

Compare: A Journal of Comparative and International Education

ISSN: 0305-7925 (Print) 1469-3623 (Online) Journal homepage: <http://www.tandfonline.com/loi/ccom20>

Identifying and investigating the “best” schools: a network-based analysis

Priyadarshani Joshi

To cite this article: Priyadarshani Joshi (2017): Identifying and investigating the “best” schools: a network-based analysis, *Compare: A Journal of Comparative and International Education*, DOI: [10.1080/03057925.2017.1293504](https://doi.org/10.1080/03057925.2017.1293504)

To link to this article: <http://dx.doi.org/10.1080/03057925.2017.1293504>



Published online: 13 Mar 2017.



[Submit your article to this journal](#)



Article views: 30



[View related articles](#)



[View Crossmark data](#)



Identifying and investigating the “best” schools: a network-based analysis

Priyadarshani Joshi*

Population Studies Center, University of Pennsylvania, Philadelphia, USA

ABSTRACT

This paper aims to provide a fresh perspective on the predominantly negative discourse on schooling quality in low-income countries by focusing on the research questions: ‘How can one identify great schools and what makes them special?’ Using a network-based perspective, I measure peer evaluations of quality in two districts in Nepal. Specifically, I ask principals to mention three schools they view as the ‘best’ schools in their district and then map the interconnections between schools as a result of this response. I additionally analyse the differentiating characteristics of these schools and qualitatively investigate the most frequently cited ‘best’ school in each district. Public school principals collectively chose a few schools as being among the ‘best’; these chosen schools had relatively higher enrolment and better student performance. The in-depth qualitative analysis highlights less quantifiable measures, such as motivated leaders who were able to help schools succeed despite difficult circumstances.

KEYWORDS

Network-based analysis; education quality; best public schools; Nepal; mixed methods

Introduction

Public school systems in low-income countries have been much maligned, especially in the global conversation around private schooling growth in these contexts. A leader article in the *Economist* provocatively summarised the situation in the following manner: ‘Private schools are booming in poor countries. Governments should either help them or get out of their way.’ Researchers have noted that government functioning has also been characterised as a key problem in the context of study – Nepal (Carney 2009), and the public-private gap has been a significant strand of inquiry (S.D. Bhatta 2004; Joshi 2014a; Thapa 2015).

This paper aims to provide a different perspective to the predominantly negative discourse by focusing on the research questions: ‘How can one identify great schools, and what makes them special?’ The analysis focuses on public secondary schools in two districts (Kathmandu and Chitwan) with high private market share in Nepal.

This study is motivated by the fact that school effectiveness and improvement have been extensively analysed in both developed and developing countries (Edmonds 1979; Oduro et al. 2007; Reynolds et al. 2014) but assessing education quality comprehensively remains

CONTACT Priyadarshani Joshi ✉ pjoshi@alumni.princeton.edu

* Global Education Monitoring Report, UNESCO, Paris, France

a difficult task given the many non-quantifiable aspects of quality (Carney 2003; UNESCO 2015). To contribute a fresh discussion to the notion of school effectiveness, I used a network-based perspective and measure peer evaluations of education quality. Specifically, I asked all surveyed principals to mention three schools they view as the 'best' schools in their district and mapped the interconnections between schools as a result of this response. I then conducted a descriptive and network-based analysis to analyse some of the differentiating characteristics of the most cited schools and ended with insights from an in-depth investigation of the most frequently cited 'best' school in each district.

I found that public school principals collectively picked few schools as being among the 'best' schools, indicating a general unanimity on which schools have the best reputation. Most principals, especially from Kathmandu, picked public schools and not private schools, despite a major private schooling presence in both districts. The public schools that were peer identified as the best schools were likely to have higher enrolment, be selective and have substantially better student performance in the school-leaving certificate high-stakes examination (SLC exam). The qualitative analysis of the two best public schools highlights less quantifiable measures that contribute to this reputation, such as motivated principals who were able to help schools succeed despite difficult circumstances.

Defining a good school – what characteristics and whose perspective?

It is notoriously difficult to define schooling quality and effectiveness with precision. Attempts to define education quality have focused on cognitive development, measured through assessments or, alternatively, the values and attitudes that promote responsible citizenship and nurture creative and emotional development, which are harder to measure (UNESCO 2004). Overall, global monitoring of education quality has emphasised global, national and classroom assessments, resources and teachers and, increasingly, textbook and curricular content and language of instruction as some of the key measurable aspects of quality (UNESCO 2015). In low-income countries, quality considerations have often focused on the lack of resources, inputs and teachers, with issues of poor learning slowly gaining more attention (UNESCO, 2014). The particular challenges in identifying indicators to measure the Sustainable Development Goal education target of providing 'Education for Sustainable Development' and 'Global Citizenship Education' have shown how difficult it is to arrive at standardised measures for these important expectations from education systems (UNESCO 2016).

The field of education effectiveness developed in reaction to seminal works by Coleman and others (1966) and Jencks et al. (1972), which highlighted the dominant influence of socioeconomic factors and suggested that schooling matters little for academic outcomes. In the more than four decades of research on the topic, the processes identified as being important for effective education in the vast literature have remained about the same. For instance, Teddlie and Reynolds (2000), building on Edmonds (1979) and others, included nine global factors for effective education: effective leadership, a focus on learning, a positive school culture, high expectations, monitoring progress, parent involvement, effective teaching, professional development and involving students in the process (Reynolds et al. 2014). As in global monitoring, a familiar problem springs up as a criticism of school effectiveness research – that these analyses undervalue public good aspects of education, such as the importance of a critical educated mass for nation-building, which can disrupt social development processes in lower-income countries such as Nepal (Carney 2003).

Leadership has received special attention, with many studies and journals dedicated to understanding how leadership affects student learning and understanding the types of leadership that may be most impactful for student learning, school improvement and effectiveness. Some of the important themes in the effective leadership discussion include the notion that *distributed* leadership, in which authority is dispersed to more than the principal, is critical for effectiveness; and that effective leadership requires *transformational* capacity, with leaders who are able to motivate their fellow professionals by transforming self-interest into interest for a larger group. In developing country contexts, the research on principal leadership has emphasised school-level resource limitations and their restricted autonomy in fairly autocratic, typically centralised systems. Thus, in these contexts principals are often viewed as operating in a resource constrained, administrative or *transactional* role rather than in one that allows for instructional, distributive/participatory and transformative leadership, whereas higher-income countries such as the USA or Britain appear to expect principals to be proactive and try and change the system (Oduro et al. 2007; Oplatka 2004).

