers were wrong to empower parents as the driving force for innovation. In that sense, it may be wise to consider whether reforms promote innovation for its own sake (and where does that lead)?

119. *Secondly*, marketing innovations have been quite apparent in these cases, but little attention has been paid to how they are *marketing themselves to both respond to and shape consumer preferences*. This trend toward symbolism may also be associated with standardised curricular options and less substantive innovation (Lubienski, 2007b). In view of the marketing and image management evident in these cases, which approximate monopolistically competitive conditions quite closely, there is the potential that schools will emphasise relatively minor differences, while obscuring overwhelming similarities — thereby undercutting incentives for innovation (Chamberlin, 1933). Furthermore, reformers apply market theory to education under the assumption that schools will emerge in response to a pre-existing landscape of the varied consumer preferences (e.g., Friedman, 1980). But that presumption ignores the degree to which providers shape consumer preferences through marketing. Indeed, quite often, producers actively cultivate consumer demand.

120. In general terms, there are two ways to survive and thrive in a competitive market: first, product or process innovations in order to attract consumers with a better value on a better product or service; or second, better marketing and organisational innovations. While not mutually exclusive, in some cases, the cost effectiveness of one option trumps the other. Instead of focusing on quality or cost-effectiveness as rational-choice theorists would prefer, competitors in consumer markets often emphasise questions of style, attitude, loyalty, and association in appealing to customers. While small differences and bells-and-whistle innovations may be useful and cost-effective for producers, it is sometimes the very effectiveness and cost efficiency of marketing that deters the incentive to offer real improvements or undertake costly innovations in a product line. Unfortunately, marketing is often designed to obscure whether a change in a product is a substantive improvement or simply a symbolic alteration.

121. This aspect in the logic of markets would also be present for schools competing for per-student funding. Indeed, many of the schools in these cases appear to be embracing the latter strategy in view of the risks and real costs associated with the former. As schools become more involved in marketing themselves to potential consumers, it will be important to note the extent to which perceived differences are a matter of true curricular or pedagogical innovation, or simply repackaging of older ideas (see, e.g., Rosenblum Brigham Associates, 1998). As noted before, a school's relative potential to add value to any given student is an exceedingly complex question. In lieu of easy indicators of such potential, parents notice proxy indicators of the academic achievement at a school — usually SES characteristics of the school's intake. Schools attempting to shape these perceptions will focus on symbolic presentation in terms of uniforms, school crests, prestigious-sounding names, pamphlets, and so forth.

5. Conclusion

122. Market mechanisms of consumer choice and competition between autonomous providers are integral to quasi-market education reforms for several reasons, including liberating parents in their "right to choose," promoting institutional efficiency, and raising academic achievement. Yet these goals assume a diverse range of options from which parents may choose in order to infuse meaningful substance into those choices. In view of state education systems thought to be inherently standardised by their "captured" status as a public sector bureaucratic monopolies, quasi-market reformers argue that choice and competition will create conditions and incentives for autonomous schools to develop new classroom innovations that give parents real options while promoting more effective teaching and learning. Based on the cases reviewed here, it appears that such reforms can promote innovations at certain levels of the school organisation, although they are somewhat limited in encouraging classroom-level innovations.

123. Evidence reported here offers insights that go beyond the hypothetical application of market mechanisms to education, as in quasi-markets. Together, these different systems include state and non-public schools, established schools freed from bureaucratic authority and new schools created outside LEA control. While state mandated regulations (such as national curricula and assessments) limited some types of innovation in some instances, similar patterns of standardisation were evident in other cases where such mandates were not a consideration. In fact, the analysis of this evidence and of quasi-market dynamics suggests that economic forces likely played a larger role in promoting uniformity than reformers initially recognised.

124. There are a few ways to interpret the evidence. First, quasi-market reforms appear to be more successful in creating innovations in marketing and management than in generating new classroom practices, although they seem particularly adept at disseminating alternative practices. But while they contribute to a diversity of options in many local communities, this diversification sometimes appears in many cases to be based on social characteristics of student intake and, thus hierarchical ordering of institutions, rather than a horizontal range of equally valued, but substantively different, curricular and pedagogical approaches.

125. Furthermore, the fact that public sector policy interventions led to innovations in classroom practice in Chile and the UK, and to the development of charter schools in North America, represents an interesting insight. Therefore, this review suggests the importance of public policy interventions, in addition to market mechanisms of choice and competition, for inducing different types of innovations. In view of the standardisation evident in these cases, the discussion of markets in this analysis suggests the need for a more nuanced and sophisticated understanding of how quasi-markets work in education.

126. Thus, secondly, it appears that some quasi-market reforms advanced from an overly simplistic and optimistic view of market mechanisms for schools, and in particular in how schools would respond to competitive incentives. This perspective is particularly problematic when applied to an area as complex and contested as education. There, unclear and conflicting goals for schools obscure the reasons for innovation. Issues in several areas suggest the need to re-think the potential for market models to generate classroom-level innovations in teaching and learning:

- Many consumers, empowered by reforms, appear to reveal preferences that do not support the assumptions regarding the need for product and process innovations.

- As both the evidence and the theoretical discussion of markets here suggest, there are standardising tendencies inherent in market mechanisms such as competition and consumer choice in education as in other sectors. Thus, while not disputing the economic incentives for innovation and experimentation embedded in the logic of markets, this discussion indicates that

there is a less recognised tendency of standardisation and emulation that may counteract the ability of choice and competition to encourage innovation and diversification.

- Markets models usually assume a set cast of characters with pre-specified motives and roles. However, as the discussion above shows, those assumptions do not necessarily transfer over into education quasi-markets.

- Choice advocates assume a dispersed distribution of preferences, when, in fact, it appears to be more modal: schools may often compete for a certain type of student (based on SES characteristics), and standardise as such to attract that type.

- Reformers assume that markets would respond to consumer preferences, when, in fact, providers can shape consumer preference through marketing innovations. That is, markets are not just consumer-oriented, but can be producer-oriented.

- Innovation may be substantive (as in classroom practice), or they can be symbolic (as in marketing). Providers can attract consumers by developing innovations for a better (or cheaper) product, or by marketing. Conditions and relative costs influence which strategy is more attractive for producers.

- In view of the relative dearth of classroom innovation, some North American reformers have lowered their expectations for innovation to focus on governance issues. Notably, like the CTCs in the UK, this reform is accomplished by public authority, not market mechanisms.

- However, by re-focusing on policy innovations alone, reformers assume that changes in governance substantially impact (or even "trickle down" to) classroom practice. In fact, such assumptions ignore significant literature on the weak association of governance policy to classroom practice, and the considerable resistance of education systems to substantive reform (e.g., D. K. Cohen, 1988; Cuban, 1984; B. Levin, 1997; B. Levin and Riffel, 1997).

- Stark simplifications about propensities inherent in public and private sectors ignore evidence of the innovative powers of public sectors, constraining factors in private sectors, and the folly of automatically oppositionalising them.

In short, as Lauder *et al.* (1999, p. 135) note of quasi-market reformers in New Zealand, "it is clear that the world is a far more complex place than they envisaged."

127. Finally, this analysis on different types of innovation in education questions the causal link between quasi-market mechanisms and classroom-level product and process innovation that continue to motivate calls for school choice. Insofar as reformers do not recognise the trends as indicated by the weight of evidence on this issue, continued policy movement in the quasi-market direction is likely to enhance the exit option for dissatisfied consumers. Indeed, the more limited state sector choice plans in places like the UK and Arizona were implemented after reformers were unable to secure fuller-scale voucher programs (Bolick, 1998a, 1998b; Thatcher, 1993). Yet, as noted in this analysis, vouchers in Chile have not led to more innovations. However, inasmuch as the evidence here suggests a discongruence between stated goals of reformers, the "basic" preferences of parents, and the standardisation resulting from the reforms, innovation may be largely beside the point.

128. However, insofar as educational innovation truly is the goal of market-oriented education, reformers may do well to consider the conditions in which competition and choice lead to innovations and diversity in provision and product. That is, it is not so much a question of whether or not quasi-markets

lead to innovation in education, but — in view of the complexities surrounding this issue in various consumer markets — how to foster desired types of innovation in education. For example, schools in New Zealand and Chile do not seem to be targeting or developing niche markets (except by SES). In the UK there is interest on the part of independent schools in opting-in to state funding. But the charter school movement in North America seems to have gone the greatest distance — albeit still to a limited extent — in pursuing niche markets (however, even in this case, it is often based on ethnicity). Policymakers may want to consider in more detail how these patterns might be related to the role of national curricula and assessment, private capital and corporate management. More research needs to be done on how the structure of school systems promotes or inhibits different types of innovation. For example, OECD (1994, p. 51) believes a "greater chance that educational innovation will result under a diversified system than a hierarchical system of choice." Yet others feel that schools failing on the uni-dimensional scale of "academic excellence" are best positioned to try something out of the norm (e.g., Whitty *et al.*, 1998). While the centre-right Education Commission of the States (National Commission on Governing America's Schools, 1999) argues that, in order to encourage innovation, all US public schools should be turned into charter schools, Fiske and Ladd (2000) argue that North American charter schools will be more diverse and innovative if they remain a minority model on the periphery of the education system. Furthermore, in modelling education — correctly or not — after markets in consumer goods, reformers should consider how different types of innovation are encouraged and constrained in such markets. For example, Gauri (1998, p. 105) observes that "Exit signals and the post-welfare model seem to be more effective in promoting innovation in health care, where there is greater agreement on what medicine is supposed to achieve." Similarly, leading figures in Public Choice theory such as Tullock (1996) point to pharmaceuticals as an example of an innovative, profit-driven sector (see also Lieberman, 2001). If both education and public health are public goods, what can we learn by comparing them?

129. This analysis is intended to offer insights into policies on school quasi-markets. It seeks to inform debates by exploring one of the primary assumptions underlying reform efforts — in terms of both research evidence and theoretical analyses. The experiences of numerous nations provide important evidence on the role of quasi-market mechanisms in education, and offer a compelling reason to consider the logic of reformers in examining expectations of product and process innovation and diversification for autonomous schools. A deeper investigation into quasi-markets illuminates the tendencies of markets toward standardisation, and problematises claims of diversification.

