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# Market Logic at School: Emerging Intra-school Competition between Private and Public STEM Programmes in Israel

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**Abstract:** This study analyses the *de facto* emerging intra-school competition between the Israeli Ministry of Education (MOE) and external organisations at public Israeli secondary schools by exploring science, technology, engineering, and mathematics (STEM) programmes. Given on-going privatisation processes within the education system, the participation of external organisations in schools has become significant, greatly affecting municipalities' authority and schools principals' autonomy. This case-study provides a comprehensive examination of this new form of intra-school competition and its possible impact on schools, based on in-depth interviews with school principals, representatives of STEM programmes, and officials at the MOE and a local education authority, as well as analysis of supporting documents. We show that despite its supposed regulatory role, the MOE is pushed to function as an additional player in this quasi-market, competing with external organisations and substituting its regulatory roles for additional market-player opportunities. Theoretical and empirical implications are suggested.

Keywords: privatization; NGOs; schools, competition

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## Lógica de mercado en la escuela: Competencia intraescolar emergente entre programas privados y públicos de STEM en Israel

Resumen: Este estudio analiza la competencia intrafamiliar emergente de facto entre el Ministerio de Educación israelí (MOE) y organizaciones externas en escuelas secundarias públicas israelíes mediante la exploración de programas de ciencia, tecnología, ingeniería y matemáticas (STEM). Debido a los continuos procesos de privatización dentro del sistema educativo, la participación de organizaciones externas en las escuelas se ha vuelto significativa, afectando en gran medida la autonomía de los directores de las escuelas y las autoridades municipales. Este estudio de caso proporciona un examen exhaustivo de esta nueva forma de competencia intraescolar y su posible impacto en las escuelas, en base a entrevistas en profundidad con los directores de las escuelas, representantes de los programas STEM y funcionarios del Ministerio de Educación y una autoridad educativa local, así como el análisis de documentos de respaldo. Mostramos que a pesar de su supuesta función reguladora, el Ministerio de Educación se ve obligado a funcionar como un jugador adicional en este cuasimercado, compitiendo con organizaciones externas y sustituyendo sus funciones reguladoras por oportunidades adicionales para los jugadores del mercado. Se sugieren implicaciones teóricas y empíricas.

Palabras clave: privatización; NGOs; escuelas, competencia

## Lógica de mercado na escola: Competição intra-escolar emergente entre programas STEM privados e públicos em Israel

Resumo: Este estudo analisa a concorrência intra-escolar de fato emergente entre o Ministério de Educação de Israel (MOE) e organizações externas em escolas públicas israelenses secundárias, explorando programas de ciência, tecnologia, engenharia e matemática (STEM). Dados os processos de privatização em curso dentro do sistema educacional, a participação de organizações externas nas escolas tornou-se significativa, afetando em grande parte a autoridade dos municípios e a autonomia dos diretores das escolas. Este estudo de caso fornece um exame abrangente desta nova forma de competição intra-escolar e seu possível impacto nas escolas, com base em entrevistas em profundidade com diretores de escola, representantes de programas STEM e funcionários do Ministério da Educação e uma autoridade local de educação. bem como a análise de documentos comprovativos. Mostramos que, apesar de seu suposto papel regulador, o MOE é forçado a funcionar como um participante adicional nesse quase-mercado, competindo com organizações externas e substituindo seus papéis reguladores por oportunidades adicionais de mercado. Implicações teóricas e empíricas são sugeridas.

Palavras-chave: privatização; NGOs; escolas, competição

#### Introduction

In recent decades, neoliberal public policies have become more common in education systems worldwide, contributing to the privatisation and decentralisation of formerly centrally managed education systems (Ball, 2009). Neoliberalism in this sense broadly applies to the "the agenda of economic and social transformation under the sign of the free market" (Connell, 2013, p. 100). The implementation of market logic is reflected in the diverse modes of privatisation within and among education systems (Hursh & Martina, 2016), as well as in the reduced role of governments in delivering and regulating education services. This change takes place alongside the

increasing involvement of external agencies1 in education systems (Almog-Bar & Zychlinski, 2012; Hursh & Martina, 2016; Savas, 2005; Yemini, 2017; Yemini & Sagie, 2015).

The involvement of external organisations in the education system tends to be considered indicative of the state's inability to provide education services (Eden, 2012; Rose, 2009). Despite the public perception of the government as legally and socially responsible for the provision of education, the governmental role is reduced constantly due to on-going decentralisation in many education systems. In conjunction, expanded autonomy is delegated to local authorities and, gradually, to the schools themselves (Lubienski, 2003; Nir, 2009). Much has been written on the competition between the public and private schools in general as a result of partial privatisation processes (Lubienski, 2005; Rowe & Lubienski, 2017) and within specific contexts (Verger, Bonal, & Zancajo, 2016). The present study contributes to this body of literature by showing how such competition can actually persist within public schools themselves, as external agencies effectively penetrate the public domain of schooling, which supposedly remains under the full, exclusive control of the Ministry of Education (MOE).

We focus on Israel as a case-study. Israel was originally established with a strong social democratic vision. Yet this vision has eroded over the years; since the 1980s, the Israeli MOE gradually embraced neoliberal ideas of decentralisation and privatisation (Addi-Raccah, 2015). Nevertheless, the vast majority of the education provision in Israel is still public. External organisations are criticised publicly and sometimes even banned, especially when they become involved in issues related to religious education (Sagie & Yemini, 2017; Sagie, Yemini, & Bauer, 2016; Yemini, Cegla, & Sagie, 2018). Moreover, most NGOs offering educational services in Israel are funded or willing to be funded by the state, thus gaining even greater access to the field.

External agencies and organisations have stepped up their involvement in the Israeli education system recently as a result of cuts in education budgets, alongside public demands to expand and diversify educational offerings in schools, due to the perceived failure of Israeli students in standardised examinations (Berkovich & Foldes, 2012; Gidron at el., 2004; Pizmony-Levy, 2017; Yemini & Gordon, 2017). Such organisations mainly supply extracurricular and supplementary remedies within the system. Moreover, the MOE's continuous attempts to organise this field are only partially successful; organisations often manage to facilitate interactions with schools absent any regulation.

