A TWO-DIMENSIONAL MODEL OF SCHOOL ENTREPRENEURSHIP

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ABSTRACT

Schools seem to be caught in a constant tension between their conservative nature and their need to behave entrepreneurially. By adopting the perspective of network theory as developed by Barabasi (2003), I argue that different levels of deregulation and the presence or absence of competition may interact to produce different niches that may inhibit or facilitate the emergence of radical school entrepreneurship. The proposed model seeks to deepen our understanding of educational entrepreneurship.

INTRODUCTION

Schools seem to be caught in a constant tension between their conservative nature and their need to behave entrepreneurially. It has been suggested that reforms involving school competition and deregulation may resolve this tension by providing the appropriate ground for entrepreneurship. However, it has been argued that these reforms have failed to support the emergence of radical entrepreneurship. In this paper, which takes a macro perspective,[1] I attempted to enhance our understanding of educational entrepreneurship in the context of competition (i.e., school choice) and deregulation. By adopting the perspective of network theory as developed by Barabasi (2003), I argue that different levels of deregulation and the presence or absence of competition may interact to produce different niches that may inhibit or facilitate the emergence of radical school entrepreneurship. The proposed model seeks to deepen our understanding of educational entrepreneurship and to indicate what policies will create the structural conditions for the growth of radical educational entrepreneurship.

THEORETICAL FRAMEWORK

"School entrepreneurship" is a term that re ects an intrinsic tension. On the one hand, state-funded schools are conservative monopolies that avoid proactive innovation (Chubb & Moe, 1990; Gauri, 1998; Peterson, 1990). On the other hand, schools have to engage in entrepreneurial behavior in order to satisfy their consumers' needs and preferences (Eyal & Inbar, 2003). Avoiding entrepreneurial behavior might make schools irrelevant in a competitive market where alternative entrepreneurial agencies are liable to threaten their monopoly (Drucker, 1985).

This intrinsic tension has led many scholars to argue that only a fundamental reform in the educational system can reinvent the school as a legitimate entrepreneurial pedagogical organization. This challenge has been addressed through the introduction of two policies—school choice and governmental deregulation—which are discussed in the literature as facilitators of entrepreneurship (Adnett & Davies, 1999; Adnett & Davies, 2000; Coulson, 1996; Davies, Adnett & Mangan, 2002). School choice introduces competition into the school arena and, therefore, is supposed to inevitably increase entrepreneurship (Adnett & Davies, 2000; Chubb & Moe, 1990; Foss, 1994; Kirzner, 1997; Levin, 1991; Tooley, 1996).

Governmental deregulation reduces government control over schools. It complements school choice and is believed to provide the freedom needed for entrepreneurship (Fuhrman & Elmore, 1995; Hanson, 2001). It has been argued that schools that face competition outperform those regulated by the government because they re ect diverse consumer preferences (Hoxby, 2003; Levin, 1991; Tooley, 1996).

Enthusiasm about school choice and deregulation have been questioned by several scholars on the grounds that these policies are mostly related to schools' adherence to traditional educational practices and limited expansion of their activity (Fitz, Halpin & Power, 1997; Lubienski, 2001; Plank &

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1 Methodologically, school entrepreneurship can be studied from either a micro or a macro perspective. Whereas the former focuses on the direct incentive or motivation for entrepreneurship, restrictions on it, and the availability of resources, the latter concentrates on structural differences that shape the degrees of freedom for entrepreneurship in the larger system. This paper adopts the macro perspective exclusively.

Sykes, 1999). For example, with these policies, school entrepreneurship was found to be mainly commercial and did not concern fundamental changes in core instructional practices, i.e., pedagogy (Davies & Hentschke, 2002; Lubienski, 2005; Maguire, Ball & Macrae, 1999). In other words, radical school entrepreneurship, which involves fundamental changes in pedagogy (Cuban, 2006; Williams, 2006) that may spur change in the larger system over time (Smith & Petersen, 2006; Teske & Williamson, 2006), was not apparent under deregulation and school choice policies (Hess, 2006).