130. Based on evidence reviewed in this analysis, it appears that there is no direct causal relationship between leveraging quasi-market mechanisms of choice and competition in education and inducing educational innovation in the classroom. In fact, the very causal direction is in question in view of the fact that government intervention, rather than market forces, has often led to pedagogical and curricular innovation. Accounting for these tendencies not only helps us understand the record of autonomous schools in promoting classroom innovation, but helps us evaluate the potential for other quasi-markets to cultivate new approaches to teaching and learning, or for standardising provision and product.

ENDNOTES

[1] Univesity of Illinois. Contact: club@illinois.edu The author gratefully acknowledges Dr. Stéphan Vincent-Lancrin of the OECD for invaluable editorial guidance, and Professor Bekisizwe Ndimande for generously offering some useful ideas and sources for this project. Additionally, Jin Lee and Shukri Nur provided able research assistance.

[2] There were exceptions to this pattern. For example, in New Zealand quasi-markets were not promoted as a response to systemic educational failure, but played to preferences for local control. Other cases, such as India, have embraced private models to aid a state sector incapable of rapid expansion to meet increasing need.

[3] Sexton quoted in Whitty and Power (Whitty and Power, 2000a) (2000, p. 3). For more detailed descriptions of the emergence of education reform policies in the UK, see Gewirtz, Ball and Bowe (1995), Rogers (1992), Walford (1994), and Whitty, Edwards and Gewirtz (1993).

[4] According to the brochure published by the government in announcing the CTC program, these schools would have managerial autonomy: "free to negotiate pay and conditions of service" (Department of Education and Science, 1986, p. 6; as quoted in Whitty *et al.*, 1993, p. 2); the Secretary of State for Education saw CTCs as "pioneering new teaching methods, new ways of managing schools, and new approaches to technology and science," and a prospectus for such schools presented them as the "research and development arm of national education" (Whitty *et al.*, 1993, pp. 95. 96)

[5] This was associated with the Moderate (conservative) Party Government, but this reform effort was in fact initiated by the previous Social Democrat government.

[6] Approximately 49% of students in general high schools attend private schools, but 52.6% of students in the specialized high school sector attend private schools, although the private school share for most levels of schooling declined slightly in recent years (Ministry of Education and Human Resources Development, 2008).

[7] For instance, Swedish economists Sandström and Bergström (2002) focus on the supply side, considering the number of alternatives to any one school in a geographic area. American economist Caroline Hoxby (2002) highlights demand-side uptake, arguing in a study of competitive effects of charter schools that district schools start to increase effectiveness when 5-6% of a district's students enroll in charter schools.

[8] Of course, not all innovations necessarily lead to improvements. For example, research and development efforts might not all reach the market, but R and D is still squarely within the realm of innovation.

[9] For example, in his study of policy innovation, Mintrom (2000b) cites Rogers (1995) and others tending toward the more contextually-dependent sense of an innovation as something that is *perceived* to be new when adopted at a local or individual level. However, in regard to the present question, this definition from Rogers does not account for efforts by policy entrepreneurs to import or apply practices from one context into another through franchising or otherwise expanding one practice in the broader market — which is clearly happening in some of the cases reviewed in this analysis. While such changes may appear to be innovative to a local parent, for example, they are not new to the franchising agency or to observers of the broader context who would see this as a provincial diversification of options for those local parents alone. Since several of the school choice policies examined here seek to induce *new* innovations that can benefit the education system as a whole by making teaching and learning more effective overall, simple diversification (as in bringing an established practice from one locality to another) is insufficient in terms of the stated goals of policymakers. Thus, Rogers' definition is too blunt for the present purposes.

[10] Although schools can impose implicit or explicit costs to attract preferred clientele (Lubienski, Weitzel, and Gulosino, 2009).

[11] To these, incentivists have also added consumer satisfaction as an important measure of success (Miron and Nelson, 2002; see e.g., Greene *et al.*, 1998; Howell and Peterson, 2002; Johnson, 2005; Lips, 2003; N. Smith, 2003).

[12] Consequently, the innovations described in this analysis are drawn from a variety of scholarly and even popular sources.

[13] This is in line with the original concept for charter schools — that they would be smaller-scale, experimental schools started by teaching professionals with a shared alternative vision for education (Budde, 1988, 1989; Shanker, 1988).

[14] On these juxtapositions, see, for example, Fiske and Ladd (2000), OECD (1994), and Lubienski (2003).

[15] An exact number is impossible to come by at this point, since both charter schools and Reggio Emilia are decentralized movements, and there is no central clearinghouse for curriculum information of this type. Furthermore, many schools are "inspired" by Reggio Emilia, so it is difficult to determine the extent that they embody this approach. However, it is clear that dozens of charter schools have adopted aspects of this approach, or at least are marketing themselves as doing so.

[16] For an economic analysis of the reasons for a "comprehensive uniformity to schools, see Brown (1992).

[17] Parry (1997b) considers innovation largely in terms of range of programmatic options along with individual schools' plans for reform (usually submitted in response to government-sponsored reform grants).

[18] Research summarized in this section is drawn from Lubienski, 2003.

[19] Traditionally, the federal government has been hesitant to get involved in elementary and secondary education policy outside of funding compensatory programs for poor and special needs students, in deference to state prerogatives and a strong tradition of local control in education.

[20] For more detailed discussions of charter school policies, including differences in authorizing legislation, see, in the US, Nathan (1996a), Vanourek, Manno, Finn and Bierlein (1997), and Hassel (1999a); and, on Canada, Bosetti *et al.* (1998) and Dobbin (1997).

[21] Despite occasional claims that private schools are more innovative (e.g., Friedman Foundation, 2008), empirical investigations of teaching practices in schools indicate that private — and particularly independent (non-Catholic) – schools tend to be more traditional (Bodovski and Farkas, 2007; Chandler, 1999).

[22] The premise underlying this assumption — that public schools are more limited than private schools in their autonomy because they are positioned in the public sector — is challenged by Glass (1997).

[23] Although observers like Ascher, Berne, and Fruchter (1996), Cookson (1994), and Tyack (1990) dispute the assumption of a lack of innovation and programmatic diversity in public schools, charter school proponents embrace that critique. For example, the Hudson team contends that "This country is too big and diverse to expect one school model to fit everybody's needs" (Vanourek *et al.*, 1997, pt. 6, p. 12). Finn (1997) insists that the non-economic structure of public education discourages innovation, and thus, he and Gau (1998, p. 79) repeat this notion of uniformity, noting that, under the public school system, "every school...was essentially identical to every other."

[24] Although presented as a research study, the CER report is more of an example of policy advocacy, so conclusions from this report must be taken with caution.

[25] The Rosenblum Brigham Associates (1998) report contends that charter schools are re-combining pre-existing practices, rather than developing new practices: "specific practices are not the key innovation implemented in charter schools, but rather the integration of practices around a central vision, and the balance of autonomy and accountability that allows the schools to match practices (including hiring) to the vision." Perhaps the most comprehensive list of innovative practices in charter schools comes from the Center for Market Based Education's report on Arizona charter schools, with examples drawn from case studies (Gifford *et al.*, 2000).

[26] New Orleans charter schools are a notable exception (Lubienski *et al.*, in press).

[27] Because of past legal prohibitions, this is a relatively new phenomenon in the US public sector.

[28] Chubb and Moe (1990) famously argued that choice and competition should be seen as a "panacea" for education.

[29] Under Hirschman's (1970) framework, public education is structured to respond to political pressure as a public good — voice expressed through political processes. Public schools are generally not designed to be directly responsive to exit, since (as critics note) they have a semi-monopoly status. But they often incite dissatisfied users to exit or "vote with their feet" (Tiebout, 1956). Thus, pathology results. Indeed, as Hirschman notes, as a lazy-monopoly primarily responsive to political pressure, schools may **prefer** or even **encourage** dissatisfied and vocal parents to exit in order to get rid of "difficult" individuals.

[30] While it is possible that asymmetries of information may be causing consumers to choose inferior educational services (Lubienski, 2007a; Lubienski and Garn, in press), educational economist Caroline Hoxby (2003) argues that only a small groups of discriminating and informed consumers need to be active in a market in order for competition to drive quality improvements for all (see also Walberg and Bast, 2003).

[31] However, such a critique does not explain how a perceived lack of competition necessarily imposes uniformity across separate LEAs (Cookson, 1994). Nor does it recognize that there are often more differences *in* various sectors of schooling (public, religious, proprietary) in curriculum and instructional practice than *between* sectors — which (despite the premise of public choice theorists) overlap so much that they are largely indistinguishable from one another (Levin, 2001). In fact, the argument could be made that, inasmuch as classrooms now appear similar across different contexts, uniformity may be due to *market* influences on the curriculum, private sector control of employment possibilities for graduates, individual economic ambition, and other market effects in standardizing schools (Hogan, 1992; Labaree, 1997). Furthermore, the narrowness of the public choice perspective slights the many innovations produced in the public sector, and, moreover, is premised on a highly hypothetical presumption of inherent selfishness of human nature that posits that innovation springs primarily from the possibility of self-enrichment (e.g., Chubb, 2001; Lieberman, 2001).

[32] Hirschman's (1970) analysis suggests similar tendencies in the political arena as well. Many commentators from different ideological vantage points have noted that opposing players the "political marketplace" offer voters options that are often indistinguishable in their substance. In Hirschman's framework, isomorphism of established parties will lead to discontent of peripheralized consumers/voters. But duopolistic or even polyopolistic power systems can constrain that discontentment through effective cooperation exercised by "competing" parties. A confluence of interests may lead to intentionally concerted efforts or collusion caused by the effects of the major players' common goal of maintaining an effective oligarchy. That is, even bitter rivals may cooperate in essence in order to prevent others from also joining the game. Thus, major parties and producers have a common interest in sustaining the peripheralized status of third parties. While at times they might look for a minor-party ally in order to tip the balance of power in their favor, they also have a common interest with their opponent in remaining the primary partner in any coalition.

REFERENCES

van Amelsvoort, H. W. C. G. v., and Scheerens, J. (1997). Policy Issues Surrounding Processes of Centralization and Decentralization in European Education Systems. *Educational Research and Evaluation, 3*(4), 340-363.

Anderson, L., and Marsh, J. (1998). *Early Results of a Reform Experiment: Charter Schools in California.* Paper presented at the annual conference of the American Educational Research Association, San Diego.

Angus, M. (2003). School Choice Policies and Their Impact on Public Educators in Australia. In D. N. Plank and G. Sykes (Eds.), *Choosing Choice: School Choice in International Perspective* (pp. 112-142). New York: Teachers College Press.