Frequently, external organisations must benefit various interest groups such as the MOE, municipalities, and schools; this ability to act upon differing agendas grants them with an image of promoters of innovation and change within schools (Dvir et al., 2017; Yemini, 2017). On the other hand, integration of external organisations into schools creates complex power dynamics between the various interest groups with misaligned interests (Sagie, Yemini, & Bauer, 2016; Yemini, Cegla, & Sagie, 2018; Yemini & Sagie, 2015). Indeed, the complicated relations between the Israeli education system and external organisations remain unsettled (Almog Bar, 2016; Ichilov, 2009; Weinheber et al., 2008; Yemini, 2017), despite the significant growth in the number of organisations operating within schools (Eden, 2012).

Although the contemporary research on privatisation in public schools is flourishing (Ball, 2012), in Israel this topic yet to receive significant attention (Klein & Shimoni-Hershkoviz, 2016). Moreover, while such research often focuses on privatisation that occurs outside the schools (notable exceptions are Brehm & Silova, 2014; Yemini, Cegla, & Sagie, 2018) and with official

<sup>&</sup>lt;sup>1</sup> In this study, we consider such entities to include organisations (both for-profit and nonprofit—international, national, and local foundations, intermediaries, and NGOs) and individual consultants external to the public education system, who take an active role in the planning, delivery, and assessment of public education.

support from policymakers (e.g., the establishment of charter schools in the US; Lubienski, 2005) this line of research only tells part of the story. Here, we show how privatisation may develop *within* public schools—where initially, private actors were supposed to complement the governmental provision of extracurricular activities or remedial assistance, but actually, they now compete with the Ministry of Education over the same (internal) resources and students. We focus on one such case, showing the dynamics of the competition emerging and examining the perceptions of this educational realm from various stakeholders' perspectives.

#### Neoliberal Governance of Education

In recent years, most western countries seem to have gradually adopted market-conforming principles as a dominant governance mode, in addition to or instead of the traditional welfare state model that was common in western democracies after the Second World War (Peters, 2017; Rowlands & Rawolle, 2013; Verger, 2012). Neoliberal approaches promote a democratic discourse of choice and competition and encourage policies of political, economic, and educational decentralisation (Ichilov, 2012). The adoption of neoliberal principles and decentralisation processes produced free-market activities in areas traditionally under governmental oversight, such as welfare and education; ultimately, they encouraged privatisation in these fields (Au & Ferrare, 2015; Hursh & Martina, 2016; Svallfors & Tyllström, 2017).

Implementation of neoliberal principles in education, alongside decentralisation policies, enabled decision-making autonomy at the municipal level and gradually also within schools themselves; the responsibility for providing educational services was transferred from the government and local authorities to school principals (Robertson & Dale, 2002). Verger, Bonal, and Zancajo (2016) claim that a steering away from the public education system also promoted this growing autonomy at the school and municipal level. Nevertheless, they argue that the public school system still impedes schooling's effectiveness by setting targets and action steps that do not necessarily benefit the students and do not allow the school staff adequate flexibility (or opportunity) to use their professional judgement in the workspace. As such, schools' abilities to govern their affairs remain rather limited (Verger, 2012). Hence, adoption of market based patterns of governance—notably, creating competition amongst schools—may enable schools to generate better 'customer' responses, forcing them to provide higher quality education services (Verger, Bonal, & Zancajo, 2016). In this 'quasi-market' model, schools are forced to operate in a semi-competitive marketplace and compete against one another for the opportunity to succeed and even survive (Lubienski, 2005).

Concepts such as 'innovation,' 'choice,' 'competition,' and 'diversity,' which previously belonged exclusively to various commercial fields, have become significant features of the educational arena (Lubienski, 2003). Moreover, the elements of a free market became objectives of formal education in themselves (Lubienski, 2003). Advocates of this quasi-market model consider choice and competition between various schools and municipalities to be legitimate, in that they encourage effective, higher-quality education systems (Belfield & Levin, 2002; Hoxby, 2000). However, Allen and Burgess's (2010) study of competition's effect on student achievements in four different countries (England, the USA, Sweden, and Chile) revealed that the common positive image of competition in education and the belief that it encourages student achievements may be inaccurate; in fact, these researchers found no real influence of competition on student achievements. Furthermore, although the free market is characterised by innovation and diversity based on competition, the quasi-market in education systems does not necessary provide innovation and diversity in the curriculum itself—especially in failed schools where competition is essentially irrelevant (Adnett & Davies, 2000; McShane & Hess, 2015). However, adapting the quasi-market

model exclusively to successful schools may yield negative social consequences, such as widening the gap between the higher achieving schools (and students) and those with lower achievements, and as a result harming society's disadvantaged groups (Adnett & Davies, 2003).

Bulkley and Burch (2011) argue that free-market principles in education reflect civil society's attitude towards the economic market and the private sector's ability to provide better, more effective solutions to the public sector. The quasi-market model allows entry into public education systems for new players, who receive access to public economic resources that previously were provided exclusively by governments (Fabricant & Fine, 2015). Accordingly, the introduction of these stakeholders tolerates the use of private economic resources within public education, as well as the borrowing of management approaches and principles from the business world (Verger, Lubienski, & Steiner-Khamsi, 2016). In this sort of privatisation process, the boundaries between private and public education become indistinct (Ball, 2009). This is not a technical change in the management of educational services' supply, but rather a fundamental change in the educational process; the unrecognised privatisation that occurs without public attention may change the face of education, with far-reaching social implications.

Indeed, educational privatisation processes are influenced by the interactions between schools and external organisations. Therefore, the involvement of external organisations in public schools should be examined, in a quest to understand the transformations that may come into effect at both the school level and the educational policy level.

#### External Organisations within Public Education

The aforementioned privatisation and the quasi-market processes have contributed to the creation of characteristics and conditions that allow incorporation of external organisations into the education field (Srivastava & Baur, 2016). As mentioned, the governmental role has subsided, and civil society began filling in this gap through third-party organisations that provide services and promote the interests of various individuals and groups. This phenomenon further contributed to privatisation processes in education. The substantial increase in the number of third-sector organisations attests to the civil society's capacity to promote its interests and its ability to modulate governmental activities (Kamat, 2004).

External organisations operate in the educational sphere to supplement, append, or challenge existing activity with services that have not received governmental recognition or funding; hence, they initiate new services (DeStefano & Moore, 2010), assist in the completion of certain services (Rose, 2009), or challenge the existing ones (Shiffer et al., 2010). The mutual interests of such external organisations and the government allow shared discourse, but also challenge the existing policy. Indeed, such external organisations have become key players in the public sector, generating a new reality of inter-sector collaboration that influences the government's approach towards these organisations (Almog-Bar & Zychlinski, 2012).