Finally, what further complicates evaluations of quality or effectiveness is that while student outcomes are often the main measurable indicators of quality, parent decision-making analysis indicates that quality as defined by student achievement is often not their only, or even their main, reason for choosing a school. For instance, a main finding of the primarily US-based literature on parent preferences is that while parents emphasise the importance of academics in self-reports, their choice of school seems to indicate that they care a lot about the schools' demographic composition (Schneider and Buckley 2002; Schneider, Elacqua, and Buckley 2006).

Research questions

There are two noteworthy gaps in the literature. Firstly, school quality is an elusive concept to measure, as it can be a proxy term that implies very different types of desirable characteristics to different types of stakeholders (parent, teacher, principal and policy-maker). In contexts like Nepal, discussing quality using learning outcomes is even more difficult given the lack of national assessments. Secondly, there has not been a significant focus on understanding quality as a relational concept and measuring how other locality stakeholders, such as parents, district education officials and principals, view and value effective schools.

I argue that using a network-based perspective to assess schooling quality through peer-based subjective evaluation can be a good means of assessing perceptions of schooling quality among professionals in the field. This is based on the supposition that other principals' perceptions may be based on their deeper understanding of, or at least great exposure to, other schools in their purview. Additionally, assessing how other stakeholders in the local neighbourhood, especially parents and policymakers, view these effective schools (essentially a qualitative network analysis) can provide confirmatory or contradictory analysis.

In order to address these literature gaps, the research questions addressed through this paper are the following:

- Which schools are identified as the best schools by their peers (principals)?
- What are the characteristics of schools that have been identified as best public schools by their peers?

- What differentiates them, according to their peers and other actors in their networks?
- What do the school principals themselves choose to highlight as achievements and challenges?

Context

Nepal is a low-income South Asian country. Within the past two decades, it has experienced a complicated transition to democracy and has seen many political upheavals and economic crises, which have led to a migration-dependent economy and significant brain drain. The country is now dealing with the aftermath of a highly contested new Constitution and devastating 2015 earthquakes.

The country's education system development only started in the 1950s (Upraity 1962). While there has been rapid system expansion, the public education system has faced major capacity, financing and education performance challenges (P Bhatta 2009). The deficiencies of the education system have also been discussed as one of the key reasons for the 'People's War' in Nepal, which substantially changed the political milieu of the country (Pherali 2011). The growth of private schooling has been one of the most significant developments since the mid-1980s. In the two districts of study, in 2011, Kathmandu's private market share in first to tenth grade enrolment was over 70%, while it was about 40% for Chitwan (Joshi 2014b).

The rise of private schooling in Nepal can be historically linked to the limited efforts in developing a robust public education system. Substantial efforts to establish a national, public education system only lasted for the decade of the 1970s, and since then the education system has gone through systematic efforts that encourage decentralisation and view private sector growth with a *laissez faire* attitude. This growth was also linked with the liberalisation and globalisation policies of the 1990s and growing external influences on Nepal (P Bhatta 2011; Rappleye 2011), which created an enabling environment for the increase of private schooling, despite limited explicit government support. Some of the key reforms that have been significantly supported by external actors include a large-scale school-based management reform, which was initiated in 2003 and sought to empower communities by involving them in school management in all public schools nationwide (World Bank 2003), and a per-child funding accountability system, which aimed to distribute education financing by the enrolment levels of the public schools to curb inefficiencies in education funding (Australian AID 2012).

Political challenges, including in the functioning of the education system, have been a hallmark of the recent Nepalese context. Violent attacks on public and private schools only subsided at the end of the decade-long Maoist war in 2006, but schools continue to be spaces for political jostling (Pherali 2013). Researchers have argued that any reform efforts that do not consider the post-conflict, politicised realities are unlikely to succeed. For instance, analysis of the school-based management reform have documented unintended consequences, including further marginalisation of disadvantaged groups, a more politicised teaching force and chronic underfunding of public education (Carney, Bista, and Agergaard 2007).

Analyses of parental choice in the Nepal context have found that parents prefer private schools since private schools teach in the English language medium of instruction compared to Nepali, and because there is a perception of better quality, such as better care taking (Joshi 2014a, 2014b). Moreover, private school examination outcomes are consistently better, even after controlling for other background factors through more sophisticated propensity score

matching techniques (Thapa 2015). However, as in many other developing countries that have experienced private schooling growth such as India, Kenya and Uganda (Härmä 2015, 2016), the choice of schooling is not available to poorer parents. There has been a documented middle-class flight in the Nepal context, with public schools having to deal with an increasing concentration of disadvantaged populations, thus conflating whether private school outcomes are a result of better quality schooling or sorting of students (Joshi 2014b).

Data and methods

Data

The paper is based on primary data collection conducted for the purpose of analysing public sector responses to competition in 2010 and 2011 (Joshi 2016). It utilises a principal survey and a purposeful qualitative sample of two public schools and related stakeholders (parents, other principals, district officials) in the districts of study, Kathmandu and Chitwan. The principal survey was administered to a census of the public secondary schools and a randomly stratified sample of private secondary schools. Some additional interviews were used to gain multi-level stakeholder insights at the national and district policy-maker level.

In order to conduct more in-depth analysis in local settings, I selected three regions each in the two districts and then interviewed local district officials and principals and conducted parent focus groups. The interviews and focus groups were conducted in a semi-structured manner. In addition, I utilised qualitative data from national-level policymakers and survey data on principal perceptions to strengthen the public-private discussion.