In New Zealand and Great Britain, for instance, competition between schools resulted in an emphasis on appearance and image over the adoption of distinct pedagogical visions (Meyer, 1992). Under privatization in Chile, it was found that, ironically, classroom innovations occurred in public schools rather than in private schools (Lubienski, 2001; Parry, 1997).

Concerning deregulation, it was found that charter schools in the US were associated with fundraising, entrepreneurial organizational marketing, and administrative innovations, such as parent contracts or employment of teachers rather than classroom-level curricula or instructional innovations (Lubienski, 2003; Lubienski, 2006; Plank & Sykes, 1999). Along the same lines, it was found that decentralization in England limited school innovations to the margins of the schools' activity (i.e., education for values, tutorial support, assemblies, and religious education) (Adnett & Davies, 2000; Fitz et al., 1997).

Thus, even if we accept the controversial proposal that competition among schools and deregulation promote productivity, ef ciency, and student outcomes (Peterson & Hassel, 1998), research nd-ings seem to converge on the conclusion that they do not inspire meaningful pedagogical-educational entrepreneurship (Fitz et al., 1997).

The limited impact of school choice and deregulation policies on radical entrepreneurship is usually explained by arguing that (a) education is merely a quasi-market and therefore not fully competitive (Henig, 1994; Lubienski, 2005; Malen, 2003), and (b) regardless of any reform, government regulation remains a constant feature in K–12 schools. I will now elaborate on both major issues.

Competition as a catalyst of entrepreneurship is limited. To begin with, school effectiveness is hard to measure, due to the imprecision of educational outcomes and the dif culty of establishing a causal connection between school practices and outcomes (Lubienski, 2003). Thus, competition is not necessarily grounded in clear, valid indicators of success. Lubienski (2001) argued that when consumers had to choose among providers, their decision-making process was irrational and "image-based." Under these circumstances, schools may improve their competitive position and increase their market share by presenting a normative image of success without being involved in any genuine innovation (Hanson, 2001; Lubienski, 2006).

The second point about competition is that school choice policies usually do not motivate radical entrepreneurship. As education is acknowledged as a public good, choice programs are publicly funded to ensure the service. That is, choice is funded and regulated by the government, which controls fundraising, consumer recruitment, and charges (Lubienski, 2001). As a result the competitive pressure on schools, as well as their ability to generate pro ts, is limited. Thus, it has been claimed that schools can maximize pro t only by reducing costs associated with research and development (R&D) and experimentation (Davies & Hentschke, 2002), since these activities are not copyright-protected and cannot secure future bene ts (Lubienski, 2006). Consequently, instead of radical entrepreneurship, image management and marketing of well-established educational practices are used as non-risky strategies for attracting consumers (Davies et al., 2002; Kerchner, 1988; Lubienski, 2005).

The second major issue is that government has maintained a constant presence in schools despite supposed deregulation. In most cases, reforms involving decentralization, charters, and choice are accompanied by increased systematic governmental regulation (Malen, 2003). For instance, standardized testing based on a compulsory national curriculum, which has characterized decentralization reforms, is said to represent a control mechanism imposed as an alternative to centralization (Adnett & Davies, 2000; Malen, 2003). Moreover, the use of a single system of curriculum-based external examinations is said to encourage uniform preferences among parents, thus promoting school conformity, which in turn discourages diversi cation. Thus, it is not surprising that under the decentralization reform in Great Britain the biggest barrier to school entrepreneurship was the government (Adnett & Davies, 2000; Boyett, 1997; Boyett & Finlay, 1993). Israeli schools during decentralization reform also avoided radi-

cal entrepreneurship (Eyal & Inbar, 2003; Eyal & Kark, 2004). In addition, legislated regulation of charter schools is reportedly a crucial factor in controlling their prevalence and innovativeness (Kuscova & Buckley, 2004). This control process is said to make charter schools resemble regular schools, which face the same structural restrictions (Bulkley, 1999; Hanson, 2001). Accordingly, it seems that governments still regulate school functions even with school choice and decentralization reforms, thus restricting schools' ability to stray from conventional teaching methods and curricula and to adopt radical educational entrepreneurship.