Arizona Education Association. (1998, March/April). Charting a Change of Course: The Good, the Bad and the Ugly in Arizona's Charter Schools. *AEA Advocate, 24,* 14-15.

Arsen, D., Plank, D. N., and Sykes, G. (1999). *School Choice Policies in Michigan: The Rules Matter*. East Lansing, MI: Michigan State University.

Bagdikian, B. H. (1997). *The Media Monopoly* (5th ed.). Boston: Beacon Press.

Bagley, C., and Woods, P. A. (1998). School Choice, Markets and Special Educational Needs. *Disability and Society, 13*(5), 763-783.

Ball, S. J., and Gewirtz, S. (1997). Girls in the Education Market: Choice, Competition and Complexity. *Gender and Education, 9*(2), 207-222.

Bartlett, W. (1993). Quasi-Markets and Educational Reforms. In J. LeGrand and W. Bartlett (Eds.), *Quasi-Markets and Social Policy* (pp. 125-153). London: Macmillan.

Bast, J. L., and Walberg, H. J. (2004). Can parents choose the best schools for their children? Economics of Education Review, 23(4),431-440

Becker, G. (1999, September 12). *Competition.* Paper presented at the Address for the Heritage Foundation 25th Anniversary Leadership for America Lectures, Chicago.

Bell, C. A. (2008). Social Class Differences in School Choice: The Role of Preferences. In W. Feinberg and C. Lubienski (Eds.), *School Choice Policies and Outcomes: Philosophical and Empirical Perspectives* (pp. 121-148). Albany: State University of New York Press.

Bennett, W. J., Fair, W., Finn, C. E., Flake, F. H., Hirsch, E. D., Marshall, W., et al. (1998). A Nation Still at Risk. *Policy Review*(90), 23-29.

Bettinger, E. P. (2005). The Effect of Charter Schools on Charter Students and Public Schools. *Economics of Education Review, 24*(2), 133-147.

Betts, J. R., Rice, L. A., Zau, A. C., Tang, Y. E., and Koedel, C. Y. (2006). *Does School Choice Work? Effects on Student Integration and Achievement*. San Francisco: Public Policy Institute of California.

Bifulco, R., and Ladd, H. F. (2006). The Impacts of Charter Schools on Student Achievement: Evidence from North Carolina. *Education Finance and Policy, 1*(1), 50-90.

Bilefsky, D. (1998, January 30). Welcome to the (L)Earning Zone. *New Statesman, 11,* 18-19.

Bodovski, K., and Farkas, G. (2007). Do Instructional Practices Contribute to Inequality in Achievement? The Case of Mathematics Instruction in Kindergarten. *Journal of Early Childhood Research, 5*(3), 301-322.

Boldt, D. (1999, January 22). Clinton's School Plan Misses the Mark: Some Ideas Hold Promise; Competition Is a Better Solution. *The Philadelphia Inquirer,* p. Retrieved on the issue date from the World Wide Web: <http://www.phillynews.com/inquirer/99/Jan/22/opinion/BOLD22.htm>.

Bolick, C. (1998a, May/June). Blocking the Exits: Libertarian Opposition to School Vouchers Is an Attack on Freedom. *Policy Review,* 42-45.

Bolick, C. (1998b, April 6). Charter Reformer. *National Review, 50,* 42-44.

Bosetti, L., [et al.],. (2000). *Canadian Charter Schools at the Crossroads*. Calgary, AB: University of Calgary, Society for Advancement of Excellence in Education.

Brandl, J. E. (1998). Governance and Educational Quality. In P. E. Peterson and B. C. Hassel (Eds.), *Learning from School Choice* (pp. 55-81). Washington, DC: Brookings Institution Press.

Braun, H., Jenkins, F., and Grigg, W. (2006). *A Closer Look at Charter Schools Using Hierarchical Linear Modeling* (No. NCES 2006–460). Washington, DC: National Center for Education Statistics.

Brown, B. W. (1992). Why Governments Run Schools. *Economics of Education Review, 11*(4), 287-300.

Brown, C. G., Lopez-Medina, L., and Reed, R. A. (2004). *Choosing Better Schools: A Report on Student Transfers under the No Child Left Behind Act*. Washington, DC: Citizens' Commission on Civil Rights.

Buchanan, J. M., and Tullock, G. (1999). *The Calculus of Consent: Logical Foundations of Constitutional Democracy*. Indianapolis, IN: Liberty Fund.

Budde, R. (1988). *Education by Charter: Restructuring School Districts: Key to Long-Term Continuing Improvement in American Education*. Andover, MA: Regional Laboratory for Educational Improvement of the Northeast and Islands.

Budde, R. (1989, March). Education by Charter. *Phi Delta Kappan, 70,* 518-520.

Bulkley, K. (1999). Charter School Authorizers: A New Governance Mechanism? *Educational Policy, 13*(5), 674-697.

Canadian Charter Schools Research and Professional Development Centre. (n.d.). Charter Schools in Canada. Calgary, AB.

Carnoy, M. (1998a, March/April). Do Vouchers Improve Education? *Dollars and Sense,* 24-26.

Carnoy, M. (1998b). National Voucher Plans in Chile and Sweden: Did Privatization Reforms Make for Better Education? *Comparative Education Review, 42*(3), 309-338.

Carnoy, M., and McEwan, P. (2000, April 24-28). *Private and Public Schools in the Context of the Chilean Voucher Plan and Voucher-Like Plans in Europe.* Paper presented at the annual conference of the American Educational Research Association, New Orleans.

Carnoy, M., and McEwan, P. J. (2003). Does Privatization Improve Education? The Case of Chile's National Voucher Plan. In D. N. Plank and G. Sykes (Eds.), *Choosing Choice: School Choice in International Perspective* (pp. 24-44). New York: Teachers College Press.

Carpenter, D. (2005, September 18). Making the choice to be there. *Indianapolis Star,* p. E3.

Carroll, S., and Walford, G. (1996). A Panic About School Choice. *Educational Studies, 22*(3), 393-407.

Carroll, S., and Walford, G. (1997). Parents' Responses to the School Quasi-Market. *Research Papers in Education, 12*(1), 3-26.

Center for Education Reform. (2000a, October 17). Center for Education Reform Newswire Vol. 2, No. 38*, 2,* available <http://www.edreform.com/update/001017.html>.

Center for Education Reform. (2000b). *What the Research Reveals About Charter Schools*. Washington, DC: Center for Education Reform.

Center for Education Reform. (2003). *Charter School Laws: Scorecard and Rankings*. Washington, DC: Center for Education Reform.

Center on Education Policy. (2000). *School Vouchers: What We Know and Don't Know... And How We Could Learn More*. Washington, DC: Center on Education Policy.

Chamberlin, E. (1933). *The Theory of Monopolistic Competition*. Cambridge, MA: Harvard University Press.

Chandler, L. (1999). *Traditional Schools, Progressive Schools: Do Parents Have a Choice?* Washington, DC: Thomas B. Fordham Foundation.

Christensen, C. M., Horn, M. B., and Johnson, C. W. (2008). *Disrupting Class: How Disruptive Innovation Will Change the Way the World Learns*. New York: McGraw-Hill.

Chubb, J. E. (2001, Spring). The Private Can Be Public. *Education Matters, 1,* 6-15.

Chubb, J. E., and Moe, T. M. (1990a). *Politics, Markets, and America's Schools*. Washington, D.C.: Brookings Institution.

Chubb, J. E., and Moe, T. M. (1990b). *Politics, Markets, and America's Schools*. Washington, DC: Brookings Institution.

Chubb, J. E., and Moe, T. M. (1992). *A Lesson in School Reform from Great Britain*. Washington, DC: Brookings Institute.

Clare, J. (1998a, October 16). Failing School to Be Put into Private Sector. *The Telegraph*.

Clare, J. (1998b, April 24). Private Role 'Will Improve Education Standards'. *The Telegraph*.

Clinton, W. J. (1997). State of the Union Address.

Clinton, W. J. (1999). State of the Union Address (pp. Retrieved on January 20, 1999 from the World Wide Web: <http://www.nytimes.com/library/politics/012099sou-text.html>.). The New York Times: The New York Times on the Web.

Cohen, D. K. (1988). Teaching Practice: Plus Ça Change. . . In P. W. Jackson (Ed.), *Contributing to Educational Change: Perspectives on Research and Practice* (pp. 27-84). Berkeley: McCutchan.

Cohen, J. S. (2002, July 23). Detroit Schools' Pr: $1.5 Million. *The Detroit News,* pp. Retrieved on August 16, 2002 from the WWW: <http://www.detnews.com/2002/schools/0207/2023/a2001-543825.htm>.

Coleman, J. S. (1990). Choice, Community and Future Schools. In W. H. Clune and J. F. Witte (Eds.), *Choice and Control in American Education, Volume 1: The Theory of Choice and Control in Education* (Vol. 1, pp. ix-xxii). London: Falmer.

Coleman, J. S. (1997). The Design of Schools as Output-Driven Organisations. In R. Shapira and P. W. Cookson (Eds.), *Autonomy and Choice in Context: An International Perspective* (pp. 249-270). Oxford, UK: Pergamon.

Copeland, I. C. (1994). The Primary School Brochure: A Sample Analysis. *Educational Studies, 20*(3), 387-398.

Coulson, A. J. (1999). *Market Education: The Unknown History*. New Brunswick, NJ: Transaction Publishers.

Cuban, L. (1984). *How Teachers Taught: Constancy and Change in American Classrooms, 1890-1980*. New York: Longman.

Cuban, L. (1986). *Teachers and Machines: The Classroom Use of Technology since 1920*. New York: Teachers College Press.

Cuban, L. (2001). *Oversold and Underused: Computers in the Classroom*. Cambridge, MA: Harvard University Press.

Daun, H. (2003). Market Forces and Decentralization in Sweden: Impetus for School Development or Threat to Comprehensiveness and Equity? In D. N. Plank and G. Sykes (Eds.), *Choosing Choice: School Choice in International Perspective* (pp. 92-111). New York: Teachers College Press.

Daun, H., and Siminou, P. (2005). State, Market, and Civil Forces in the Governance of Education. *European Education, 37*(1), 26-45.

Davies, S. (under review). Testing Theories of School Organisations in Toronto: The Interplay of Markets and Institutions. *Sociology of Education*.