In order to peer identify the best schools in the district, the public and private school principals were asked to name up to three best secondary schools in their district in the principal survey. They were not prompted to provide public or private school names. I argue that asking principals to list the best schools is likely to reduce their tendency to give a socially normed response, since the 'best in the district' is a broad enough category to not implicate any direct competitors. In addition, it was also a more objective means to assess whether public schools referred to private schools and vice versa, instead of asking the direct question 'Do you think private schools are among the best schools in the district?' This subjective measure was designed with reference to Schneider, Elacqua and Buckley's (2006) approach to analysing parent decision-making¹.

There is still some possibility of measurement bias – that is, the school principals may not mention the schools that they truly believe are the best schools in the district, especially if they are concerned about how they would look in comparison to those schools and if there were any potential for rewards or punishment based on these responses. However, I contend that it is unlikely that the principals were affected by any such accountability mechanism since the enumerators made it very clear that this was a private research study. In addition, given the limited use of checks and balances in the education system, the principals may not be very worried about the repercussions of their survey responses.

Methods

Using the principal survey data, I conducted descriptive social network analysis (Jabbar, 2015, Hanneman and Riddle, 2005) to ascertain the best public schools as identified by

their peers. I then utilised network analysis and descriptive methods to show how the schools identified as the best schools differ from other public schools. Finally, I conducted an in-depth qualitative investigation of one best school in each district, both of which were the most frequently selected ‘best’ schools in their districts. All interviews and focus groups were translated and transcribed and clustered by emergent themes.

School A, from Chitwan, and School B, from Kathmandu, were highly recommended by the district officials. I conducted multiple, detailed discussions with the current principals of both schools and one ex-principal of School A. Since these individuals had over 20 years of experience with these schools, they were able to provide a comprehensive and informed account of the school’s achievements and challenges, most of which they had initiated. Both schools were part of my in-depth local investigation, which gave me access to interviews with local officials and principals and parent focus groups in the local neighbourhoods of both of these best schools. I used these interviews to piece together an understanding of how the school is viewed by the other actors in the locality.

Results

The interlinkages between schools based on which schools are considered to be the ‘best’

The social network plots of the interconnections between public schools based on their responses to the question – which are the three best schools in the district – are mapped in Figure 1. Of the 212 public schools, 56 were identified as best schools by their peers, while the remaining 156 public schools were not mentioned by any other public school. As shown by the in-degree centralisation measure (Table 1), only a handful of public schools were cited very frequently. For instance, the three most frequently cited schools in Kathmandu were referenced by 96, 65 and 48 of the 145 schools in the sample, respectively. In Chitwan, the

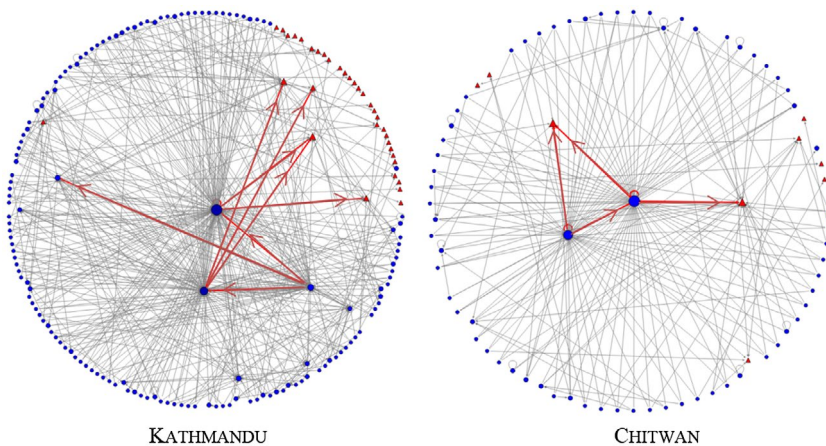












Figure 1. Social network graphs of peer-identified best public secondary schools. Source: Author’s analysis based on the social network data from the Principal Survey.

Notes: The graphs are social network plots where one vertex is School X and the other vertex is School Y, a school identified as a best school in the district by the principal of School X. Each principal selected a maximum of three schools as best schools. This graph includes the up to three schools, public or private. It plots the data in a circular social network with the most frequently identified schools closer to the centre. Public schools are presented as blue circles and private schools as red triangles.

Table 1. Summary network statistics of the public secondary schools.

	Kathmandu	Chitwan
Nodes	145	67
Arcs	321	139
Density	0.0154	0.0314
Reciprocity	0.1102	0.1446
Dyad census		
Mutual	 1	0
Asym	 319	139
Null	 10120	2072
Transitivity	0.1761	0.3635
Triad census		
003	 460558	42116
021C	 220	12
021D	 116	17
021U	 8026	3059
030C	 0	0
030T	 126	79
111D	 52	0
Betweenness centralisation	0.0087	0.0009
Indegree centralisation	0.6591	0.9109
Outdegree centralisation	0.0017	0.0034

Source: Authors' calculations based on the social network data from the principal survey.

two most cited schools were mentioned by 61 and 51 of the 67 public secondary schools, respectively. This suggests that these five public schools, and especially the most named public school in each district, have a strong reputation.

Besides figuring out which schools are most frequently cited, it is also key to understand the extent to which the reputational quality linkages are reciprocated, that is, between two schools, or transitive, that is between three schools (Hanneman and Riddle 2005). The dyad analysis in Table 1 shows that there is only one reciprocal link in Kathmandu, and none in Chitwan. The vast majority of public schools are not linked to each other (null arcs). Thus, reputational quality is not reciprocated in this analysis. This is likely linked to the fact that school principals may be citing other schools they consider to be better than themselves, suggesting that while X may cite Y, Y may cite Z instead of X, establishing a hierarchy of connections in the network.

The triad analysis show that there are also no completely transitive linkages between any three schools X, Y and Z. That is, if X cites Y, Y cites Z then there is no instance where Z cites X. This may be due to the fact that the survey only asked them to mention three schools. As shown in the triad analysis in Table 1, there are thousands of triads where X and Y both cite Z, establishing some unanimity in which schools are the best schools. There are 220 triads

in Kathmandu and 12 triads in Chitwan where X cites Y and Y cites Z, also establishing the above mentioned hierarchy of reputation. There are 116 triads where X cites both Y and Z in Kathmandu. There are also 126 triads where X cites Y and Z, and Y also cites Z, again establishing a hierarchy and general agreement on reputational quality (Table 1).