The researcher might thus conclude that institutional considerations are stronger than competition in determining the form of school entrepreneurship (Borins, 2000; Hanson, 2001). Yet in practice, the interaction between the presence or absence of competition and differing levels of deregulation may produce different niches that may facilitate or hinder radical entrepreneurship. The following sections explore this interaction with the aim of enriching our view of radical entrepreneurship under conditions of deregulation and competition.

A TWO-DIMENSIONAL MODEL OF SCHOOL ENTREPRENEURSHIP

The level of governmental regulation, as manifested, for example, by a national curriculum or standards, represents the system's control and supervision of educational endeavors. School choice, the second dimension of the model, is the citizen's right to choose a school from among several options. School choice was intended to induce competition. Although it can take many forms (e.g., de-zoning or vouchers), the main goal of choice programs is to increase the potential for consumer mobility between schools. Effective mobility is attained when irrelevant factors that might prevent the actualization of consumers' free choice are removed. Thus, when choice is introduced into an educational system, government schools lose their monopoly. As a result, the threat to a school's existence and to its ability to obtain resources increases. Once the interdependence between the recruitment of consumers and resource allocation reaches a certain point, school entrepreneurship should become indispensable.

Although deregulation and school choice must be measured along a continuum, a binary table has been drawn up for conceptual clari cation of the various frameworks in which entrepreneurship can be generated. Although regulation may be referred to as "high" or "low," school choice is referred to here as "present" or "absent" for the sake of the overview. A 2x2 table illustrates the intersection of the two policy dimensions. The four table cells represent different niches that generate different types of entrepreneurship. Table 1 shows the different types that, according to the hypothesis, evolve from the different options. The hypothesis is that most of the niches do not provide the grounds for the emergence of radical school entrepreneurship, except in conditions of low regulation without school choice. Although the model suggested by the table refers to asynchronic dynamic processes, it is shown in static form for analytical clarity only.

Table I:

The two-dimensional model of school entrepreneurship

		Governmental regulation	
		High	Low
Choice	Absent	No Entrepreneurship	Radical Entrepreneurship
	Present	Manipulative Entrepreneurship	Popular Entrepreneurship

The following sections discuss the four niches and the hypothesis regarding the evolution of entrepreneurial types.

Niche 1: High governmental regulation with no choice

This niche represents complete governmental control of educational services and consumption thereof. In these circumstances, close state supervision of curricula, resource allocation, and staff employment minimizes the differences between state schools and other educational agencies. When education is not only sponsored by the state, but also exclusively and directly delivered by it, a *centralized educational system* results, like the educational systems of Eastern European countries under Communism. This system is designed to provide universal education in a uniform manner because it is considered a basic public service needed to ensure "obvious" outputs (Drucker, 1985). To achieve this aim, education is fully funded by the state and the intervention of private and/or non-governmental organizations in providing educational services is forbidden. Moreover, even when some parents try to in uence their children's education, a dearth of information about public services and rights make their attempts ineffective. For this reason, the public as individuals, groups, or communities lacks bargaining power vis-à-vis the service providers.

When schools do not face competition and are highly controlled by the state, demand for local adaptation of educational services is low. The state prevents school responsiveness to consumer demands, and school administrations avoid exposure to market uncertainties. As a result, it seems that there is neither the need nor the motivation to act entrepreneurially. As a matter of fact, any entrepreneurial activism will be regarded as irrational and inef cient (Covin & Slevin, 1991).

When no degrees of freedom exist for bottom-up initiatives in the educational system, obviously no entrepreneurship will appear, or if it does, it will take the form of a technical innovation aimed at resolving practical issues related to maintaining the status quo. Using the perspective of network theory (Barabasi, 2003), a highly regulated system with no choice may be described as a scale-free network in which a few nodes act as highly connected "hubs." These hubs are introduced into the system by the government, and most other nodes have no choice but to be connected to these central hubs. These hubs represent the institutionalized norms with which all schools must align themselves.