Indeed, the mere existence of external organisations casts some doubt on governments' ability to provide quality educational services and has constituted a criticism of governmental conduct (Eden, 2012). Yet notably, the public continues to perceive the government as the morally, socially, and legally responsible entity in regard to education provision. Therefore, the government is expected to create a regulatory mechanism to monitor and manage partnerships with external organisations (Rose, 2009). Recently, however, school principals and municipalities gained autonomy, while regulation and governmental control decreased (Lubienski, 2003); these parallel trends enable pedagogical changes not anchored in policy but rather stemming from external organisations' involvement in schools (Williamson, 2012).

Such organisations' involvement in and ability to influence schools largely depend on their relationship with the governmental or municipal decision-makers. These organisations may even

serve as intermediaries between governmental decision-makers and the educators responsible for carrying out decisions (Honig, 2004). They have the capacity to address the interests of different stakeholders (such as the MOE, the municipality, and schools) and therefore are perceived as ideal partners to promote innovation and change in schools. On the other hand, integration of external organisations into schools may create complex power relations between the different stakeholders, due to the proliferation of interests that may not coincide (Authors, 2015).

#### External Organisations within Israeli Public Education: The Case of STEM Programmes

The State of Israel was founded on a welfare state model, committed to the provision of public services to its citizens (Berkovich & Foldes, 2012). After several decades during of operating a standardised, uniform educational education system, Israel seems to be on track towards abandoning the idea of public education in favour of a market-based model (Nir, 2003). In conjunction with privatisation tendencies, external organisations now comprise a significant component of Israel's education system, in the quest to improve student achievement (Berkovich & Foldes, 2012); indeed, they have become quite powerful (Gidron et al., 2004). Nevertheless, most privatisation processes are partisan; the MOE declares a continuous commitment to public schooling (Berkovich, 2014; Sagie & Yemini, 2017).

In 2008, the Israeli MOE founded a department charged with regulating and overseeing the involvement of external organisation in schools. Yet according to the State Comptroller's Report (2011), the significant number of external organisations working within the education system and these organisations' extensive involvement in school affairs indicate the MOE's inability to manage and regulate schools' relations with external actors (State Comptroller's Report, 2011). In addition, the State Comptroller found this intervention to contribute to the formation of uncontrolled privatisation processes in the Israeli public education system (State Comptroller's Report, 2011). Indeed, despite the existence of the MOE's targeted regulatory department, the Ministry seems challenged in finding a sustainable solution for on-going collaboration with external organisations—due to decentralisation processes and the autonomy of school principals, which enables them to introduce external organisations into schools without involving the MOE (Addi-Raccah, 2015). Through continuous blurring of public/private boundaries, unintentional competition may develop in some spheres between governmental and external programmes and tracks (Brehm & Silova, 2014).

In April 2015, the MOE published a Director General's Circular detailing the Ministry's policy regarding the integration of external educational programmes into education institutes and discussing collaborations with external factors. According to this Circular, the MOE is working towards establishing collaborations with external organisations and is attempting to formulate a policy for integrating these organisations into the education system. The MOE seems to be aware of the significant increase in the number of external organisations operating in the education system and hence seeks to establish policy—supposedly through on-going dialogue with stakeholders involved in the integration of external programmes into schools. Furthermore, the MOE attempted to control collaborations by creating a database of all the programmes operating in schools, which offers school principals' and supervisors' assessments.

STEM education in Israeli schools comprises a particularly interesting case study regarding competition in educational provision, since these subjects can be delivered as an independent programme taught at advanced, intermediate, and basic levels or as part of a specific programme. STEM programmes tend to be popular and greatly in demand due to higher credits their students receive in admission to higher education; their image also benefits from the usually higher socioeconomic composition of the pupils studying STEM subjects (Ayalon & Gamoran, 2000).

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In the last two decades, several NGOs took on an active role in delivering those programmes at public schools through teachers' training, fund-raising, mentoring, curricular development, and other supporting activities. The increased interest in STEM programmes within schools and in the general public can be related to the generally low image of public education in the Israeli public discourse and the Israeli system's weak positioning within international ranking systems (Pizmony-Levy, 2017). Furthermore, the lesser availability of such programmes in schools serving marginalised populations has been criticised.

Recently, the MOE developed an in-house STEM programme as part of its plan to increase students' performance and study of advanced-level STEM subjects. This programme, called the Technological Scientific Reserve, was proposed to schools as a benefits package that includes additional funding in teaching hours, mentoring, and teachers' training. It enters a school essentially upon an autonomous decision of the principal, but sometimes is can also be forced on a school by the Local Education Authority (LEA). In many schools, this programme was opened on top of existing STEM programmes, which often are delivered in close cooperation with NGOs. In this study, we focus on schools that run both of the programmes simultaneously (the governmental programme and a programme offered by one specific NGO), to assess the potential intra-school competition that might occur within schools in this regard.

#### **Research Objectives**

Connell (2013, p. 101) notes that "[n]eoliberalism seeks to make existing markets wider and to create new markets where they did not exist before." In this study, we aim to further unpack this process by critically examining the provision of STEM education in Israeli schools. Neoliberalism understands education as process of a human capital formation, aimed to produce an efficient workforce that will be productive and competitive in the world economy (Connell, 2013). Thus, STEM education comprises a major sphere of action and struggle for this purpose, as STEM capabilities are taken as a proxy for the state's competitiveness in international examinations and the public discourse (Yemini & Gordon, 2017). We employ the theory of education governance (Ball, 2009) and the notion of a 'competition state' to address our research questions, focusing on neoliberalism as an analytical prism to inform our findings.

Although several studies deal with private sector involvement in public sector education (e.g., Verger, Bonal, & Zancajo, 2016), in this study we tackle a case of unintentional privatisation occurring in public schools in Israel. The specific research questions that guided our study were as follows:

- (1) What sort of discourse developed around the operation of the public and private programmes within public schools? How did different stakeholders perceive such a dual STEM provision?
- (2) In particular, how did this dual provision gain legitimacy with public schools?