Focusing on just the schools cited by the top three public schools in Kathmandu and the top two public schools in Chitwan shows how these schools differ from the rest of the public schools in the district in terms of their choice of 'best' schools. These connections are shown by the red arrows in Figure 1. The schools in Chitwan and the most cited public school in Kathmandu self-reference when asked to mention the best school in the district, demonstrating their confidence in their reputation. By comparison, of the 212 public schools, only 9 of the 67 Chitwan schools, and 9 of the 145 Kathmandu schools self-reference. The most frequently cited school in both schools mention two private schools as their other choices, and were among the 29 of the 212 public schools that mentioned two or more private schools in their three choices. In Kathmandu, the other two frequently cited schools had very different inclinations. One of the schools referred to three private schools, and was only one of five schools to do so; while the other referenced only public schools, including the top two schools and another well reputed public school.

Characteristics of public schools most frequently identified as the best schools

The five public schools that are most frequently cited as best schools have better SLC exam outcomes compared to other schools. Importantly, on average, the top five public schools had over 88% of their students performing at a high proficiency level (scoring over 60%), compared to only about 36% among the public schools that were not mentioned as best schools (Table 2). These differences are important signals since doing well on the nationally

Table 2. A comparison of education characteristics between public schools in the sample and the schools they identify as the best public schools in the district, 2011–2012.

	Best five public schools		Other public schools that were mentioned as best schools		Other schools that were not mentioned as best schools	
	Mean	SD	Mean	SD	Mean	SD
<i>N</i>	5		51		156	
School-average examination outcomes						
English	47.7	6.1	38.0	7.5	32.5	7.8
Mathematics	80.7	5.6	57.3	9.9	50.7	11.5
Science	48.5	7.9	37.7	7.6	34.0	8.8
Percent of students who scored over 32%	98.6	2.1	83.4	15.9	72.7	21.6
Percent of students who scored over 60%	88.5	11.9	49.2	23.3	36.3	25.3
Total enrolment	1195.6	428.9	724.2	358.8	509.8	279.0
Enrolment in grade 1	103.4	28.2	52.2	45.4	36.9	24.5
Total fees in grade 1 (in Nepali Rs.)	814.0	523.4	574.6	766.2	400.0	706.0
Adopted English medium (%)	100.0	–	74.5	–	71.8	–
Require entrance examination at 6th grade (%)	100.0	–	72.5	–	63.5	–

Source: Authors' calculations based on the combined quantitative data-set.

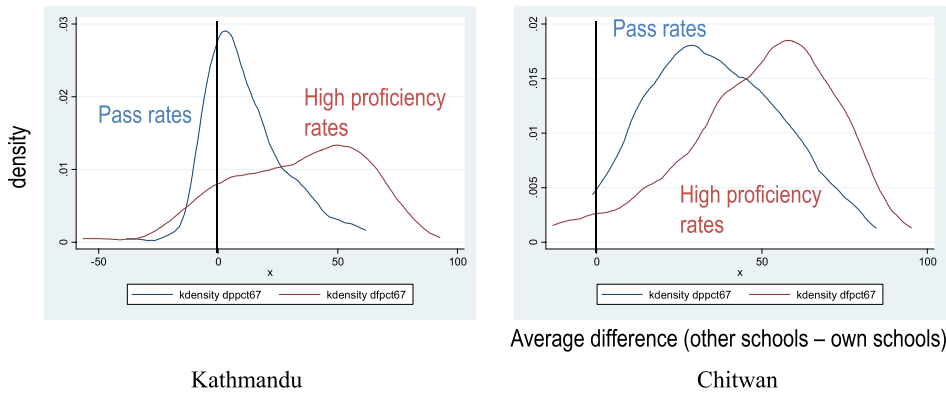


Figure 2. The difference in high-stakes examination performance between public schools and the schools their principal identified as the 'best' public schools. Sources: MoE (2012b), OCE (2012) and principal survey. Notes: The chart plots the kernel density of the average difference in high proficiency rates and pass rates between the public school and the schools they listed as best public schools. The plotted differences are calculated as follows. The raw data used is the high-stakes school-leaving examination pass rates at the school level. The pass rates of the public schools are subtracted from the pass rates of the 1–3 schools they identified as the best public schools. Then the average of these differences is computed for the 'best schools' separately. This graph is a kernel density of those averages. Thus, if the average difference is greater than 0, then the public school has a lower pass rate on average than the public schools it mentions as best schools. If the average difference is less than 0, then the public school has a higher pass rate on average than the public schools it mentions as best schools.

required SLC exam is critical for future higher education and employment opportunities. Perhaps as a result of their examination performance, these schools have higher total school enrolment and demonstrate signs of selectivity such as higher school fee requirements and entrance examination requirement for students trying to enter after the end of primary schooling.

The schools' overall performance on the SLC examinations is also the key measure used by the Ministry of Education to reward schools, and the best performers are publicised each year. As a result, it is not surprising that principals chose schools that had much better examination pass rates and high proficiency rates compared to their own schools (Figure 2).

Why not cite private schools among the best schools?

While the public schools do select the schools that perform well on the SLC exams, they are less likely to select private schools, even though most private schools routinely outperform public schools in these high-stakes SLC exam outcomes. This suggests that test scores are not all that matter in determining school reputation.

The hesitance to name private schools may indicate that despite the density of and proximity to private schools, public schools in both districts may view private schools as operating in a separate, parallel system governed by different motivations and regulations. Indeed, comparing the responses from the private school sample reveals that private schools are more likely to identify private schools, while public schools are more likely to identify public schools (Figure 3).