Niche 2: Low governmental regulation with choice

This niche represents the other extreme of the model. It characterizes educational systems that adopt *privatization reform*. Governments that adopt this free-market ideology tend to believe that the "hidden hand" of the market can best determine the composition, quality, and value of educational services (Oplatka, 2004). Such reforms stem from the notion that consumers know best, and that schools will be motivated to improve under conditions of competition. Moreover, it is assumed that freedom is a basic requisite for people to fully realize their potential in general, and their professional aspirations and dreams in particular. For all these reasons, under the circumstances of privatization, state regulation is replaced with competition and schools are only partially funded by the state. Thus, the survival of an educational enterprise depends on its ability to attract consumers, satisfy their demands, and outperform its competitors. As was previously discussed, the assumption that low regulation and choice would lead to radical entrepreneurship has been empirically refuted. Nevertheless, it is important to examine this stance from a theoretical perspective.

It is customarily argued that this kind of environment is fertile ground for entrepreneurship. However, if a school's survival fully depends on its ability to satisfy consumer preferences that mostly converge on several hubs, we will probably encounter a type of *popular entrepreneurship* that attempts to resonate with the convergent tastes of the public, whimsical or fashionable as they might be. In other words, the distribution of individual preferences within a given society seems to converge on several major hubs. In contrast with Niche 1, however, in which the hubs are enforced top-down by the government, in Niche 2 the hubs emerge from the free dynamic of the network as guided by the logic of "preferential attachment." *Preferential attachment* means that the more connected a node is, the more likely it is to receive new links (Barabasi, 2003). In our case preferential attachment should not be confused with school choice. Preferential attachment is the dynamic in which schools align themselves with several limited

norms/standards ("hubs") of the system.

Assuming that the dynamic of preferential attachment underlies the path taken by the system under conditions of low regulation and high choice, it is likely that most schools would join the hubs of the system instead of initiating radical entrepreneurship. Although this structure may tolerate a few radical entrepreneurs who enter the market with novel ideas, on the systemic level it would lead to convergence of taste through imitations of the successful product, i.e., a connection to hubs.

Niche 3: High governmental regulation with choice

The niche of high regulation with choice seems to be internally inconsistent, since it tries to weave together diametrically opposing forces: top-down regulation by the government and bottom-up choice by the citizenry. Although this condition might sound like an imaginary construct, it is clearly evident in many educational systems that have implemented quasi-market reforms.

Ef ciency underlies *quasi-market reforms* that manifest these structural conditions. In these reforms, choice programs supplement decentralization processes, which are accompanied by an increase in standardization.

Decentralization supposedly represents a shift in the power structure, as authority is delegated to local-level administrators to ensure a better t between the service provided and consumer needs. Such a reform re ects the idea of "subsidiarity," which stems from the notion that "a central authority should have a subsidiary function, performing only those tasks which cannot be performed effectively at a more immediate or local level" (OED, 2d ed., 1989). Thus, although power may be delegated to regional or local administrators, its potential may be fully materialized only when it is devolved to the end provider of educational services, as in the case of *school-based management reform* (David, 1989; Leithwood & Menzies, 1998; Nir, 2003).

Under these circumstances, parental and community pressure on educational providers (i.e., schools) should intensify, thereby increasing the in uence of the parents and the community on schooling. These pressures are expected, theoretically, to increase school diversity as different communities are believed to require distinct educational services. This is especially evident when choice mechanisms are introduced into the system. Then schools are expected to generate pedagogical innovations in order to satisfy their clients' diverse needs--i.e., to generate radical entrepreneurship. In fact, however, the in uence of consumers on schooling is limited due to governmental constraints. Decentralization reforms seldom change the power structure in the system in practice and are often associated with heavy regulation, with standardization and national and international testing used as alternative control mechanisms. As I suggested above, the norms imposed by the government may be considered hubs to which each school must be connected. Using Barabasi's ideas (2003), we can argue that when mandatory hubs exist, consumer choice is not real choice because the logic of preferential attachment will inevitably lead most schools to align with these hubs/norms.