Davies, S., and Aurini, J. D. (2008). School Choice as Concerted Cultivation: The Case of Canada. In M. Forsey, S. Davies and G. Walford (Eds.), *The Globalisation of School Choice?* (pp. 55-71). Oxford: Symposium Books.

De Groof, J. (2004). Regulating School Choice in Belgium's Flemish Community. In P. J. Wolf and S. Macedo (Eds.), *Educating Citizens: International Perspectives on Civic Values and School Choice* (pp. 157-186). Washington, DC: Brookings Institution Press.

Department for Education. (1992). *Choice and Diversity: A New Framework for Schools*. London: Her Majesty's Stationary Office.

Department of Education and Science. (1986). *City Technology Colleges: A New Choice of School*. London: Department of Education and Science.

Dierkes, J. (2008). Japanese Shadow Education: The Consequences of School Choice. In M. Forsey, S. Davies and G. Walford (Eds.), *The Globalisation of School Choice?* (pp. 231-248). Oxford: Symposium Books.

Dijkstra, A., Dronkers, J., and Karsten, S. (2001, April). *Private Schools as Public Provision for Education School Choice and Marketization in the Netherlands and Elsewhere in Europe.* Paper presented at the annual conference of the American Educational Research Association, Seattle, WA.

Dijkstra, A., Dronkers, J., and Karsten, S. (2004). Private Schools as Public Provision for Education: School Choice and Market Forces in the Netherlands. In P. J. Wolf and S. Macedo (Eds.), *Educating Citizens: International Perspectives on Civic Values and School Choice* (pp. 67-90). Washington, DC: Brookings Institution Press.

Dirkswager, E. J. (Ed.). (2002). *Teachers as Owners: A Key to Revitalization of Public Education*. Lanham, MD: Scarecrow Press.

Dobbin, M. (1997, June). What Did We Earn in School Today. *The Canadian Forum, 76,* 17-23.

Doyle, D. P. (1994, October). The Role of Private Sector Management in Public Education. *Phi Delta Kappan, 76,* 128-132.

Dronkers, J. (2004). Do Public and Religious Schools Really Differ? Assessing the European Evidence. In P. J. Wolf and S. Macedo (Eds.), *School Choice and Civic Values in Germany* (pp. 287-312). Washington, DC: Brookings Institution Press.

Dryler, H. (1998). Parental Role Models, Gender and Educational Choice. *British Journal of Sociology, 49*(3), 375-398.

Durant, W. C. (1997). The Gift of a Child: The Promise of Freedom: Creative Approaches to Learning, Teaching, and Schooling. *The Freeman, 47*(6), 360-364.

Dykgraaf, C. L., and Lewis, S. K. (1998, October). For-Profit Charter Schools: What the Public Needs to Know. *Educational Leadership, 56,* 51-54.

Eckes, S. E., and Trotter, A. E. (2007). Are Charter Schools Using Recruitment Strategies to Increase Student Body Diversity? *Education and Urban Society, 40*, 62-90.

Education Commission of the States, and Nathan, J. (1995). *Charter Schools: What Are They up To?* Denver, CO: Author.

Edwards, C. P. (2002). Three Approaches from Europe: Waldorf, Montessori, and Reggio Emilia. *Early Childhood Research and Practice, 4*(1), http://ecrp.uiuc.edu/v4n1/edwards.html.

Edwards, T., and Whitty, G. (1997). Marketing Quality: Traditional and Modern Versions of Educational Excellence. In R. Glatter, P. A. Woods and C. Bagley (Eds.), *Choice and Diversity in Schooling: Perspectives and Prospects* (pp. 29-43). New York: Routledge.

Espínola, V. (1993). *The Educational Reform of the Military Regime in Chile: The School System's Response to Competition, Choice, and Market Relations.* Unpublished Ph.D. diss., University of Wales, Cardiff.

Eyal, O. (2008). Degeneracy, Resilience and Free Markets in Educational Innovation. *Systems Research and Behavioral Science*.

Farber, P. (1998, July 1). Boston: Renaissance Charter School. *The American Prospect,* 48-50.

Feintuck, M. (1994). *Accountability and Choice in Schooling*. Buckingham, UK: Open University Press.

Finn, C. E. J. (2008, February 27). Lessons Learned. *Education Week, 27,* 28, 36.

Finn, C. E., and Manno, B. V. (1998, September). Support Your Local Charter School. *Policy Review,* 18-25.

Fiske, E. B., and Ladd, H. F. (2000). *When Schools Compete: A Cautionary Tale*. Washington, DC: Brookings Institution Press.

Fiske, E. B., and Ladd, H. F. (2003). School Choice in New Zealand: A Cautionary Tale. In D. N. Plank and G. Sykes (Eds.), *Choosing Choice: School Choice in International Perspective* (pp. 45-67). New York: Teachers College Press.

Fiske, E. B., and Ladd, H. F. (2004). Balancing Public and Private Resources for Basic Education: School Fees in Post-Apartheid South Africa. In L. Chisholm (Ed.), *Changing Class: Education and Social Change in Post-Apartheid South Africa* (pp. 57-88). London: Zed Books, HSRC Press.

Fitz, J., Halpin, D., and Power, S. (1993). *Grant-Maintained Schools: Education in the Market Place*. London: Kogan Page.

Fitz, J., Halpin, D., and Power, S. (1997). 'between a Rock and a Hard Place': Diversity, Institutional Identity and Grant-Maintained Schools. *Oxford Review of Education, 23*(1), 17-30.

Fitzgerald, J. (1995). *Charter Schools in Colorado*. Denver, CO: Colorado Children's Campaign.

Forsey, M. (2008). No Choice but to Choose: Selecting Schools in Western Australia. In M. Forsey, S. Davies and G. Walford (Eds.), *The Globalisation of School Choice?* (pp. 73-93). Oxford: Symposium Books.

Fox, R. A., and Buchanan, N. K. (2008). *School Choice in the Republic of Ireland: An Unqualified Commitment to Parental Choice* (Occasional Papers No. 157). New York: National Center for the Study of Privatization in Education.

Francis, M. (1990). Race and the Education Reform Act. *The Urban Review, 22*(2), 115-130.

Friedman Foundation. (2008). *The ABCs of School Choice, 2007-2008 Edition*. Indianapolis, IN: Friedman Foundation.

Friedman, M. (1955). The Role of Government in Education. In R. A. Solo (Ed.), *Economics and the Public Interest* (pp. 127-134). New Brunswick, NJ: Rutgers University Press.

Friedman, M. (1994). The Case for Choice. In K. L. Billingsley (Ed.), *Voices on Choice: The Education Reform Debate* (pp. 91-101). San Francisco: Pacific Research Institute for Public Policy.

Friedman, M. (1995). *Public Schools: Make Them Private* (Briefing Paper No. 23). Washington, DC: Cato Institute.

Friedman, M., and Friedman, R. (1980). *Free to Choose: A Personal Statement*. New York: Harcourt Brace Jovanovich.

From, A. (1999, Fall). Where We Stand: New Democrats' 10 Key Reforms for Revitalizing American Education. *Blueprint,* Retrieved on December 13, 1999 from the World Wide Web: <http://www.dlc.org/blueprint/fall/1999/wherewestand.html>.

Fuchs, T., and Woessmann, L. (2007). What Accounts for International Differences in Student Performance? A Re-Examination Using Pisa Data. *Empirical Economics, 32*, 433-464.

Garcia, D. R. (in press-a). Academic and Racial Segregation in Charter Schools: Do Parents Sort Students into Specialized Charter Schools? *Education and Urban Society*.

Garcia, D. R. (in press-b). The Impact of School Choice on Racial Segregation in Charter Schools. *Educational Policy*.

Garcia, D. R., McIlroy, L., and Barber, R. T. (2008). Starting Behind: A Comparative Analysis of the Academic Standing of Students Entering Charter Schools. *Social Science Quarterly, 89*(1), 199-216.

Garn, G. A. (1998, October). The Thinking Behind Arizona's Charter Movement. *Educational Leadership, 56,* 48-51.

Gauri, V. (1998). *School Choice in Chile: Two Decades of Educational Reform*. Pittsburgh: University of Pittsburgh Press.

General Accounting Office. (1995). *Charter Schools: A New Model for Public Schools Provides Opportunities and Challenges* (Report to Congress No. HEHS-95-42). Washington, DC: General Accounting Office.

Gewirtz, S. (2002). *The Managerial School: Post-Welfarism and Social Justice in Education*. London; New York: Routledge.

Gewirtz, S., Ball, S. J., and Bowe, R. (1995). *Markets, Choice and Equity in Education*. Buckingham, UK: Open University Press.

Gifford, M., Phillips, K., and Ogle, M. (2000). *Five Year Charter School Study* (Arizona Education Analysis). Phoenix, AZ: Center for Market-Based Education, Goldwater Institute.

Gilder, V. (1999). Want Better Public Education? Support Private Vouchers. *Imprimis, 28*(9), 5-6.

Gintis, H. (1995). The Political Economy of School Choice. *Teachers College Record, 96*(3), 462-511.

Glass, G. V. (1994). School Choice: A Discussion with Herbert Gintis. *Education Policy Analysis Archives, 2*(6), Retrieved on February 18, 1997 from the World Wide Web: <http://olam.ed.asu.edu/epaa/v1992n1996.html>.

Glassman, J. K. (1998, July/August). Where Charter Schools Work. *The American Enterprise, 9,* 86-87.

Glatter, R., Woods, P. A., and Bagley, C. (1997). Diversity, Differentiation and Hierarchy: School Choice and Parental Preferences. In R. Glatter, P. A. Woods and C. Bagley (Eds.), *Choice and Diversity in Schooling: Perspectives and Prospects* (pp. 7-28). London: Routledge.

Glazerman, S. (1998). *School Quality and Social Stratification: The Determinants and Consequences of Parental School Choice.* Paper presented at the annual conference of the American Educational Research Association, San Diego.

Glenn, C. L. (1989). *Choice of Schools in Six Nations* (No. (Superintendent of Documents # ED 1.302:Sch 6/5) (OERI PIP 90-851)).

Glenn, C. L. (2003). Protecting and Limiting School Distinctiveness: How Much of Each? In A. Wolfe (Ed.), *School Choice: The Moral Debate* (pp. 173-194). Princeton, NJ: Princeton University Press.