The public school principals from 63% of Chitwan schools but a mere 37% of Kathmandu schools cited at least one private school among the three best schools in the district. The fact that the principals of schools in Chitwan are more likely to admit that private schools

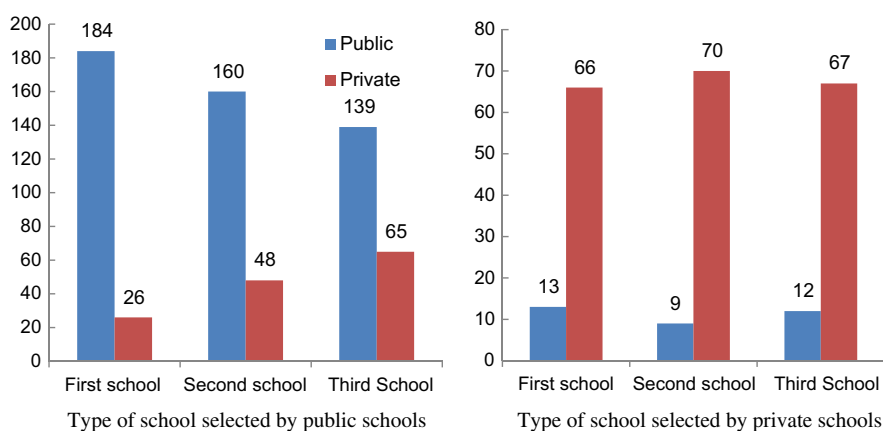


Figure 3. The order in which different types of schools were identified as the best schools by public and private school principals. Source: Author's analysis based on principal survey.

Notes: The graphs are simple frequency plots of the type of school identified by the public secondary schools in Kathmandu and Chitwan in the order in which they were identified. The question did not ask for a ranking (best, 2nd best, 3rd best), but the respondent's answer order may be construed as implicit ranking.

Table 3. Public school principal responses to questions on public-private differences (%).

	Strongly disagree	Disagree	Agree	Strongly agree
<i>Public school challenges</i>				
• Comparatively speaking, the home environment of public school students is more challenging	0.5	3.8	51.4	44.3
• Most of the parents of public school students do not understand the importance of education	8.0	32.5	44.3	15.1
• Public schools are equated with poor or low-status schooling	1.4	7.5	48.6	42.5
• There is social pressure to send your child to private school	3.8	23.6	59.4	13.2
• There is more political influence among teachers in public schools compared to private schools	0.5	8.0	59.9	31.6
<i>Opinion regarding private sector growth</i>				
• Private schooling generally has better SLC results than public schooling	1.9	15.1	74.5	8.5
• Comparatively speaking, private schools are also better on other quality indicators besides SLC results	7.5	56.6	35.4	0.5

Source: Authors' calculations based on the principal survey.

are among the best schools in the district than in Kathmandu is slightly puzzling since Kathmandu has the higher concentration of private schools and the most prestigious private schools in the country. Kathmandu school officials may have built a more defensive stance against private schools given their dominance and be more likely to focus their attention within the public sector than Chitwan public schools that encounter fewer private schools.

An alternative plausible explanation for why private schools are not considered among the best schools may simply be that public schools do not believe that private schools are

really better in terms of quality. As shown in Table 3, while most public school principals agree that private schools have better examination outcomes, two-thirds of the principals do not agree that they are better in other dimensions of quality. Public school principals attribute their students' poor performance to factors beyond the school's control, such as political and bureaucratic problems, student background and parental involvement. There is near unanimous opinion that public schools face more difficult circumstances – that they experience more political influence in their functioning, that the parents who have selected public schools are not as educationally aware or concerned, and that public schools are equated with low-status schooling, while there is social pressure to select private schooling.

An in-depth examination of the two peer-identified best schools in the districts

In this section, I analyse the schools that were identified most often as the best schools in Kathmandu and Chitwan by their peers (referred to as School B and School A, respectively), using interviews with school principals, district and national officials and parents from the locality of the school.

The schools' evolution into symbols of public school exceptionalism

Public schools A and B enjoy a strong reputation among other stakeholders in the locality (district education officials, principals and other parents) due to their examination performance and their school leaders.

Parents who selected School A said that the school has a good reputation in the community and that it was 'like a boarding (private) school'. A parent who had sent her child to a neighbouring public school suggested that she wanted to transfer her child to School A, since she observed that the teachers were more responsible and took attendance twice a day. The parents who selected School B suggested that the school has a robust reputation for its dedicated principal and responsible, hardworking teaching team. Some of the parents in a private school near School B mentioned that the best student from School B had got the top SLC exam score among all government school students last year.

The local government officials in Chitwan admitted that there was not much of a gap between school A and private schools, and that many parents only consider other schools when they are unable to enrol their children in School A. Principals around School A acknowledged the school's examination performance and that it was attracting the attention of more middle-class parents and guardians. Another public school principal mentioned that they decided to implement student testing every Friday by learning from School A's practice.

School B enjoys a special position in the capital of the country and its leadership and quality is well recognised by national and district officials. For instance, several national-level education policymakers mentioned the school by name and how its principal had been able to maintain good teamwork. The local-level officials responsible for the area especially highlighted the principal's leadership, positive attitude and diligence, and mentioned its reputation and its impact on other nearby public schools:

There is definitely an impact of School B on other schools, but in what way? There was an interesting thing that happened – they invited the top scoring student from School B, and gave him a prize at School Y. No other school has done that before – award a student from another school. The principal of School Y said that this is our responsibility, to become like

School B. And that we should have some ego. Next year one of our children should do as well as those children. School B has given a lot in that regard – there are plenty of schools that have tried to understand what works differently at that school and positively use that to follow and improve schooling.

Notably, a principal of an award winning private school near School B brought up the fact that Public School B was the top public school in the country, with a dynamic principal and highly motivated teacher team. As he stated:

We consider School B as ‘a guardian of all schools in this whole locality’. It’s a guardian school for us. And we learn from them.

The principals of both schools were clearly confident of their reputation, and especially in the school’s most visible indicator of school quality, the SLC exam. School A’s principal also indicated the school’s prestigious position by stating that teachers feel honoured to be part of the school. School B’s principal discussed their very low dropout and repetition rates as a signal that their stellar examination results are a sign of school teaching rather than attempts to screen students. However, he did concede that their current status has allowed them to have high intake rates in early grades, which gives them room to be selective at other schooling transition points.

Both attributed this reputation to a long-term focus on improving student performance starting from their humble beginnings, and both principals led that reform process. For example, the ex-principal of School A mentioned that about 35 years ago, none of the students were able to pass the SLC exam. When he began the reform process 20 years ago, he identified teacher negligence due to poor management as the key challenge. The team then focused on improving student performance in English, mathematics and science by recruiting good subject-specific teachers and adding extra sessions with funding from parents.