#### Research Methodology

#### **Data Collection**

This study is part of a larger research project concerned with investigation of interactions between NGOs and schools in Israel (Sagie, Yemini, & Bauer, 2016; Yemini, 2017; Yemini, Cegla, & Sagie, 2018; Yemini & Sagie, 2015), which included interviews, meetings observations, document and media analysis, and literature reviews. Here, we focus on a specific form of such interaction, analysing a case of the delivery of two particular STEM programmes that operate in Israeli

secondary schools; namely, the Technological Scientific Reserve programme operated by the Ministry of Education and a similar programme operated by an external NGO. We examined the factors influencing the formation and existence of the competition, as well as the different motivations and strategies of the stakeholders involved (the school principals, regulatory agents, municipal school district personnel, and NGO leadership) in the decision-making process of choosing which programme to offer at particular schools. We focus on one Local Education Authority (a particular school district comprising four secondary schools) located in central Israel, in which all schools adopted the MOE's STEM programme in addition to a STEM programme run by one particular NGO.

Data collection for this study took place in Israel between July and December 2016. Two data collection methods were applied: semi-structured interviews and document analysis. The interviews were scheduled with stakeholders independently and conducted by the first author at the interviewees' offices or at coffee shops in locations convenient to the interviewees. The interviews lasted between 45 and 120 minutes and were recorded and transcribed. In total, we based our study on 11 interviews, detailed in Table 1.

Table 1

Details of the Interviewed Stakeholders

Stakeholder	Employer	Gender	Additional details
Manager of the Technological	MOE	M	National level
Scientific Reserve Programme	MOE	111	National level
Coordinator in the Unit for Inter-	MOE	F	National level
	MOE	1'	Nauonai ievei
Sectoral Partnerships	NICO	Б	Nistis and Issued Also Nicco
CEO of the STEM-programme	NGO	F	National level, the NGO
NGO	NICO	г	is active nation-wide
Manager of the STEM-programme	NGO	F	National level, the NGO
NGO	NGO		is active nation-wide
Coordinator of the STEM-	NGO	F	Responsible for Middle-
programme NGO at the			upper class LEA
municipality			
School Principal 1	Public secondary	F	Middle class
	school		
School Principal 2	Public secondary	F	Middle-upper class
	school		
School Principal 3	Public secondary	M	Middle class
	school		
School Principal 4	Public secondary	F	Middle class
	school		
Manager of scientific programmes at	LEA	F	Middle-upper class LEA
the municipality			11
Coordinator of the Technological	LEA	F	Middle-upper class LEA
Scientific Reserve programme at the			1.1
municipality			
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Note: Additional stakeholders who were interviewed in a larger study (12 school principals from LEAs of low, intermediate, and high SES; 3 heads of education departments at those LEAs; 12 officials in several NGOs extensively working in schools mainly delivering extracurricular activities; 2 parliament members responsible for the Education Committee; and 5 past Director Generals of the MOE).

The purpose of the interviews was to allow the interviewees to reveal their story, its meaning, and their stances and opinions on the subject. Semi-structured interviews allow an open conversation between the interviewer and the interviewee, which can develop in different directions (Thomas, 2009): They reveal the policy being explored, offer an opportunity to expose the environment in which the policy exists, and enable expansive examination of the policy through a senior interviewee's personal acquaintance with the subject matter and the exchange of ideas. This type of interview usually begins from the interviewees' personal stance and professional experience and reflects their point of view on the policy, examining the extent of their involvement in it (Marshall & Rossman, 2014).

Moreover, analysis of official documents allows another perspective on the programmes and the way in which interviewees choose to present themselves and their policies. Hence, in addition to interviews, we collected official documents of the programmes being examined (which reveal the programmes' objectives and characteristics and are published in relevant websites), as well as relevant official documents from the MOE or the municipalities involved. In particular, we analysed all publicly available policy reports, Director General Circulars, and contents of the MOE website related to involvement of external agencies in schooling—comprising over 1,400 pages of documentation. We also included promotional materials regarding the NGO and governmental STEM programmes, which the relevant actors within both agencies had distributed to the LEA and schools. We triangulated data sources and collection techniques to facilitate truthfulness.

#### **Data Analysis**

To analyse the data we employed Critical Discourse Analysis (CDA), which focuses on the ideologies and philosophies that emerge from the interviews but are not always explicitly expressed. This method treats the interviewees as a subject matter that cannot be disconnected from context; thus, to properly analyse their statements, their environment and relationships with others are addressed. We examined the situation as seen through the eyes of the interviewee and as influenced by society; hence, we considered the socio-political context in analysing statements made in interview (as per Fairclough et al., 2011).

The analysis of each interview protocol and text was conducted on three levels: (1) as a stand-alone document; (2) in comparison to other texts and interviews; and (3) through a wider prism, within the socio-political context as an expression of ideology or a particular viewpoint. At each stage we developed a thorough coding system, using inductive and deductive coding procedures. The inductive coding was based on repetitive reading of interviews transcripts and documents; the codes emerged through the reading process. Examples of inductive codes include the role of parents, the importance of STEM as a specific programme, and the personal relations that NGO personnel formed with the schools. The deductive thematic coding was informed by the theoretical orientation briefly presented above and included codes such as autonomy, accountability, reference to policy decisions concerning privatisation, and involved actors. The documents regarding the examined STEM programmes were reviewed initially in preparation for the interviews and then re-examined at an advanced stage in light of the interview findings.

#### **Results and Discussion**

The following section is organised according to the two main themes that arose from our data. The first theme regards the emergence of market logic due to competition between the two STEM programmes within the schools. As previously noted, market patterns result from changes and exchanges in the educational world, which influence the schools' and LEAs' conduct vis-à-vis the MOE and other external organisations. The free market patterns that characterise the business

sector were found to redefine the schools' interactions with the MOE and external organisations and create a brand-new perception of an educational world that effectively operates like the business sector. The second theme focuses on the emerging power relations between the various entities involved in the decision-making process over the choice of STEM programme: the school principals, the local authority, and the MOE. Apparently, the process of introducing competing STEM programmes into schools and the manner in these programmes operate in schools is shaped by these relationships.