Golden, D. (1999, September 15). Old-Time Religion Gets a Boost at a Chain of Charter Schools. *Wall Street Journal,* pp. A1, 14.

Good, T. L., Braden, J. S., and Drury, D. W. (2000). *Charting a New Course: Fact and Fiction About Charter Schools* (No. 11-130-W). Alexandria, VA: National School Boards Association.

Gordon, L., and Whitty, G. (1997). Giving the 'Hidden Hand' a Helping Hand? The Rhetoric and Reality of Neoliberal Education Reform in England and New Zealand. *Comparative Education, 33*(3), 453-468.

Gould, S. J. (1989). *Wonderful Life: The Burgess Shale and the Nature of History* (1st ed.). New York: W.W. Norton.

Greene, J. P., Carroll, T. W., Coulson, A. J., Enlow, R., Hirsch, E. D., Ladner, M., et al. (2008, January 24). Is School Choice Enough? *City Journal,* http://www.city-journal.org/2008/forum0124.html.

Greene, J. P., Howell, W. G., and Peterson, P. E. (1998). Lessons from the Cleveland Scholarship Program. In P. E. Peterson and B. C. Hassel (Eds.), *Learning from School Choice* (pp. 357-392). Washington, DC: Brookings Institution Press.

Guernsey, L. (2009, March 2). Rewards for Students under a Microscope. *New York Times*.

Halpin, D., Power, S., and Fitz, J. (1997). Opting into the Past? Grant-Maintained Schools and the Reinvention of Tradition. In R. Glatter, P. A. Woods and C. Bagley (Eds.), *Choice and Diversity in Schooling: Perspectives and Prospects* (pp. 59-70). London; New York: Routledge.

Hannan, M. T., and Freeman, J. H. (1977). The Population Ecology of Organisations. *American Journal of Sociology, 82*(5), 929-964.

Hanus, J. J., and Cookson, P. W. (1996). *Choosing Schools: Vouchers and American Education*. Washington, DC: American University Press.

Harmer, D. (1994). *School Choice: Why You Need It—How You Get It*. Washington, DC: Cato Institute.

Hassel, B. C. (1998). Charter Schools: Politics and Practice in Four States. In P. E. Peterson and B. C. Hassel (Eds.), *Learning from School Choice* (pp. 249-271). Washington, DC: Brookings Institution Press.

Hassel, B. C. (1999). Charter Schools: A National Innovation, an Arizona Revolution. In R. Maranto, S. Milliman, F. Hess and A. Gresham (Eds.), *School Choice in the Real World: Lessons from Arizona Charter Schools* (pp. 68-95). Boulder, CO: Westview Press.

Henig, J. (1994). *Rethinking School Choice: Limits of the Market Metaphor*. Princeton, NJ: Princeton University Press.

Hernandez, J. C. (2009, March 19). A New High School, with College Mixed In. *New York Times*.

Hesketh, A. J., and Knight, P. T. (1998). Secondary School Prospectuses and Educational Markets. *Cambridge Journal of Education, 28*(1), 21-36.

Hill, D. (1999, February). Would You Buy an Education from This Man? *Teacher Magazine, 10,* 26-31.

Hill, P. T. (2007, September 5). Waiting for the 'Tipping Point'. *Education Week, 27,* 26-27.

Hirsch, D. (1995). School Choice and the Search for an Educational Market. *International Review of Education, 41*(3-4), 239-257.

Hirschman, A. O. (1970). *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organisations, and States*. Cambridge, MA: Harvard University Press.

Hofman, M. (1998, June). Upstarts (New-Biz Watch): Staking out a Share of Public-School Gold. *Inc., 20,* 25-27.

Hofmeyr, J., and Lee, S. (2004). The New Face of Private Schooling. In L. Chisholm (Ed.), *Changing Class: Education and Social Change in Post-Apartheid South Africa* (pp. 143-174). London: Zed Books, HSRC Press.

Horn, J., and Miron, G. (1999). *Evaluation of the Michigan Public School Academy Initiative* (Final No. Report). Kalamazoo, MI: The Evaluation Center, Western Michigan University.

Horn, J., and Miron, G. (2000). *An Evaluation of the Michigan Charter School Initiative: Performance, Accountability, and Impact* (Final No. Report). Kalamazoo, MI: The Evaluation Center, Western Michigan University.

Howell, W. G., and Peterson, P. E. (2002). *The Education Gap: Vouchers and Urban Schools*. Washington, DC: Brookings Institution Press.

Hoxby, C. M. (2002). How School Choice Affects the Achievement of Public School Students. In P. T. Hill (Ed.), *Choice with Equity* (pp. 141-177). Stanford, CA: Hoover Institution Press.

Hoxby, C. M. (2004). *A Straightforward Comparison of Charter Schools and Regular Public Schools in the United States*. Cambridge, MA: Department of Economics, Harvard University.

Hoxby, C. M. (Ed.). (2003). *The Economics of School Choice*. Chicago: University of Chicago Press.

Hoxby, C. M., and Rockoff, J. (2004). *The Impact of Charter Schools on Student Achievement: A Study of Students Who Attend Schools Chartered by the Chicago Charter School Foundation*. Cambridge, MA: Department of Economics, Harvard University.

Ivins, M., and Dubose, L. (2000). *Shrub: The Short but Happy Political Life of George W. Bush* (1st Vintage ed.). New York: Vintage Books.

Johnson, K. A. (2005). *A Promising Start for the D.C. Opportunity Scholarship Program* (Web Memo No. 710). Washington, DC: Heritage Foundation.

Kahlenberg, R. D. (2008, March 26). The Charter School Idea Turns 20. *Education Week, 27,* 24.

Kane, P. R. (1998, October 14). Charter Schools: Paying Attention to Ancillary Findings. *Education Week, 18,* 42, 45.

Kates, W. (2001, August 29). Public Schools Respond to Competition with Marketing Efforts. *Associated Press,* pp. Retrieved on September 3, 2001 from the WWW: <asbj.com/extra/extra.html>.

Khouri, N., Kleine, R., White, R., and Cummings, L. (1999). *Michigan's Charter School Initiative: From Theory to Practice* (Final Report). Lansing, MI: Public Sector Consultants, Inc., and MAXIMUS, Inc.

Kim, J. (2004). *Does NCLB Provide Good Choices for Students in Low-Performing Schools?* Cambridge, MA: Civil Rights Project at Harvard University.

Kim, K.-k. (2003). Modification of the Equalization Policy and Suggested Policy Measures. *Korea Journal, 43*(4), 186-199.

Kingdon, G. (1996). The Quality and Efficiency of Private and Public Education: A Case Study of Urban India. *Oxford Bulletin of Economics and Statistics, 58*(1), 57-82.

Kober, N. (2000a). *Lessons from Other Countries About Private School Aid*. Washington, DC: The Center on Education Policy.

Kober, N. (2000b). *School Vouchers*. Washington, DC: The Center on Education Policy.

Kohn, A. (1998, April). Only for My Kid: How Privileged Parents Undermine School Reform. *Phi Delta Kappan, 79,* 568-578.

Ladner, M., and Brouillette, M. J. (2000). *The Impact of Limited School Choice on Public School Districts* (No. S2000-04). Midland, MI: Mackinac Center for Public Policy.

Lange, D. (1988). *Tomorrow's Schools: The Reform of Education Administration in New Zealand*. Wellington, NZ: V.R. Ward, Government Printer.

Langouet, G., and Leger, A. (1991). *Public Ou Privé?* Nanterre: Publidix.

Lauder, H., Hughes, D., Watson, S., Waslander, S., Thrupp, M., Strathdee, R., et al. (1999). *Trading in Futures: Why Markets in Education Don't Work*. Buckingham, UK: Open University Press.

Lee, J.-H. (2004). The School Equalization Policy of Korea: Past Failures and Proposed Measure for Reform. *Korea Journal, 44*(1), 221-234.

Lehman, T. E. (1997). Government Schooling: The Bureaucratization of the Mind. *The Freeman, 48*(7), 266-269.

Lennon, C., and White, J. (1997, April). The Reform of School Governance in the Republic of Ireland. *Phi Delta Kappan, 78,* 632-635.

Levin, B. (1997). The Lessons of International Education Reform. *Journal of Education Policy, 12*(4), 253-266.

Levin, B., and Riffel, J. A. (1997). School System Responses to External Change: Implications for Parental Choice of Schools. In R. Glatter, P. A. Woods and C. Bagley (Eds.), *Choice and Diversity in Schooling: Perspectives and Prospects* (pp. 44-58). London: Routledge.

Levin, B., and Young, J. (1999). The Origins of Educational Reform: A Comparative Perspective. *Canadian Journal of Educational Administration and Policy*(12).

Levin, H. M. (2000). *A Comprehensive Framework for Evaluating Educational Vouchers* (Occasional Paper No. 5). New York: National Center for the Study of Privatization in Education.

Levin, H. M. (2002). A Comprehensive Framework for Evaluating Educational Vouchers. *Educational Evaluation and Policy Analysis, 24*(3), 159-174.

Lewin, T. (1999, October 26). In Michigan, School Choice Weeds out Costlier Students. *The New York Times*.

Lieberman, M. (2001). *Innovation in the School Choice Debate* (Brief No. 010801). Washington, DC: Education Policy Institute.

Lightfoot, L. (1999, January 9). Move to 'Privatise' Poor Schools. *The Telegraph*.

Lips, D. (2003). *The Impact of Tuition Scholarships on Low-Income Families: A Survey of Arizona School Choice Trust Parents* (Policy Report No. 187). Phoenix, AZ: Goldwater Institute.

Lohr. (2009, May 23). Who Says Innovation Belongs to the Small? *New York Times*.

Lubienski, C. (2003). Innovation in Education Markets: Theory and Evidence on the Impact of Competition and Choice in Charter Schools. *American Educational Research Journal, 40*(2), 395-443.

Lubienski, C. (2005). Public Schools in Marketized Environments: Shifting Incentives and Unintended Consequences of Competition-Based Educational Reforms. *American Journal of Education, 111*(4), 464-486.

Lubienski, C. (2006a). Incentives for School Diversification: Competition and Promotional Patterns in Local Education Markets. *Journal of School Choice, 1*(2), 1-31.

Lubienski, C. (2006b). School Diversification in Second-Best Education Markets: International Evidence and Conflicting Theories of Change. *Educational Policy, 20*(2), 323-344.