Within-school functioning from the perspective of the school principals

In describing their school functioning, the public school principals highlight many of the attributes that are discussed in the effective education literature, such as an emphasis on student outcomes, parental involvement and teacher accountability.

In order to target student performance, both schools have developed a systematic method to analyse learning outcomes, through detailed teacher-specific analysis of their student performance and a focus on getting parents involved as much as possible. In School A, they take multiple examinations over the year, follow a yearly calendar and teach extra classes for more difficult subjects.

Both school principals highlighted their positive, united teaching environment and their methods of ensuring teacher accountability despite the lack of a performance-based award system. School B’s principal stressed that he routinely used dialogue and communication to understand teachers’ talents and problems individually and held teacher meetings to inquire about their classroom problems. To improve examination transparency, both schools have blinded criteria to evaluate student performance so that teachers cannot manipulate results or benefit from private tuition opportunities.

Both principals have also attempted to make teachers accountable to parents by requiring them to be present when discussing student performance with parents. Thus, when School A and School B conduct parent/guardian meetings, all of the teachers who teach in that class have to attend the meeting. School B’s principal argued that there was a lot of interaction and

communication to ensure that the parents were happy, especially since the guardians support more than half of the school budget, despite School B's principal being a public school.

Finally, both principals mentioned the need to engage with students with an open mind and ask them for suggestions. School A's ex-principal believed that discipline and an orderly environment could only come with student's involvement – additionally, if they come up with the rules, then it would be easier to manage them. School B has instituted a variety of roles for student leaders. Student monitors are given regular leadership and training opportunities and students are provided materials for self-study as a means to combat teacher absenteeism challenges. The principal even utilises student help to figure out how to distribute government provided scholarships. While the government rule is to openly list the scholarship availability, he disregards this directive in order to limit the 'psychological damage to the students'. He asks the classroom monitors to figure out which of their friends needs financial support and to report to him discretely.

Dealing with political and bureaucratic challenges

The school principals suggest that they are highly constrained by the difficult political and bureaucratic context, despite having solid reputations. Both school principals feel that there is a woeful lack of vision among the ministries of education. School B's principal brought this up as a national issue; for instance, how the Ministry of Education is never a priority area of politicians.

They particularly highlight the fact that the government does not provide the incentives or finances needed by even the most promising schools. School B's principal argued that while the government harps on not getting the right returns on investments, they have never fully committed to providing the necessary investments. School A's principal thought it was unfair that the schools didn't receive different budgets based on performance, which would affect the motivation of staff.

The lack of funds has forced public schools to rely extensively on student fees in order to keep the school operational, even though education is supposed to be free and available to all (UNESCO 2015). School A's principal similarly mentioned that they had tremendous financial challenges and that 'if you don't align yourself with certain parties, then you don't even get one penny.' He said that 'free education is done for cheap popularity in this country' and that he had to receive funds from parents to operate the school.

The politicisation of the school fee issue can lead to interesting personal experiences. School B's principal recounted that 'because I took fees, the revolutionary students came and blackened my face and toured me around. They came to check my accounts ...'. The only solution, given that they couldn't pay for all the services, was to bring up the issue again in a parents and guardians meeting. They informed the parents of the exact financing gap they were facing, and asked them to specify how much they could pay. Their goal was that since parents would be involved in the decision, other parties would not have space to complain.

Despite the constant political involvement in the education system, the public school principals try to persevere and focus on schooling-related issues. School B's principal mentioned that the principal's financial transparency and demonstrated lack of corruption is key to reassure and motivate teachers. The principal was also firm in his views that the key to team harmony was ensuring that political affiliation does not interfere with schooling processes:

I don't say things like I am a pure teacher and have no interest in politics. I just don't advertise and promote it. There are all kinds [political affiliations] of teachers here – the reason the team is still well formed is because none of the teachers can say that the headmaster has particular favourites or is biased towards someone or the other because of their ideological orientation. I am aware of not letting that bias to be felt.

Juxtaposing public and private education with national identity concerns

Despite their track record and reputation among other education professionals, there are intertwined issues of 'publicness', English medium and social prestige that appear to limit the attractiveness of even these best schools to parents.

In terms of the composition of students, the principal from School B described the parents as being 'lower-middle class and lower class'. Of the 2000 students, he estimated that about 300 work in other people's houses, work in the morning and cook and clean and then attend school here. In order to understand why neighbourhood parents were not sending their children to the public school despite their high SLC exam performance, School B's principal conducted a systematic analysis that revealed the parent selection process to them:

We surveyed 100 local guardians whose children attend the private schools in the neighbourhood. Why don't they come even though our results are good? From them, we got three points of feedback. First, our school has no English medium – that was the main issue. Second, the students of the school are children who wash dishes in other people's homes, and we feared that they would spoil by being in bad company. And third, most of them said that –School B is a government school The fear was that their social status would fall. You may get a comment, almost accusation like – why do you teach in government school even though you are such a well-to-do person – by friends and relatives.

The reactions of parents are the most illuminating with regards to issues of social prestige, and they often spoke from the perspective of their children's feelings. In Chitwan, parents who had chosen private schools mentioned that their children would not be willing to go to the public school and that one's social prestige, and the children's psychology and motivation would all be affected if one sent them to public schools. Parents from another private school affirmed these statements: 'The child won't agree to it, but our hearts also won't agree to that.'

Interestingly, parents from Kathmandu private schools are not very positive about School B. They commented on the children's clothing: 'Even in School B, the clothes are not very tidy. That's the truth – they have torn ties.' As suggested by the principal, the parents were most concerned about the lack of English medium at the school. As recounted by one of the parents:

A child who has passed with distinction results in School B won't be able to say anything in English. ... for English, you have to put them in boarding schools. ... There was a girl who got distinction results from School B. She also got the highest marks in mathematics. I asked her to give tuition to my children in math. She said, 'I can't do English, aunty.' If you can't even teach 3rd and 4th grade children in mathematics, then what kind of schooling is it then?