#### Intra-school Competition as a Buffer for Market Behaviours

The interview protocols and documents analysed reveal that consistent use of expressions traditionally belonging to the business world (such as 'marketing,' 'branding,' and 'customers') seeped into the discourse on education as well. Notably, in describing the STEM education at schools, all interviewees included expressions taken from the business world. For example, one of the school principals discussed the implementation of the MOE STEM programme despite the lack of demand for it (business-related terms are emphasised):

There is no way I will beg the students to sit in the [MOE STEM] class, because they think that the work is too hard so they don't want to, so no. If I'm marketing some kind of so-called business and no one is interested, you know, like someone who sells clothes and the collection isn't in demand now, then I won't sell it, I'll return it to the store and bring a relevant collection. The same with everything else...

Another school principal also spoke about the school governance as the authority responsible for marketing the two STEM programmes in question:

It all begins and ends with the school principal's **marketing ability**. If you promote the programme correctly, and explain its **benefits**, the collaborations... then you can definitely benefit here. So, if you run it correctly – and the school is marketed not only by its principal but also through **word-of-mouth** (**parents and students are the best marketers** through their grocery store or supermarket conversations)... there is success. Everybody wants that.

The word 'marketing' was repeated frequently throughout the interviews; a key element of bringing STEM education into schools seems to be marketing the programmes themselves. The school principals' numerous marketing efforts attest to the educational quasi-market created and confirm the existence of competition (Lubienski et al., 2009). The principals seem to be required, as an integral part of their job, to proactively promote the proposed STEM programmes (of both the MOE and the NGO), to monitor the demand for them, to analyse them, and to meet the outcome measures the school committed to in its agreements with the MOE or with the external organisation. Notably, such market-based dynamics completely contradict the MOE's declared intentions and declarations advocating for public schooling and seeking to enable only a marginal and very specific role for NGOs. Instead, competition became a prominent feature within schools; hence the vigorous 'business talk.'

The market approach is evident in the MOE's budgeting system for schools that run the Technological Scientific Reserve programme: schools are rewarded based on the number of students per grade who graduate with advanced physics, mathematics, or science classes. Thus, in a process typically characteristic of the business sector, to increase the number of students who attain a

'higher-quality' matriculation. Indeed, the MOE's encouragement of principals through incentives and rewards mimics management practices in the business sector (Clarke, 2004).

Moreover, the mere introduction of the MOE's Technological Scientific Reserve programme is a process with business-like characteristics. The programme's coordinator discusses the process of implementing it in schools as follows:

I want my potential clients to know in advance where they are going, and then they will be able to tell me if they even want to be my client. It's a waste of [teaching] hours and public [taxpayers'] money [if clients are not informed in advance regarding the programme].

The use of the word 'client' indicates how the coordinator perceives of the schools as potential customers for implementing the MOE's STEM programme, just as in a business transaction. Hence, the instructor presents the programme as a service offered to the school. Her remarks clearly refer to the fact that public funds are being invested in the programme. Her words make it seem as if the public funds are traded in a free market and can be allocated differently should the "clients" prefer otherwise, indicating the MOE's entry into such a 'market.'

As noted above, the academic literature presents an image of education systems as influenced by neoliberal and decentralisation processes that create an educational quasi-market and encourage privatisation (Hursh & Martina, 2016). Our findings confirm the existence of an educational quasi-market; although when asked directly, almost all school principals denied the presence of competition and claimed that the two programmes are simply run simultaneously with no negative consequences to either one. This approach is reflected in one principal's words:

No. No competition. I've always had 40 students for this and 40 students for that, nothing. Not at all... You won't see this competition in any possible context; these are two good programmes ... I don't see anything related to competition, definitely not. All the emotions are drained mainly into the selection process and after it's finished the winds calmed and we set sail and that's where it ends.

However, a broader and deeper analysis of the documents distributed by the programmes' officials and statements made in interviews through an examination of the social contexts and implied behaviours reveals clear signs of competition; notably, the principals executed changes in programmes according to student demand. For example, one school decided to run the Technological Scientific Reserve programme throughout the six years of secondary school, despite the MOE's instructions to the contrary. This continuation over the span of six years is characteristic of the competing NGO STEM programme, and therefore the mere change in itself indicates the quest to compare the programmes. Another example apparent in three of the schools is the establishment of selection processes for the Technological Scientific Reserve programme, contradicting the MOE's guidelines recommending access to all students. Indeed, selection processes are included in the competing NGO STEM programme, and this move suggests competition between the two programmes. Moreover, it seems that the two programmes are designed similarly; even the brochures that we analysed were graphically reminiscent. The programmes seem to be becoming even more isomorphic through the process of integration in the schools.

Like the school principals, the manager of the Technological Scientific Reserve programme at the MOE denied the existence of competition between the programmes. He claimed that it is

<sup>&</sup>lt;sup>2</sup> 'High quality' is a term commonly applied to the completion of advanced levels of STEM subjects in matriculation exams.

impossible to compete with the Ministry of Education, which is the sole entity responsible for education in the State of Israel: "I don't compete with non-profit organisations, the State cannot compete with non-profit organisations, we are the state, which decided upon and implements [the policy]. Others complement us by doing really blessed work, and there is a room for everyone."

In practice, however, the Ministry indeed appears to be competing with the NGO's STEM programme; our analysis of the MOE manager's statements made in interview reveals a comparison between the two programmes and an attempt to prove why one programme is better than the other, as well as the uniqueness of the MOE's programme. Notably, the comparison between the two programmes is not always based on their educational contribution (from a pedagogic-professional perspective, they are quite similar), but most of the interviewees also referred to the marketing of the two programmes, their prestige among parents and students, the number of students each programme is able to recruit, and the way in which each is perceived by the rest of the students at the school. This comparison attests to existing competition and to the competitive atmosphere between the MOE and external organisations, despite the denial of any such competition on the part of the manager of the Technological Scientific Reserve programme at the MOE. In contrast, the Ministry of Education's Unit for Inter-Sectoral Partnerships admits to and even encourages this competition. In the words of its representative:

If a school principal searches for a science programme, all the science programmes will indeed appear, but the one with the highest rating will appear first. That's exactly what competition is. Usually when we're coming to buy something, we'll call whatever appears first, right? Not everyone always has the patience to search through Google for hours, and this is where competition comes in. It won't appear as green or blue (i.e., it won't be marked as a MOE programme or an external organisation's programme), but it will appear by rating. So of course, there's an element of competition apparent here and we're completely aware of it, we want it, we want the schools to choose the highest quality programmes.