Lubienski, C. (2007a). Marketing Schools: Consumer Goods and Competitive Incentives for Consumer Information. *Education and Urban Society, 40*(1), 118-141.

Lubienski, C. (2007b). School Competition and the Emergence of Symbolism in a Market Environment. In C. F. Kaestle and A. E. Lodewick (Eds.), *To Educate a Nation: Federal and National Strategies of School Reform* (pp. 257-280). Lawrence, KS: University Press of Kansas.

Lubienski, C. (2008). *Educational Innovation and Diversification in School Choice Plans* (Policy Brief). Tempe, AZ and Boulder, CO: Education Policy Research Unit at Arizona State University and Education and the Public Interest Center at University of Colorado.

Lubienski, C., Crane, C., and Lubienski, S. T. (2008, May). What Do We Know About School Effectiveness? Academic Gains in a Value-Added Analysis of Public and Private Schools. *Phi Delta Kappan, 89,* 689-695.

Lubienski, C., and Garn, G. (in press). Evidence and Ideology on Consumer Choices in Education Markets: An Alternative Analytical Framework. *Current Issues in Education*.

Lubienski, C., Gulosino, C., and Weitzel, P. (in press). School Choice and Competitive Incentives: Mapping the Distribution of Educational Opportunities across Local Education Markets. *American Journal of Education*.

Lubienski, C., and Lubienski, S. T. (2006a). *Charter, Private, Public Schools and Academic Achievement: New Evidence from NAEP Mathematics Data* (Occasional Paper No. 111). New York: National Center for the Study of Privatization in Education.

Lubienski, S. T., and Lubienski, C. (2006b). School Sector and Academic Achievement: A Multi-Level Analysis of NAEP Mathematics Data. *American Educational Research Journal, 43*(4), 651-698.

Manno, B. V., Finn, C. E., Bierlein, L. A., and Vanourek, G. (1998a). Charter Schools: Accomplishments and Dilemmas. *Teachers College Record, 99*(3), 537-558.

Manno, B. V., Finn, C. E., Bierlein, L. A., and Vanourek, G. (1998b, March). How Charter Schools Are Different: Lessons and Implications for a National Study. *Phi Delta Kappan, 79,* 489-498.

Margonis, F., and Parker, L. (1995). Choice, Privatization, and Unspoken Strategies of Containment. *Educational Policy, 9*(4), 375-403.

Mathews, J. (2009, January 26). Despite Flaws, Site Rating Preschools Fills a Critical Need. *Washington Post,* p. B2.

Mazzocco, D. W. (1994). *Networks of Power: Corporate Tv's Threat to Democracy*. Boston, MA: South End Press.

McEwan, P. J., and Carnoy, M. (2000). The Effectiveness and Efficiency of Private Schools in Chile's Voucher System. *Educational Evaluation and Policy Analysis, 22*(3), 213-239.

McGhan, B. (1998, April). Choice and Compulsion: The End of an Era. *Phi Delta Kappan, 79,* 610-613.

McGriff, D. (1996, September 1). Edison Project Lights the Way to Innovation. *Michigan Forward,* 13.

McKinney, J. R. (1996, October). Charter Schools: A New Barrier for Children with Disabilities. *Educational Leadership, 54,* 22-26.

Mead, J. F. (2003). Single-Gender "Innovations": Can Publicly Funded Single-Gender School Choice Options Be Constitutionally Justified? *Educational Administration Quarterly, 39*(2), 164-186.

Meadmore, D., and Symes, C. (1997). Keeping up Appearances: Uniform Policy for School Diversity? *British Journal of Educational Studies, 45*(2), 174-186.

Meuret, D. (2004). School Choice and Its Regulation in France. In P. J. Wolf and S. Macedo (Eds.), *School Choice and Civic Values in Germany* (pp. 238-267). Washington, DC: Brookings Institution Press.

Mikuta, J. (1999). Education as a Commodity in New Zealand. In N. Alexiadou and C. Brock (Eds.), *Education as a Commodity* (pp. 149-163). Suffolk, UK: John Catt.

Milken, M., Michaels, J. W., and Berman, P. (1992, March 16). My Story — Michael Milken. *Forbes, 149,* 78-100.

Ministry of Education and Human Resources Development. (2008). *Education in Korea, 2007-2008*. Seoul: Ministry of Education and Human Resources Development.

Miron, G., and Horn, J. (2002). *Evaluation of Connecticut Charter Schools and the Charter School Initiative*. Kalamazoo, MI: The Evaluation Center, Western Michigan University.

Miron, G., and Nelson, C. (2000). *Autonomy in Exchange for Accountability: An Initial Study of Pennsylvania Charter Schools*. Kalamazoo, MI: The Evaluation Center, Western Michigan University.

Miron, G., and Nelson, C. (2002). *What's Public About Charter Schools? Lessons Learned About Choice and Accountability*. Thousand Oaks, CA: Corwin Press.

Miron, G., Nelson, C., and Risley, J. (2002). *Strengthening Pennsylvania's Charter School Reform: Findings from the Statewide Evaluation and Discussion of Relevant Policy Issues, Year 5 Report*. Kalamazoo, MI: The Evaluation Center, Western Michigan University.

Molnar, A. (1996). *Giving Kids the Business: The Commercialization of America's Schools*. Boulder, CO: Westview Press.

Mouw, R. J. (2003). Educational Choice and Pillarization: Some Lessons for Americans from the Dutch Experiment In "Affirmative Impartiality". In A. Wolfe (Ed.), *School Choice: The Moral Debate* (pp. 155-172). Princeton, NJ: Princeton University Press.

Nathan, J. (1996a). *Charter Schools: Creating Hope and Opportunity for American Education*. San Francisco, CA: Jossey-Bass.

Nathan, J. (1996b, Winter). Progressives Should Support Charter Public Schools. *Rethinking Schools, 11,* 20-21.

Nathan, J. (1997). Congressional Testimony of Joe Nathan, Director, Center for School Change, Hubert H. Humphrey Institute of Public Affairs, University of Minnesota, *Hearing on Charter Schools, Committee On Education And The Workforce, United States House Of Representatives*: Center for Education Reform.

Nathan, J. (1998, March). Heat and Light in the Charter School Movement. *Phi Delta Kappan, 79,* 499-505.

Nathan, J., and Power, J. (1996). *Policy-Makers View the Charter School Movement*: The Center for School Change, Humphrey Institute, University of Minnesota.

National Commission on Governing America's Schools. (1999). *Governing America's Schools: Changing the Rules* (Final Report). Denver: Education Commission of the States.

National Council of Teachers of Mathematics. (1989). *Curriculum and Evaluation Standards for School Mathematics*. Reston, VA: NCTM.

National Council of Teachers of Mathematics. (2000). *Principles and Standards for School Mathematics*. Reston, VA: NCTM.

National Council of Teachers of Mathematics. Commission on Teaching Standards for School Mathematics. (1991). *Professional Standards for Teaching Mathematics*. Reston, VA: The Council.

Ndimande, B. S. (2007). "It's a Catch 22 Situation": The Challenge of Race in Post-Apartheid Soth African Desegregated Schools. *International Journal of Educational Policy, Research and Practice: Reconceptualizing Childhood Studies, 8*(1), 131-147.

Ndimande, B. S. (2008). Parental Choice: The Liberty Principle in Education Finance in Postapartheid South Africa. In W. Feinberg and C. Lubienski (Eds.), *School Choice Policies and Outcomes: Philosophical and Empirical Perspectives on Limits to Choice in Liberal Democracies* (pp. 197-218). Albany, NY: SUNY Press.

Obama, B. (2009, March 10). *Remarks by the President to the Hispanic Chamber of Commerce on a Complete and Competitive American Education.* Paper presented at the Hispanic Chamber of Commerce, Washington Marriott Metro Center, Washington, DC.

Oettle, K. (1997). Has There Been a Change of Paradigm in Managerial Economics from the Public Enterprise toward the Regulated (Privatized) Enterprise? *Annals of Public and Co-Operative Economy, 68*(3), 367-377.

Oplatka, I. (2008). The Introduction of Controlled School Choice in Tel Aviv, Israel: An Attempt to Attain a Balance between Integration and Pluralism. In M. Forsey, S. Davies and G. Walford (Eds.), *The Globalisation of School Choice?* (pp. 111-130). Oxford: Symposium Books.

Oplatka, I., Hemsley-Brown, J., and Foskett, N. H. (2002). The Voice of Teachers in Marketing Their School: Personal Perspectives in Competitive Environments. *School Leadership and Management, 22*(2), 177-196.

Organisation for Economic Co-Operation and Development (OECD) (1994). *School: A Matter of Choice*. Main author: D. Hirsch. Paris: Centre for Educational Research and Innovation, Organisation for Economic Co-Operation and Development.

Organisation for Economic Co-operation and Development (OECD) (2005), *Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data, 3rd Edition*, OECD Publishing, Paris.

Organisation for Economic Co-operation and Development (OECD) (2008), *Innovation: the OECD Definition (last accessed August 2009)*, Paris: Organisation for Economic Co-operation and Development.

Parry, T. R. (1997a). Decentralization and Privatization: Education Policy in Chile. *Journal of Public Policy, 17*(1), 107-134.

Parry, T. R. (1997b). How Will Schools Respond to the Incentives of Privatization? Evidence from Chile and Implications for the United States. *American Review of Public Administration, 27*(3), 248-269.

Paulu, N., and United States. Office of Educational Research and Improvement. (1989). *Improving Schools and Empowering Parents: Choice in American Education: A Report Based on the White House Workshop on Choice in Education*. Washington, DC: U.S. Dept. of Education Office of Educational Research and Improvement.

Payne, J. L. (2000). The Agony of Public Education. *The Independent Review, 5*(2), 265-275.

Penning, N. (1997, August). The President's Lead on Charters. *The School Administrator, 54,* 32.

Peterson, P. E. (1990). Monopoly and Competition in American Education. In W. H. Clune and J. F. Witte (Eds.), *Choice and Control in American Education, Volume 1: The Theory of Choice and Control in Education* (Vol. 1, pp. 47-78). London: The Falmer Press.

Picot, B., and Taskforce to Review Education Administration. (1988). *Administering for Excellence: Effective Administration in Education*. Wellington, NZ: Government Printer.

Plank, D. N., and Sykes, G. (1997). *Effects of Charter Schools and Interdistrict Choice.* Paper presented at the Michigan State University College of Education, Policy Forum, East Lansing, MI.