In interviews, government officials and public school principals confirmed the survey results that private schools are advantaged since they can function more smoothly because of higher decision-making control, more educated and involved parents and the lack of bureaucratic rigidities. However, the public school principals questioned the credibility of the methods via which the private schools procure higher results in the high-stakes examinations, which included rote learning.

Despite their financial and bureaucratic challenges, and parent perceptions favouring private schools, both of the school's principals took their role as 'leader' schools for their district seriously. They argued that their quality has to motivate other schools to improve and to impact the image of public schooling more broadly. School B mentioned how after their school's results improved, the region's public schools started improving their results, and that all the teachers and headmasters of the neighbouring area have visited to have discussions with him. Similarly, School A's principal also mentioned that a lot of neighbouring schools came to visit and learn from the school. School A's ex-principal revealed that he initiated the reform process with the ultimate aim of bringing children back to public schooling.

Importantly, both public school principals were worried that the current state of education was corroding national identity. School B's principal frankly assessed that he had only been able to ensure his students got good test scores, and thus had not been able to truly provide education that can bring change to the country:

I have made this school a good factory which will produce students who will pass SLC In my view, getting very good exam results is not quality. Has that person become a good citizen or not? Besides earning for themselves, have they been able to give something back to society? ... They have to love and appreciate their own culture and festivals. We have not provided that knowledge.

There was a particularly pro-public, or especially anti-private, orientation in School A compared to School B. School A's principal called for nationalising private schools by transferring operational responsibilities to the government. He conceded that it would be difficult to put this into practice since private school owners are powerful and have control in ministries. Still, he urged for nationalisation to improve equity and equal opportunity and reduce 'the existence of dual education.' One key point highlighted by the principal of School A was that, unlike most other public schools, his children and the children of all teachers studied at the school:

I have done so in my case and made my three children pass from this school itself. I cannot send them to the private schools. It is not that I don't have the [financial] capacity to do so but I have the confidence that all the children will pass from this community school with 1st or 2nd division results and make their own progress.

Unlike in other schools, all the teachers have their children enrolled here, and many have brought the children of their relatives by discontinuing their enrolment in the boarding schools as they feel it will be better for them.

Discussion

The decades-long quest to effectively understand education quality and learn from best practices has revealed that the quality of education is a rather complex collection of attributes. In this paper, I try to circumvent this challenge of defining quality by devising a unique measure of reputational quality to facilitate the identification of good schools. Such an evaluation relies on the subjective assessments of the professional peers in a network, thus removing the obstacle of needing to use so-called objective metrics to evaluate schools.

In applying this methodology to the Nepal context, I find that there are few schools that have a strong reputation in both districts. It is not surprising that the most cited schools are those that do perform very well in examinations, which are the most visible, quantifiable measure of school quality, suggesting that peers, parents and the government rely on these

metrics as shortcuts to assess quality. While all stakeholders may care about the holistic intentions of education, it may not be easy for them to highlight schools that are able to improve equity or develop good citizenship values given the lack of adequate monitoring of these aspects. However, the fact that few private schools, and for that matter very few of the public schools, were frequently chosen among the best schools indicates that school principals did not base their judgment solely on examination performance, but also on other subjective attributes of the schools. Furthermore, the two best schools' principal interviews indicated their strong vision for public schooling, their concerns over intense private school growth and their frank assessment of the limited 'quality' they can provide to students given resource and other constraints. Thus, while all schools work hard to improve exam performance, the analysis suggests that school reputations may be built on more accurate assessments of attempts to provide more holistic education.

This probe into the characteristics of two of the exceptional public schools in Nepal shows that these schools share a number of important leadership characteristics routinely cited in the education leadership literature. In both schools, school leaders were able to motivate transformative change and find ways to motivate teachers and students to participate in creating an effective learning environment. The school leaders demonstrate an ability to navigate bureaucratic hurdles and aspire to a greater, transformational goal to improve the status of public schooling in the country. These achievements of the principals and their teaching and management teams are even more impressive given the difficulties presented by the context. These public schools are operating within stifling political circumstances where schools do not receive adequate resources, public educational issues are used for political leverage and public schools have to work with a concentration of economically disadvantaged students. The existing accountability systems are rudimentary and not based on school performance, which can easily lead to demotivated staff.

The juxtaposition of public and private schools is an important aspect of the Nepali education system. Most public school principals view public and private schools as operating under very different systems, especially in Kathmandu valley, which has a very high schooling enrolment in private schools. On the other hand, while the most highly reputed schools are concerned about the implications of overall growth in private schooling and sceptical of their quality, they are comfortable with acknowledging private schools when asked to mention the best schools. Parents appear to prefer private schools, even when compared to the best public schools that are held in high regard by principals and local officials. These parent opinions of even the most well regarded public schools further confirm existing analysis that improving the opinion of public schooling in Nepalese society will require system-wide efforts that recognise the problem of public school status as distinct from specific dimensions of 'quality', such as SLC exam performance or English medium of instruction (Joshi 2014b).

This two-pronged methodology, which uses quantitative and qualitative network-based analysis, provides a research framework that can be implemented globally, since one rarely finds such discussions of reputational quality. However, the analysis may especially resonate with other developing countries that have experienced a similar trajectory of unregulated private schooling expansion. Future network analysis in similar developing country contexts could benefit from a more comprehensive data collection in private as well as public schools, and could encourage schools to cite more than three schools to assess a fuller range of reputational quality connections.

To conclude, this study provides a different perspective to the effective schools literature by providing a network-based means of understanding education quality. Since local reputation plays a major role in determining school influence and parent selection of the schools, this methodological approach also helps provide a more locally grounded, context specific understanding of quality. This approach may allow one to concretely understand which schools are held in high regard and why, and simultaneously discuss the inner workings of such schools to gain a robust understanding of what is working in those schools.

Note

1. Schneider, Elacqua, and Buckley (2006) asked parents to list three schools that they were considering for their children. The researchers argue that asking parents to explicitly mention the schools that they were considering reduces their tendency to provide socially normed responses, which would be expected if one asked them to rank whether school academics or demographics were more important in determining school choice. The authors instead utilise the question on school names to later examine the parent's true preferences for demographics or academic quality by matching the mentioned schools to national records on school characteristics.