The programme database created by the Unit for Inter-Sectoral Partnerships includes all the school programmes and tracks, whether operated by the MOE or by external organisations. The database collects information on school programmes and produces a programme ranking, for a "more informed school programmes selection process," in the words of the Unit's representative. She claims that competition is not only created but also welcomed, because it enables a choice of high quality programmes. This finding is in line with the suggestion of Verger, Lubienski, and Steiner-Khamsi (2016) on the role of the state as an entity encouraging and maintaining competition.

According to this representative, this database provides a safety net for school principals. In establishing the database, the MOE provides a service to school principals—it centralizes and concentrates the essential information for the decision-making process, without limiting the principal or deciding for him/her which programme to implement. Thus, the MOE encourages and supports the principals' autonomy. However, contrary to the MOE's expectation, the school principals participating in the study did not attest to using the Unit for Inter-Sectoral Partnerships' database extensively, and when they did, it was mainly for technical information rather than more profound information regarding quality.

The external organisation's representatives interviewed attested to the existence of competition and expressed a positive attitude towards it, claiming that competition aids in the development and growth of both the schools and the MOE—which is forced to compete with organisations that provide schools with educational services. One of the MOE representatives interviewed concurs, claiming that "this is healthy competition. It creates a condition in which

everyone actually has to keep up to date all the time. Everyone needs to continue to create new things. Meaning that the point of the competition is to develop."

As Eden (2012) asserts, it seems that the mere existence of an external programme similar to the MOE's own programme constitutes a criticism of the Ministry's operations and casts doubt on its ability to provide quality educational services. In fact, it seems that for the external organisation, the MOE is just another player and can be influenced easily by competition to promote and improve its services for students. This finding is consistent with the neoliberal approach characteristic of most educational systems these days, according to which competition within a quasi-market is the best way to promote public efficiency and welfare (Hursh & Martina, 2016), and such competition can influence and even change the MOE's policy (Ball & Junemann, 2012).

LEA officials who participated in this study also attest to the existence of competition between the two programmes, and more broadly even between the MOE and external organisations. They present a process of choice and differentiation between the programmes as one in which the MOE competes with external organizations as any other market player—not with its presumed status as the education system's regulator. That is, the directors of the LEA are the ones who run the competition that takes place within the schools in their district. This finding is consistent with Addi-Raccah and Gavish's (2010) study, which emphasises municipalities' roles in an era of decentralisation and the relationship between the municipality and school principals. In this sense, the municipality (as represented by the LEA) plays a significant role vis-à-vis school principals, given its involvement in determining school policy and status as a source of resources (Addi-Raccah & Gavish, 2010).

Thus, we showed, how the mere existence of two STEM providers within schools fostered market-based logic and funnelled the schools' resources and energy into the competition, thereby changing the role of MOE from the regulator to a competitor—just one more service provider in the field. As such, the presence of the NGO within schools, which definitely comprises part of the privatisation of public provision, was only a first step towards market-based logic. Next, the creation and facilitation of direct intra-school competition further added to the transformation of the discourse within the schools.

#### Who Benefits from Intra-school Competition?

In the first part of our findings, we showed how market-based dynamics penetrate and actually dominate schools' discourse. Below, we examine the emerging power relations between the involved stakeholders in an attempt to understand the effect of these relations on the interaction between the MOE and the NGO.

School principals' role. Adoption of the neoliberal approach within education and the decentralisation policies provided municipalities and gradually schools themselves with autonomy in their decision-making; in fact, the responsibility for providing educational services was transferred from the government to municipalities and school principals (Robertson & Dale, 2002). Municipalities' and schools' autonomy coupled with high-stakes accountability regimes (Pizmony-Levy & Woolsey, 2017) resulted from these institutions' adopting free-market patterns and distancing themselves from a public education system, with the stated objectives of pursuing better responses for students' needs (Verger, Bonal, & Zancajo, 2016).

The study's findings support this description; schools were found to enjoy some degree of autonomy in selecting and managing the STEM programmes. This is evident in the construction of the Technological Scientific Reserve programmes' application process. Each school principal chose the manner in which s/he wished to conduct the application process, although the MOE's definition

of the programme eliminates the need for formal admission. The school principals interviewed indicated a need for the application process, given the increased demand for the programme.

We conducted a kind of internal test that was actually to check some level of intelligence, because honestly, I don't really have a way of sifting through applications. We did a short personal interview but we also did a quiz to assess the reading of scientific texts ... But it's possible that I'll have to think of a new model that will better screen the students, or that I'll try to check and if they don't even want this kind of programme, then there's no need.

School principals seem to have considerable freedom in managing and adapting the programmes to their school's needs. The above-quoted statement reveals a high level of autonomy, whereby the decision regarding what to offer and how remain in the hands of the school. Furthermore, the principal's choice of whether or not to offer a programme can vary from year to year, following the principal's own assessment regarding its demand. The principal acts in line with the customers' (parents and students) needs; this is the main consideration guiding the principal in introducing such a programme in the first place. In addition, the interviews indicate that each principal has a clear, solid agenda that s/he expresses in relation to the programmes available.

This autonomy creates a link between the principal's views and his or her conduct towards the programme's success; representatives of both the governmental and the NGO programmes choose whether or not to cooperate with a particular principal, since they are aware that the programme's success depends on this key position-holder. This situation emerged clearly in an interview with a school principal who insisted on introducing one of the programmes at a school she headed in the past; her persuasion efforts at her present school focused on proving the success of that previous experience.

The principals' considerable use of first-person pronouns when describing the programmes is just one of the expressions of their autonomy: "I implemented it as soon as I arrived... I started the pilot, I was one of the first principals who got it, in the previous school... as soon as I began there, I said, 'I want it.' It took me some time to arrive at the format that makes the most sense for me."

Regarding the NGO STEM programme, principals express an even greater sense of ownership and belonging, since the introduction of the programme reflects a principal's choice to implement a class for 'outstanding' students within the school. In contrast, the motivation to implement the MOE programme quite frequently was financial, as the programme includes additional funding (hours) either for schools that choose to implement it or for all schools within a district whose LEA decided to implement it.

Indeed, an analysis of the interviews with the MOE representatives demonstrates that the most significant figures in the decision-making process are the school principals. The representative of the Unit for Inter-Sectoral Partnerships, which runs the database of existing programmes discussed above, stated that principals have the ability to choose between the programmes since the Ministry considers them to be "honestly the best professionals out there ... today in particular, with their experience and training and the way they're recruited, which is not at all trivial. We trust them, the Ministry says 'I trust you. This is your responsibility."