Podgursky, M., and Ballou, D. (2001). *Personnel Policy in Charter Schools*. Washington, DC: Thomas B. Fordham Foundation.

Poole, C. (1998, June). Trailblazers' Tale of Early Woe. *Inc., 20,* 27.

Power, S., Fitz, J., and Halpin, D. (1994a). Parents, Pupils and Grant Maintained Schools. *British Educational Research Journal, 20*(2), 209-226.

Power, S., Halpin, D., and Fitz, J. (1994b). Underpinning Choice and Diversity? The Grant-Maintained Schools Policy in Context. In S. Tomlinson (Ed.), *Educational Reform and Its Consequences*. London: IPPR/Rivers Oram.

Price, J. H. (1998, June 22). America's Quiet Revolution. *Insight on the News, 14,* 40-42.

Public Policy Associates, National Alliance of Business, and Michigan Future. (1999). *Redefining Public Education: The Promise of Employer-Linked Charter Schools* (No. ERIC ED 435 813). Lansing, MI: Public Policy Associates.

Rafferty, F. (1999, January 15). Downing Street to Rule on Councils. *The Times Education Supplement,* Retrieved on the issue date from the World Wide Web: <http://www.tes.co.uk:8484/tp/9000000/PRN/edition/edition.html>.

Raham, H. (1996, August). Revitalizing Public Education in Canada: The Potential of Choice and Charters. *Fraser Forum*.

Rapp, K. E., and Eckes, S. E. (2007). Dispelling the Myth Of "White Flight": An Examination of Minority Enrollment in Charter Schools. *Educational Policy, 21*(4), 615-661.

Ravitch, D. (2003, April 15). *Innovations in Education: Does Education Really Need More Innovation in the Age of Scientifically Based Research?* Paper presented at the Office of Innovation and Improvement Innovations in Education Conference, Cambridge, MA.

Reardon, S. F., Cheadle, J. E., and Robinson, J. P. (2009). The effects of Catholic school attendance on reading and math achievement in kindergarten through fifth grade. *Journal of Research on Educational Effectiveness, 2*(1), 45-87.

Reuter, L. R. (2004). School Choice and Civic Values in Germany. In P. J. Wolf and S. Macedo (Eds.), *School Choice and Civic Values in Germany* (pp. 213-237). Washington, DC: Brookings Institution Press.

Reynolds, K. (2000). *Innovations in Charter Schools: A Summary of Innovative or Unique Aspects of Michigan Charter Schools*. Kalamazoo, MI: The Evaluation Center, Western Michigan University.

Rhim, L. M. (1998). *Franchising Public Education: An Analysis of the Linkage of Charter Schools and Private Management Companies.* Paper presented at the annual conference of the American Educational Research Association, San Diego.

Rising, M. (2008, July 26). Big Change for Welfarist Sweden: School Choice. *Washington Post*.

Rofes, E. (1996). Charters: Finding the Courage to Face Our Contradictions. In R. Lowe, B. Miner, L. Miller, B. Peterson and R. Tenorio (Eds.), *Selling out Our Schools: Vouchers, Markets, and the Future of Public Education* (pp. 50-51). Milwaukee, WI: Rethinking Schools.

Rofes, E. (2000). Teachers as Communitarians: A Charter School Cooperative in Minnesota. In B. Fuller (Ed.), *Inside Charter Schools: The Paradox of Radical Decentralization* (pp. 203-229). Cambridge, MA: Harvard University Press.

Rogers, M. (1992). *Opting Out: Choice and the Future of Schools*. London: Lawrence and Wishart.

Rosenblum Brigham Associates. (1998). *Innovation and Massachusetts Charter Schools*. Boston: Rosenblum Brigham Associates, for the Massachusetts Department of Education.

Rothstein, R., Celis, W., Corson, R., Cooper, S., and Farber, P. (1998). Charter Conundrum. *The American Prospect*(39), 46-61.

Roy, J., and Mishel, L. (2005). *Advantage None: Re-Examining Hoxby's Finding of Charter School Benefits* (Briefing Paper No. 158). Washington, DC: Economic Policy Institute.

Rutkowski, L., and Rutkowski, D. J. (2009). *Private and Public Education: A Cross-National Exploration With TIMSS 2003*. Paper presented at the annual conference of the American Educational Research Association.

Sandström, F. M., and Bergström, F. (2002). *School Vouchers in Practice: Competition Won't Hurt You!* (Working Paper No. 578). Stockholm: Research Institute of Industrial Economics.

Sarkar, A., Rao, N., and Naik, P. (2008, Spring). Harnassing India's Human Capital through Educational Opportunities. *MIT International Review,* 9-13.

Sass, T. R. (2006). Charter Schools and Student Achievement in Florida. *Education Finance and Policy, 1*(1), 91-122.

Schnaiberg, L. (1999, December 1). Entrepreneurs Hoping to Do Good, Make Money. *Education Week, 19,* 1, 14, 16.

Scott, J. T. (2008). Managers of Choice: Race, Gender, and the Political Ideology of the "New" Urban School Leadership. In W. Feinberg and C. Lubienski (Eds.), *School Choice Policies and Outcomes: Empirical and Philosophical Perspectives* (pp. 149-176). Albany, NY: SUNY Press.

Shanker, A. (1988, March 31). *Address to the National Press Club*, Washington, DC.

Shores, K. D. (1999, November 23). Aquinas Proposes New Approach with Charter School. *Grand Rapids Press,* pp. Retrieved on November 29, 1999 from the World Wide Web: <http://gr.mlive.com/news/index.ssf?/news/stories/19991123grpschar19101804.frm>.

Smith, K. B., and Meier, K. J. (1995). *The Case against School Choice: Politics, Markets, and Fools*. Armonk, NY: M.E. Sharpe.

Smith, N. (2003). *Catching the Wave: Lessons from California's Charter Schools*. Washington, DC: Progressive Policy Institute.

Somers, M.-A., McEwan, P. J., and Willms, J. D. (2004). How Effective Are Private Schools in Latin America? *Comparative Education Review, 48*(1), 48-69.

Srivastava, P. (2008). School Choice in India: Disadvantaged Groups and Low-Fee Private Schools. In M. Forsey, S. Davies and G. Walford (Eds.), *The Globalisation of School Choice?* (pp. 185-208). Oxford: Symposium Books.

St. John-Brooks, C. (1995). *Schools under Scrutiny*. Paris: Centre for Educational Research and Innovation, Organisation for Economic Co-Operation and Development.

Stossel, J. (2006, January 13). Stupid in America: How Lack of Choice Cheats Our Kids out of a Good Education. *20/20*.

Stout, R. T., and Garn, G. A. (1999). Nothing New: Curricula in Arizona Charter Schools. In R. Maranto, S. Milliman, F. Hess and A. Gresham (Eds.), *School Choice in the Real World: Lessons from Arizona Charter Schools* (pp. 159-172). Boulder, CO: Westview Press.

Symonds, W. C. (2000, February 7). Edison's Chris Whittle: "Winners of This Race Are Children". *BusinessWeek Online,* Retrieved on February 7, 2000 from the World Wide Web: <http://www.businessweek.com/2000/2000_2006/b3667005.htm>.

Taub, A., and Weissman, R. (1998, November). Oligopoly! Highly Concentrated Markets across the U.S. Economy. *Multinational Monitor, 20,* 9-12.

Thatcher, M. (1993). *The Downing Street Years, 1979-1990*. New York: HarperPerennial.

Tooley, J. (1995). *Disestablishing the School: Debunking Justifications for State Intervention in Education*. Aldershot Hants, UK: Avebury.

Tooley, J. (1999a). Asking Different Questions: Towards Justifying Markets in Education. In N. Alexiadou and C. Brock (Eds.), *Education as a Commodity* (pp. 9-19). Suffolk, UK: John Catt.

Tooley, J. (1999b). *The Global Education Industry: Lessons from Private Education in Developing Countries*. London: IEA Education and Training Unit; International Finance Corporation, World Bank.

Tooley, J. (2002). Private Education in the European Union. *Journal of the Institute of Economic Affairs, 22*(2), 54-54.

Tooley, J. (2005). Private Schools for the Poor. *Education Next, 5*(4), http://www.hoover.org/publications/ednext/3217591.html.

Tooley, J., and Dixon, P. (2003). *Private Schools for the Poor: A Case Study from India*. Reading, UK: Centre for British Teachers.

Tooley, J., and Dixon, P. (2005). *Private Schools Serving the Poor: Working Paper, a Study from Delhi, India*. New Delhi: Centre for Civil Society.

Treasury. (1987). *Government Management: Volume Ii - Education Issues*. Wellington, NZ: Government Printer.

Triant, B. (2001). *Autonomy and Innovation: How Do Massachusetts Charter School Principals Use Their Freedom?* Washington, DC: Thomas B. Fordham Foundation.

Tsang, M. C. (2003). School Choice in the People's Republic of China. In D. N. Plank and G. Sykes (Eds.), *Choosing Choice: School Choice in International Perspective* (pp. 164-195). New York: Teachers College Press.

Tullock, G. E. (1996). Provision of Public Goods through Privatization. *Kyklos, 49*(2), 221-225.

Tyack, D. B. (1974). *The One Best System: A History of American Urban Education*. Cambridge, MA: Harvard University Press.

Tyack, D. B., and Cuban, L. (1995). *Tinkering toward Utopia: A Century of Public School Reform*. Cambridge, MA: Harvard University Press.

Vandenberghe, V., and Robin, S. (2004). Evaluating the Effectiveness of Private Education across Countries: A Comparison of Methods. *Labour Economics, 11*(4), 486-506.

Vann, B. J. (1998). An Urban School Network's Resistance to a Competition Policy: Defending Communitarian Accountability in England. *Education and Urban Society, 30*(4), 516-530.

Vanourek, G., Manno, B. V., Finn, C. E., and Bierlein, L. A. (1997). *Charter Schools in Action*. Indianapolis, IN; Washington, DC: Hudson Institute.

Vermeulen, B. P. (2004). Regulating School Choice to Promote Civic Values: Constitutional and Political Issues in the Netherlands. In P. J. Wolf and S. Macedo (Eds.), *Educating Citizens: International Perspectives on Civic Values and School Choice* (pp. 31-66). Washington, DC: Brookings Institution Press.