When the outcomes of schooling are rigid and predetermined by the system, and when regulation of pricing and fundraising is high and resources are limited, schools may adopt a low-cost entrepreneurial strategy that is not radical entrepreneurship. This strategy is employed to establish or maintain the school's public image as a successful school as ef ciently and inexpensively as possible. This will be done by using proven practices in whatever way is most fashionable: providing attractive extracurricular programs, engaging in prestigious projects, and producing impressive events. All these activities, however, most of which are marginal to the core pedagogical activity of the school, are mainly for PR purposes. Impression management might then become a major characteristic of these schools. Marketing efforts will be direct toward attracting consumers, as their participation is no longer guaranteed.

This entrepreneurship may be termed "*manipulative entrepreneurship*" because consumers are manipulated to believe that novel radical endeavors are initiated to address their needs, while actually the purpose is to serve the system's agenda. For example, although parents and children may consider the proactive introduction of new subject matter, such as law studies, to be a radical change in the traditional school curriculum, it may represent nothing more than the conventional pedagogy of "educational banking." In the same vein, information technology (IT) initiatives, which are sometimes presented as a revolutionizing force, may be used by entrepreneurial schools to "support, rather than alter, their existing

teacher-centered practices" (Peck, Cuban & Kirkpatrick, 2002).

Niche 4: Low governmental regulation with no choice

Unlike the previous niches, the fourth niche is evident when the policy is to support *communitarism*.[2] In this case, in contrast with decentralization, the government gives up its regulation of the educational system in certain communities (Bryk & Driscoll, 1988; Lee et al., 1993). The communities maintain their schools autonomously with minimal regulation by the state.

However, the community members have little choice because by joining the community they empower the collective to choose for them (Feinberg, 1995; Lee et al., 1993). For example, the Amish in United States run their own schools with low regulation by the federal government and no choice for community members. In practice, a member of the Amish community cannot choose a school for her children, even though in theory she could send them to a public school. Under conditions of no choice and low regulation, *radical entrepreneurship* may emerge. The isolated "islands" of the diverse communities are not connected/obliged to major hubs. They are separate networks (Barabasi, 2003) that have an obligation to maintain their ideological distinctiveness, which constitutes and legitimizes their separate existence. Under these conditions, the system moves toward increasing divergence. It also maintains this divergence so the community itself is not dominated by others. Communitarian schools may necessarily be pushed toward innovation to maintain communal identity. Innovation, as epitomized by radical entrepreneurship, is the way the system maintains its distinctiveness and assures the community's survival.

The Amish educational system is a good example in support of the above argument (Johnson-Weiner, 2006), although it is a rarity. The Amish have been able, by legal means, to organize school life and curricula in harmony with the community's worldview. This means, among other things, that students are involved in community life through work. In addition, only Amish teachers work in their schools, so the children are exposed to a coherent educational message. In a sense, the Amish have been able to develop a rather closed system that reinforces community identity and values. Moreover, because different Amish communities are loosely connected and react differently to pressures from the dominant society, the Amish school bears responsibility for constantly de ning the borders and the identity of the community against the world and other Amish groups (Johnson-Weiner, 2006). This is accomplished by designing the school curriculum, pedagogy, and school architecture in accordance with the community's religious ideology. Thus schools have become "agents of change as well as agents of resistance to change" (Johnson-Weiner, 2006). Whereas most Western schools have traditionally attempted to (a) provide abstract knowledge, (b) separate children from their family and community, and (c) disconnect learning from real life (Bekerman, 2002; Cole, 1990), the Amish schools do exactly the opposite. Thus, although Amish schools seem like a remnant of the past, they continuously create and revise their own model as an alternative to public education.

In sum, while the proponents of the free-market ideology describe low regulation and choice as the optimal conditions for the emergence of radical school entrepreneurship, the current model challenges this "indisputable" axiom and suggests that conditions of low regulation and no choice, as evident in communitarism, are the best soil for the growth of radical entrepreneurship. This strategy may facilitate the emergence of varied educational models in which conventional practices are rejected in favor of diverse pedagogical and organizational arrangements, practices, agendas, norms and values.

CONCLUDING REMARKS

School entrepreneurship is supposedly connected to decentralization and school choice reforms.