Alongside the school principals' great autonomy and significant role in implementing and managing the programmes at the schools, other factors emerged from our findings that could potentially create obstacles to the principals' activities: the MOE requires the principal of every school that implements the Technological Scientific Reserve programme to appoint a programme coordinator who will receive close guidance from one of the MOE officials, in addition to the

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guidance received from the school principal. Perhaps this is the Ministry's way of preserving its interests, given principals' high autonomy. In addition, the MOE at the LEA regards the programme coordinators as responsible for all issues related to programme implementation:

I am not a pedagogical guide; I am an administrative guide.... I don't give them pedagogical support. On the contrary, as far as I'm concerned, he [schools' coordinator] is the programme manager... I give him professional tools... there are annual tasks, there are training courses, things need to be done to increase motivation, to persevere, to recruit the teachers, to recruit the parents, all those actions, who does them... enrichment activities, experiential activities, marketing of the programme, advertisements, creating school spirit, forming a team... the coordinator does all these things and he needs to know how to do them, the guidance is very tight...

As aforementioned, school principals dictate which programmes will be offered and how, but they are restricted by financial and bureaucratic constrains. Thus, intra-school competition is being normalised through the perceived autonomy held by the school principals. Once normalised, it is further integrated and displayed through the schools' routines and relations with the regulatory agencies.

The Local Authority's standpoint. Decentralisation processes in the education system were shown to have completely changed the balance of power between the State, the MOE, the LEA, and schools, transferring control over educational policies and activities from the State and the MOE to the LEA and school principals (Addi-Raccah & Gavish, 2010; Robertson & Dale, 2002). In Israel, The LEA thus plays a central role in the decision-making process and is responsible for the introduction of external programmes into the schools. This finding is reflected in the school principals' statements that attest to a good relationship with the LEA representative and to the professional and managerial support they receive from the Authority in all matters related to the STEM programmes. The programmes' documents also reflect a major role assigned to the LEA; extensive reference is made to it in relation to decision-making processes.

Analysis of the MOE's and LEA's official documents highlights that implementing STEM programmes is a municipal agenda, and the LEA invests substantial time and resources into promoting the STEM fields within its region; it engages in a selection process to define the STEM field on behalf of the district and lists this process as one of its goals. One LEA official used powerful language to describe the programme implementation process ("we simply forced the schools to implement this programme"), which seems to contradict the sense of autonomy that the school principals expressed. These findings align with existing research showing that the LEA has come to exert substantial influence on schools, given its involvement in educational policy and its status as the source for additional resources (Addi-Raccah, 2015; Addi-Raccah & Gavish, 2010). Thus it is not surprising that in interview, the LEA officials, like the school principals, also spoke extensively in the first person: "We created a new tradition in the city"; "I choose the programme"; "I try to exercise judgment and act in accordance with the principles I previously spoke about"; "In my administration... according to my world view..."

Moreover, LEA officials attest to a good relationship with all school principals, as well as with the MOE and NGO personnel. It is the collaboration between the LEA and these two entities that dictates what in practice happens in schools—in terms of both pedagogy and management. A LEA representative exclaimed:

That's the beauty of this issue, and in general of our teamwork: the municipality can't do anything without the Ministry, and the Ministry can't do anything without the

municipality. When you work together—two are greater than one, and it just so happens that there's also great chemistry between us and we get along really well and with the supervisor, too. We exchange opinions, get each other's advice, and collaborate.

In fact, the LEA functions as a regulator; it is responsible for implementing STEM programmes in schools, it makes the managerial and professional decisions in this regard, and it preserves the two programmes that will be implemented in the schools, because they align with the LEA's interests. In the words of one LEA representative: "We have a goal and there are a few means to reach it... all means are good."

Our findings show that the situation described in the State Comptroller's Report (2011) is still relevant today: external organisations are still active in educational service provision within schools, with neither a deliberate and planned policy on behalf of the Ministry of Education nor any supervision or control over the organisations involved (State Comptroller's Report, 2011). However, it seems that the municipality, which is also responsible for supervision and control, does have a deliberate and planned policy. In fact, it takes over from the Ministry of Education, as stated above, and de-facto manages education provision. As one LEA official stated:

I also initiate relationships with the people who create the programmes, with the people who widen perspectives, and those I can introduce into the school to open new windows onto a new world. That basically means that any external programme has to pass through me, regardless of whether it belongs to the Ministry of Education or not.

This position of power is reflected in the LEA's use of the database of programmes that the MOE takes pride in having established and run as a rating system. Although this database was supposed to be significant in the decision-making process and to provide reliable information about the various tracks being offered to schools, it seems that the LEA uses it mainly in a technical manner (i.e., to learn which programmes can be applied as municipal suppliers). The LEA officials do not consider the database indicative regarding the quality or level of the external programme in question.

The Ministry of Education's perspective. As noted above, external organisations have become significant within the Israeli educational system, and their entry into the system may even reflect a new educational policy (Berkovich & Foldes, 2012). The relationship between the MOE and such NGOs are complex; on the one hand, the Ministry views external organisations as a threat, since they represent free-market principles and interests that do not necessarily coincide with those of the public sector. On the other hand, these partnerships enable the MOE to cope with limited resources that affect the delivery of educational services (Almog-Bar & Zychlinski, 2012; Yemini, Cegla, & Sagie, 2018).

Our findings reveal a new educational realm facilitated by school principals and the local authority. The MOE attempts to regulate the partnerships with external organisations. However, the MOE's role is unclear, as it appears to experience great difficulty managing the inter-sectoral partnerships and the schools within a broad mechanism similar to those found in the business sector. The Ministry, which is unable to interfere in the principals' process of selecting external programmes, has created a database that it considers to be a useful tool. Yet the MOE itself is passive with regard to decisions about which programmes to implement, and the creation of the database comprises its attempt to consolidate all existing programmes at an initial stage—and at a later stage to create supervision and control mechanisms for these programmes. In practice, however, it appears to be difficult to consolidate all the programmes implemented in schools: the

Unit for Inter-Sectoral Partnerships reports the existence of over 3,000 programmes, but only 1,500 are found in the database. Notably, the balance of power between the Ministry and the principals is the opposite of what one might expect—the MOE needs the principals, acknowledges that they are the decision-makers, and tries through them to create a supervision and control mechanism. Indeed, a MOE representative summarised the core content of the Director General's Circular from April 2015 (mentioned above) as stating the following: "Listen, principal, we trust you, your professional and pedagogical judgment, we know you can choose external programmes. We only ask one thing: that the plan should be in the database, on either a blue or a green track, and you should give it feedback."