Vidovich, L., and Sheng, Y. M. (2008). Global-Local Dynamics in Expanding School Choice in Singapore. In M. Forsey, S. Davies and G. Walford (Eds.), *The Globalisation of School Choice?* (pp. 209-229). Oxford: Symposium Books.

Viteritti, J. P. (1999). *Choosing Equality: School Choice, the Constitution and Civil Society*. Washington, DC: Brookings Institution Press.

Walberg, H. J., and Bast, J. L. (2003). *Education and Capitalism: How Overcoming Our Fear of Markets and Economics Can Improve America's Schools*. Stanford, CA: Hoover Institution Press.

Walford, G. (1994). *Choice and Equity in Education*. London: Cassell.

Walford, G. (2008). School Choice in England: Globalisation, Policy Borrowing or Policy Corruption? In M. Forsey, S. Davies and G. Walford (Eds.), *The Globalisation of School Choice?* (pp. 95-109). Oxford: Symposium Books.

Walford, G. (Ed.). (1996). *School Choice and the Quasi-Market*. Oxford: Triangle.

Walford, G., and Miller, H. (1991). *City Technology College*. Milton Keynes England: Open University Press.

Walford, G., and Pring, R. (1996, January 19). An Inclusive Issue Still Relevant for a New Millennium. *Times Educational Supplement,* p. 20.

Walsh, M. (1998, September 23). High-Risk Investors Eye Education Opportunities. *Education Week, 18,* 1, 12-13.

Walsh, M. (1999, November 24). Ka-Ching! Businesses Cashing in on Learning. *Education Week, 19,* 1, 14-16.

Wells, A. S., Artiles, L., Carnochan, S., Cooper, C. W., Grutzik, C., Holme, J. J., et al. (1998). *Beyond the Rhetoric of Charter School Reform: A Study of Ten California Districts*: University of California at Los Angeles.

Welner, K. G. (2008). *Neovouchers: The Emergence of Tuition Tax Credits for Private Schooling*. Lanham, MD: Rowman and Littlefield.

West, A., Pennell, H., and Edge, A. (1997). Exploring the Impact of Reform on School-Enrollment Policies in England. *Educational Administration Quarterly, 33*(2), 170-182.

West, E. G. (1982). The Public Monopoly and the Seeds of Self-Destruction. In M. E. Manley-Casimir (Ed.), *Family Choice in Schooling: Issues and Dilemmas* (pp. 185-198). Lexington, MA: LexingtonBooks.

West, E. G. (1995). *Education with and without the State* (Working paper for the World Bank).

West, E. G. (1997). Education Vouchers in Practice and Principle: A Survey. *The World Bank Research Observer, 12*(1), 83-104.

Whittle, C. (2005). *Crash Course: Imagining the Future of American Public Education*. New York: Riverhead Books.

Whitty, G. (1997). Creating Quasi-Markets in Education: A Review of Recent Research on Parental Choice and School Autonomy in Three Countries. In W. L. Boyd and J. G. Cibulka (Eds.), *Review of Research in Education* (Vol. 22, pp. 3-47). Washington, DC: American Educational Research Association.

Whitty, G., Edwards, A. D., and Gewirtz, S. (1993). *Specialisation and Choice in Urban Education: The City Technology College Experiment*. London; New York: Routledge.

Whitty, G., and Power, S. (1997). Quasi-Markets and Curriculum Control: Making Sense of Recent Education Reform in England and Wales. *Educational Administration Quarterly, 33*(2), 219-240.

Whitty, G., and Power, S. (2000a, March 28-30). *Devolution and Choice in Education: The Research Evidence to Date.* Paper presented at the Futures of Education conference, Zurich, Switzerland.

Whitty, G., and Power, S. (2000b). Marketization and Privatization in Mass Education Systems. *International Journal of Educational Development, 20*, 93-107.

Whitty, G., Power, S., and Halpin, D. (1998). *Devolution and Choice in Education: The School, the State, and the Market*. Bristol, PA: Open University Press.

Wilgoren, J. (2001, April 20). Schools Are Now Marketers Where Choice Is Taking Hold. *The New York Times,* p. A1.

Williams, C. (2009, March 19). Schools Post Spending Online. *Detroit News*.

Williams, R. C., Harold, B., Robertson, J., and Southworth, G. (1997, April). Sweeping Decentralization of Educational Decision-Making Authority: Lessons from England and New Zealand. *Phi Delta Kappan, 78,* 626-632.

Woessmann, L. (2003). Schooling Resources, Educational Institutions and Student Performance: The International Evidence. *Oxford Bulletin of Economics and Statistics, 65*(2), 117-170.

Wohlstetter, P., and Griffin, N. C. (1997). *First Lessons: Charter Schools as Learning Communities* (Policy Brief No. RB 22). Philadelphia: Consortium for Policy Research in Education.

Wolff, L., Navarro, J. C., Gonzâalez, P., Programa de Promociâon de la Reforma Educativa en Amâerica Latina., and Inter-American Development Bank. (2005). *Private Education and Public Policy in Latin America*. Washington, D.C.: Partnership for Educational Revitalization in the Americas (PREAL).

Woods, P. A., Bagley, C., and Glatter, R. (1998). *School Choice and Competition: Markets in the Public Interest?* London: Routledge.

Wyatt, E. (1999a, November 4). Investors Are Seeing Profits in Nation's Demand for Education. *The New York Times*.

Wyatt, E. (1999b, November 4). Investors See Room for Profit in the Demand for Education. *New York Times,* pp. A1, A27.

Wylie, C. (1994). Mixed Messages from New Zealand. In R. Martin, J. McCollow, L. McFarlane, G. McMurdo, J. Graham and R. Hull (Eds.), *Devolution, Decentralisation and Recentralisation: The Structure of Australian Schooling* (pp. 13-14). Brisbane: Australian Education Union.

Zimmer, R., Gill, B. P., Booker, K., Lavertu, S., Sass, T. R., and Witte, J. F. (2009). *Chartyer Schools in Eight States: Effects on Achievement, Attainment, Integration, and Competition*. Santa Monica, CA: Rand.

Zollers, N. J., and Ramanathan, A. K. (1998, December). For-Profit Charter Schools and Students with Disabilities: The Sordid Side of the Business of Schooling. *Phi Delta Kappan, 80,* 297-304.

RECENT OECD PUBLICATIONS OF RELEVANCE TO THIS WORKING PAPER

OECD (2006) *Demand-Sensitive Schooling? Evidence and Issues*, OECD Publishing, Paris.

EXISTING OECD EDUCATION WORKING PAPERS

No. 1 *Teacher Demand and Supply: Improving Teaching Quality and Addressing Teacher Shortages* (2002), Paulo Santiago.

No. 2 *Teacher Education and the Teaching Career in an Era of Lifelong Learning* (2002), John Coolahan.

No. 3 *Towards an Understanding of the Mechanisms That Link Qualifications and Lifelong Learning* (2003), Friederike Behringer and Mike Coles.

No. 4 *Measuring Educational Productivity in Standards-Based Accountability Systems: Introducing the SES Return on Spending Index* (2005), Martin Hampel.

No. 5 *PISA 2000: Sample Weight Problems in Austria* (2006), Erich Neuwirth.

No. 6 *Funding Systems and their Effects on Higher Education Systems – International Report* (2007), Franz Strehl, Sabine Reisinger and Michael Kalatschan.

No. 7 *On the Edge: Securing a Sustainable Future for Higher Education* (2007), OECD/IMHEHEFCE.

No. 8 *Globalisation and Higher Education* (2007), Simon Margison and Marijk van der Wende.

No. 9 *Understanding the Regional Contriubution of Higher Education Institutions: A Literature Review* (2007), Peter Arbo and Paul Benneworth.

No. 10 *Effects of Tertiary Expansion – Crowding-out Effects and Labour Market Matches for the Higher Educated* (2007), Bo Hansson.

No. 11 *Skilled Voices? Reflections on Political Participation and Education in Austria* (2007), Florian Walter and Sieglinde K. Rosenberger.

No. 12 *Education and Civic Engagement: Review of Research and a Study on Norwegian Youths* (2007), Jon Lauglo and Tormod Oia.

No. 13 *School Accountability, Autonomy, Choice, and the Level of Student Achievement: International Evidence from PISA 2003* (2007), Ludger Wössmann, Elke Lüdemann, Gabriela Schütz and Martin R. West.

No. 14 *School Accountability, Autonomy, Choice, and the Equity of Student Achievement: International Evidence from PISA 2003* (2007), Gabriela Schütz, Martin R. West, Ludger Wössmann.

No. 15 *Assessment of learning outcomes in higher education: a comparative review of selected practices* (2008), Deborah Nusche.

No. 16 *Approaches and Challenges to Capital Funding for Educational Facilities* (2008), Ann Gorey.

No. 17 *Recent Developments in Intellectual Capital Reporting and their Policy Implications* (2008), W. Richard Frederick.

No. 18 *Employers' Perspectives on the Roles of Human Capital Development and Management in Creating Value* (2008), L. Bassi and D. McMurrer.

No. 19 *Job-related Training and Benefits for Individuals: A Review of evidence and explanations* (2008), Bo Hansson.

No. 20 *A Framework for Monitoring Transition Systems* (2008), Rolf van der Velden.

No. 21 *Final Report of the Development of an International Adult Learning Module (OECD AL Module)* (2008), Bo Hansson and Helmut Kuwan.

No. 22 *What Works in Migrant Education? A Review of Evidence and Policy Options* (2009), Deborah Nusche.

No. 23 *Teacher Evaluation: Current Practices in OECD Countries and a Literature R*eview (2009), Marlène Isoré.

No. 24 *Assessment and Innovation in Education* (2009), Janet Looney.

THE OECD EDUCATION WORKING PAPERS SERIES ON LINE

The OECD Education Working Papers Series may be found at:

- The OECD Directorate for Education website: www.oecd.org/edu/workingpapers
- The OECD's online library, SourceOECD: www.sourceoecd.org
- The Research Papers in Economics (RePEc) website: www.repec.org

If you wish to be informed about the release of new OECD Education working papers, please:

- Go to www.oecd.org
- Click on "My OECD"
- Sign up and create an account with "My OECD"
- Select "Education" as one of your favourite themes
- Choose "OECD Education Working Papers" as one of the newsletters you would like to receive

For further information on the OECD Education Working Papers Series, please write to: edu.contact@oecd.org.