Disclosure statement

No potential conflict of interest was reported by the author.

References

- Australian AID. 2012. *Government of Nepal: Final Mid-Term Evaluation of the School Sector Reform Program (SSRP)*. <http://www.aid.gov.au/publications/pages/list.aspx?country=Nepal>.
- Bhatta, P. 2009. *Education in Nepal: Problems, Reforms and Social Change*. Kathmandu: Martin Chautari.
- Bhatta, P. 2011. "Aid Agency Influence in National Education Policy-Making: A Case from Nepal's 'Education for All' movement." *Globalisation, Societies and Education* 9 (1): 11–26.
- Bhatta, S. D. 2004. *A Descriptive Analysis of the Disparities in School Performance in the SLC Exams. SLC Study Report # 1*. Kathmandu: The Education Sector Advisory Team, Ministry of Education and Sports.
- Carney, S. 2003. "Globalisation, Neo-Liberalism and the Limitations of School Effectiveness Research in Developing Countries: The Case of Nepal." *Globalisation, Societies and Education* 1 (1): 87–101.
- Carney, S. 2009. "Negotiating Policy in an Age of Globalization: Exploring Educational 'Policyscapes' in Denmark, Nepal, and China." *Comparative Education Review* 53 (1): 63–88.
- Carney, S., M. Bista, and J. Agergaard. 2007. "'Empowering' the 'Local' through Education? Exploring Community-Managed Schooling in Nepal." *Oxford Review of Education* 33 (5): 611–628. doi:10.1080/03054980701476253.
- Coleman, J. S., E. Q. Campbell, C. J. Hobson, J. McPartland, A.M. Mood, F.D. Weinfeld, and R. L. York 1966. *Equality of Educational Opportunity*. Washington, DC: US Department of Health, Education and Welfare, Office of Education.
- Edmonds, R. 1979. "Effective Schools for the Urban Poor." *Educational Leadership* 37: 15–27.
- Hanneman, R. A., and M. Riddle. 2005. *Introduction to Social Network Methods*. Riverside, CA: University of California, Riverside.
- Härmä, J. 2015. "Private Schooling and Development: An Overview." In *Handbook of International Development and Education*, edited by P. Dixon, S. Humble, and C. Counihan, 171–199. Cheltenham: Edward Elger Publishing.
- Härmä, J. 2016. "School Choice in Rural Nigeria? The Limits of Low-Fee Private Schooling in Kwara State." *Comparative Education* 52 (2): 246–266.

- Jabbar, H. 2015. "Competitive Networks and School Leaders' Perceptions The Formation of an Education Marketplace in Post-Katrina New Orleans." *American Educational Research Journal* 52 (6): 1093–1131.
- Jencks, C., M. Smith, H. Acland, M. S. Bane, D. Cohen, and H. Gintis. 1972. *Inequality: A Reassessment of the Effect of Family and Schooling in America*. New York: Basic Books.
- Joshi, P. 2014a. "Continuing to Exercise Choice after Selecting a School: Insights into Parent Decision-Making in Local Education Markets in Nepal." *International Journal of Educational Development* 37: 57–67.
- Joshi, P. 2014b. "Parent Decision-Making When Selecting Schools: The Case of Nepal." *Prospects* 44 (3): 411–428.
- Joshi, P. 2016. "Experiencing and Responding to Private Competition: The Importance of Subjectivity and Intermediate Outcomes." *Comparative Education Review* 60 (3): 571–600.
- Oduro, G., H. Dachi, M. Fertig, and J. Rariyea 2007. *Examining Educational Leadership and Quality in Developing Countries*. Bristol: EdQual Research Programme Consortium.
- Oplatka, I. 2004. "The Principalship in Developing Countries: Context, Characteristics and Reality." *Comparative Education* 40 (3): 427–448.
- Pherali, T. J. 2011. "Education and Conflict in Nepal: Possibilities for Reconstruction." *Globalisation, Societies and Education* 9 (1): 135–154.
- Pherali, T. J. 2013. "Schooling in Violent Situations: The Politicization of Education in Nepal, before and after the 2006 Peace Agreement." *Prospects* 43 (1): 49–67.
- Rappleye, J. 2011. "Catalysing Educational Development or Institutionalising External Influence? Donors, Civil Society and Educational Policy Formation in Nepal." *Globalisation, Societies and Education* 9 (1): 27–49.
- Reynolds, D., P. Sammons, B. De Fraine, J. Van Damme, T. Townsend, C. Teddlie, and S. Stringfield. 2014. "Educational Effectiveness Research (EER): A State-of-the-Art Review." *School Effectiveness and School Improvement* 25 (2): 197–230. doi:10.1080/09243453.2014.885450.
- Schneider, M., and J. Buckley. 2002. "What Do Parents Want from Schools? Evidence from the Internet." *Educational Evaluation and Policy Analysis* 24 (2): 133–144. doi:10.2307/3594140.
- Schneider, M., G. Elacqua, and J. Buckley. 2006. "School Choice in Chile: Is It Class or the Classroom?" *Journal of Policy Analysis and Management* 25 (3): 577–601.
- Teddlie, C., and D. Reynolds. 2000. *The International Handbook of School Effectiveness Research*. London: Falmer Press.
- Thapa, A. 2015. "Public and Private School Performance in Nepal: An Analysis Using the SLC Examination." *Education Economics* 23 (1): 47–62.
- UNESCO. 2004. *EFA Global Monitoring Report 2005: Education for All - the Quality Imperative*. Paris: UNESCO.
- UNESCO. 2014. *EFA Global Monitoring Report 2013/14: Teaching and Learning*. Paris: UNESCO.
- UNESCO. 2015. *EFA Global Monitoring Report 2015: Education for All 2000–2015 - Achievements and Challenges*. Paris: UNESCO.
- UNESCO. 2016. *Global Education Monitoring Report 2016: Education for People and Planet - Creating Sustainable Futures for All*. Paris: UNESCO.
- Upraity, T. 1962. *Financing Elementary Education in Nepal*. Eugene, OR: The American-Nepali Education Foundation.
- World Bank. 2003. *Project Appraisal Document for a Community School Support Project*. Washington, DC.