The MOE's statements correspond with the existing quasi-market and the strong neoliberal perception of the educational reality, alongside the MOE's inherent passivity. This finding is consistent with the way the power relations are presented in the academic literature; Eden (2012) argues that the quasi-market created in the education system places it in a passive position vis-à-vis external factors and calls for a policy change to regulate the status of both the MOE and the external organisations involved. However, it seems that the MOE adopts the neoliberal view because it has no choice; it cannot cope with the existing situation and therefore adopts a passive approach. This is apparent from the words of the Coordinator in the Unit for Inter-Sectoral Partnerships:

The mere fact that the MOE has a list of approved projects shows that it is basically exempting itself from this dialogue because it says, "I gave you the list, I do not approve of what is not on the list, from here on out you have the autonomy to decide, you are the operating body."

Furthermore, the database encourages the competition that already exists between the various programmes, including those offered by the MOE itself and by external organisations, such as the STEM programmes. The Coordinator in the Unit for Inter-Sectoral Partnerships noted:

The competition is completely okay and today, in the era of the database, all the programmes are equal and it is up to the principals to select them. The instructions to the principals are, "You can choose any programme in the blue or green track." We don't tell them to choose only from the green track (the Ministry of Education programmes). This means that there is competition, and competition is welcome as far as we're concerned. The attitude at the Ministry today is one that doesn't see any of these organisations as a threat; it sees them as partners.

The MOE is effectively a player in this market, much like the external organisations, and it is unable to supervise the programmes and serve as a regulator. Indeed, the MOE does perform some supervision over and limitations of the STEM programmes, such as overseeing the number of students in particular classes, like the NGO STEM programme. It also provides funding for schools and districts offering the Technological Scientific Reserve programme it operates, but not for other programmes run by external organisations. This funding comprises a critical component that has tilted the scales in favour of the MOE programme. However, the Ministry's representatives made no mention of such funding in interview, and the Manager of the Technological Scientific Reserve Programme expressed the opinion that the selection of this programme is based on professional rather than financial considerations:

There's a complete discipline here... because of the curriculum itself, which is unique to Technological Scientific Reserve. It can't be taught by just anyone—no one external can replace it. From your questions I get the feeling that you're interviewing me as if I am some third-party here, but I should remind you that this is the MOE. We are the sole authority responsible for the education in the country.

This last extract reveals the MOE Programme Manager's insistence on the MOE's status as the ultimate authority in STEM provision, basically denying the existence of competing programmes and the MOE's competitor role assigned to it by the school principals, NGO, and LEA representatives. In his perception, NGOs are complementary and marginal to the MOE, as they cannot replace it (although it is precisely such a replacement that our study reveals). Nevertheless, the MOE unit that is responsible for regulating NGO activities actually organises the field for this competition, if merely by presenting the two STEM programmes in the same database.

#### **Conclusions**

The present study examines the relationships between the MOE and external organisations operating in public schools by exploring a case study of competing STEM programmes offered within schools by the MOE and by an external NGO. In particular, this study investigates the factors influencing the formation and existence of the intra-school competition between MOE and the NGO, as well as the different motivations and strategies of the stakeholders involved (school principals, regulatory agents, and the external organisations' leadership) using interviews and additional information from the institutions' websites and official documentation.

The data analysis reveals a number of points. First, seemingly, all the stakeholders involved are acutely affected by the intra-school competition between the MOE and the NGO and within schools. This influence is reflected in the widespread and persistent application of business sector rhetoric within public schools; all stakeholders described conduct that assumes the existence of competition—be it by marketing or branding one of the programmes or by comparing the two programmes. The presence of external programmes in public schools is normalised through regulatory actions of the LEA and the MOE; however, such normalisation creates a market logic, followed by all those involved. The existing competition also affects the way the school principals choose to deal with students, parents, the local authority, and even the MOE, thus forming a completely different structure of relations in the education arena.

Second, notably, the competition exists in well-established schools and evolves in accordance with LEA regulation. This case study indicates the growing power of the LEA in the formation and sustainability of the competition, given that the LEA has a deliberate and planned policy regarding integration of STEM programmes (which are in high parental demand), including integration of programmes operated by the MOE. In fact, the LEA functions as a regulator, having taken over this role from the MOE; it is responsible for implementing STEM programmes in schools, and it is the authority making the managerial and professional decisions in regard to all the programmes.

Third, the MOE participates as an equal (and sometimes disadvantaged) player in this emerging intra-school education market; much like the NGO, and it is unable to supervise and to serve as a regulator, even though the MOE is trying to pursue this role. Furthermore, it seems that the MOE is a rather passive actor in the decision-making process regarding schools' programme selection. As mentioned above, the LEA steps in to actually regulate, rather than the MOE. The MOE's attempt to direct and supervise the process seems to create an unnecessary bureaucratic burden for the local authority and the school principals—as reflected in the fact that they ignore the programme rankings and evaluations in the MOE's database, using this database for purely technical informational purposes only. Thus, market-based logic is promoted in public schooling that was privatised not only by the NGO but also by the MOE itself, which cannibalises its own schooling system by competing with the NGO over STEM programme execution.

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Such relations merit further exploration in diverse contexts, given the abundance and prominence of external entities involved in public education systems. We show here that market-led regimes can also develop *within* schools and not only between schools, as was explored previously (Lubienski, 2005; Rowe & Lubienski, 2017; Verger, Bonal, & Zancajo, 2016). Specifically, we call for future research focusing on intra-school competition as a prominent site of policy enactment in relation to external involvement in public education. By adding quantitative analysis of the scope and extent of this phenomenon in different countries and spaces, as well as qualitative studies in educational settings of diverse socio-economic status, future research may overcome the major limitations of this study; namely, its small scale, specific context, and exploratory nature. While privatisation policy is studied broadly, here we show how privatisation is enacted in a particular setting where concrete policy is rather vague or altogether missing. We demonstrate the unintended emergence of fierce intra-school competition, which shapes school dynamics according to market-based logic, as the MOE de-facto competes rather than regulates.

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