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2 Communitarism is a philosophy that critiques Rawl's liberal individualism by countering that individuals are social creatures shaped by their communal identity (Bell, 1993; Caney, 1992). A communitaristic community is a distinct and cohesive community with shared values due to a common heritage, culture, language, and/or religion, and its educational system usually promotes and protects the family or in-groups and community goals (Arthur, 1998; Etzioni, 1993; Etzioni, 1995). Schools serve the communitaristic community as model "small societies" (Lee, Bryk & Smith, 1993).

Although these reforms may increase motivation to engage proactively in entrepreneurial endeavors, they do not necessarily ensure the emergence of radical educational entrepreneurship as opposed to mere business ventures.

The introduction of choice into educational systems eventually makes schools focus on the issue of relevance. For a school, being relevant means satisfying students' needs, or supposed needs, as manifested in students' or parents' preferences. Schools remain relevant if the services, competencies, or knowledge they provide can assist students in adult life and increase their present well-being.

In contrast to school choice, governmental regulation makes maintaining legitimacy the main focus of schools. Maintaining legitimacy implies that a school's main concern is recognition by governmental authorities. Thus, avoiding clashes with the educational system and preventing deviation from norms become important missions for the school. Otherwise the school is liable to lose the educational system's full sponsorship. The tension between maintaining legitimacy and remaining relevant is a constant feature of school entrepreneurship.

The two-dimensional model presented in the current paper represents this inherent tension, and thus offers some hints about how schools resolve it, while acting entrepreneurially under different conditions. With centralization, where schools strive mainly to remain legitimate, entrepreneurship will probably not emerge. In contrast, popular entrepreneurship will probably characterize schools whose main challenge is to maintain their relevance under privatization. Schools operating in the context of quasi-market reform, which stresses the equally important role of legitimacy and relevance, may adhere to manipulative entrepreneurship. In contrast, radical entrepreneurship may flourish under communitarism, where neither legitimacy nor relevance is considered important.

I have discussed the hypothesized impact of school choice and deregulation policies on school entrepreneurship by employing Barabasi's concepts. Applying ideas from network theory to the study of radical school entrepreneurship can provide fresh perspectives to develop novel hypotheses. As Efroni and Cohen argued (2003), albeit in a totally different context: "A good [biological] theory is one that serves the process of discovery and opens the way to 'otherwise unthinkable research.' " The ubiquity of scale-free networks and the dynamic of preferential attachment justify the use of these concepts as new perspectives on educational policy that can lead to more research. Moreover, based on ideas from network theory, I proposed a major hypothesis that can be tested empirically: that radical school entrepreneurship may flourish under communitarism. Thus this paper suggests the need for further research.

The implications of this hypothesis hold many ethical implications. From an ethical perspective, the flourishing of radical entrepreneurship under conditions of low regulation and no choice may pose a threat to the nation-state. Moreover, individual freedom, including free choice, and the equal opportunity to move from one community to another or to leave the community and its segregated way of life for larger society, might be severely impeded under communitarism. In this context, it is an open question whether the nation-state should promote radical school entrepreneurship in segregated communities that may threaten its unity.

The proposed model points out macro-level constraints on micro-level entrepreneurial behavior. These constraints do not determine the micro-level behavior in the strong causal sense, but they do limit the degrees of freedom for school entrepreneurship. In this sense it is hypothesized that although radical school entrepreneurship is rare, it can be seen under certain circumstances. One example might be when a school decides to ignore market considerations and government control mechanisms and give precedence to professional or ideological considerations.

To conclude, the present paper gives us a more complex understanding of school entrepreneurship by pointing out the interplay of macro-level constraints and micro-level behavior. It also stresses that the impact of structural reforms on schooling is overrated (Cuban, 1990). Moreover, it claims that in many cases the new structural arrangements adopted may hinder the original, stated intentions of the reform. Finally, it suggests that although radical school entrepreneurship is frequently praised for its potential to create an educational environment that best suits students' needs, it should not be embarked upon lightly. Thus, educational entrepreneurs' good intentions and the social benefits of their entrepreneurship should not be taken for granted.

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