



LUND UNIVERSITY

Curse or Blessing? Chinese Academic Responses to China's PISA Performance

Schulte, Barbara

Published in:

Understanding PISA's attractiveness: Critical analyses in comparative policy studies

2019

Document Version:

Peer reviewed version (aka post-print)

[Link to publication](#)

Citation for published version (APA):

Schulte, B. (2019). Curse or Blessing? Chinese Academic Responses to China's PISA Performance. In G. Steiner-Khamsi, & F. Waldo (Eds.), *Understanding PISA's attractiveness: Critical analyses in comparative policy studies* (pp. 177-197). (New Directions in Comparative and International Education). Bloomsbury Publishing.

Total number of authors:

1

General rights

Unless other specific re-use rights are stated the following general rights apply:

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: <https://creativecommons.org/licenses/>

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

LUND UNIVERSITY

PO Box 117
221 00 Lund
+46 46-222 00 00

Curse or Blessing? Chinese Academic Responses to China's PISA Performance

Barbara Schulte

Introduction

Over the past fifteen years, China has been struggling with educational reform in order to transform from an exam-oriented system into a system that values holistic and creative approaches to education and learning. Persisting mechanisms of competition and selection were to be reconciled with considerations that would reach beyond test performance and take into account innovative thinking, students' well-being and genuinely equal access to educational resources. China's comparatively weak performance (in proportion to its population size) e.g. in terms of patents or international academic citations seemed to underline the urgency of educational reforms.¹

The Chinese – or rather, Shanghainese – high performance in PISA 2009 and 2012 implied a potential break with China's continuous striving for educational improvement and its orientation towards Western educational models: through the OECD ranking, the Chinese educational system was testified to produce internationally outstanding students, assessed by indicators that had been developed at an institution who symbolized the quintessence of Western-dominated, global power. Did this mean that China would stop looking elsewhere for educational improvement and reform, and could instead of *importing* educational models and ideas, engage in global educational *export*? (see e.g. Sellar and Lingard 2013, on the reconstitution of educational reference societies)

This chapter will look at the academic responses to China's PISA performance as articulated in Chinese academic journals and educational newspapers.² These responses belong largely to four different types: (i) Learning from PISA and its implications for assessing educational quality; (ii) establishing China as an educational role model; (iii) contrasting the Chinese system's exam-efficiency with individual or social welfare; and (iv) questioning the positive correlation of educational assessments with educational quality. An ensuing section will then discuss the potential motives and agendas behind the Chinese embrace or, alternatively, rejection of PISA. The conclusion will relate these perceptions and projections to the wider transnational, hegemonic educational policy regimes that permeate the implementation of, and conclusions drawn from, PISA.

China's Participation in PISA

China has participated in PISA four times, but never as an entire country. In 2009 and 2012, China was represented by Shanghai, which achieved top results, separating Shanghainese students from the rest of the OECD countries by up to several school years (e.g. OECD 2014). While data in regions other than Shanghai were collected, they were never made publicly accessible; researchers who were given exclusive access note, among other things, the prevalent rural-urban divide in educational performance (Lu 2017) and more generally problems of educational inequality (Wang, Jing and Tong 2017). In PISA 2015, the Chinese sample was extended to also include students from Beijing as well as from the provinces of Jiangsu and Guangdong. Probably due to the greater diversity of the sample, China dropped to the tenth place in the PISA ranking (OECD 2016b). Only the aggregated data can be retrieved (OECD 2016c); it is therefore impossible to make any data-supported assumptions about performance disparities within or between the four regions

included. For PISA 2018, Guangdong province is reported to have been replaced by Zhejiang province. This may lead to a higher total ranking, since Zhejiang province is known for its excellent schools and high prioritization of education amongst families.

Already during the early days of PISA-Shanghai, those in charge would stress that the participation in PISA was only a temporary solution, and that the ultimate goal was to develop a Chinese version of PISA. As Zhang Minxuan, the person in charge of PISA-Shanghai, already remarked in 2013, China “participated in order to not participate [in the future; BS]” (quoted in Wang 2013). Prior to PISA 2015, news went out that China would drop out of PISA altogether. In March 2014, *Xinmin Evening News (Xinmin Wanbao)* reported on the decision that China would not take part in PISA 2015. It specified that the aim should not be to find the most efficient cram school, but to diminish the burden on teachers and students (e.g. arising from excessive homework) (Wang 2014). However, due to the many contextual data that PISA was able to deliver – such as regarding the socio-economic background of students, gender differences, and stress factors, and their correlation with student performance – China renounced the decision to withdraw, and instead enlarged the student sample. Similarly, China’s participation in PISA 2018 had long been uncertain; consequently, the preparation work, which usually requires one and a half years, had to be completed within four months (National Innovation Center for Assessment of Basic Education Quality 2017).

In addition to China’s international PISA participation, a nation-wide assessment system was put in place in 2015. This system is to a large extent based on a pilot assessment system developed since 2012 in Shanghai – the so-called “green indicators” (*lǜsè zhibiao*) (see Xu et al. 2016) – which in turn draw on the Shanghainese experiences from PISA. According to these indicators, test results play only a minor role (of approximately ten per cent); further factors to consider are attitudes towards learning, moral behavior, mental and physical health, individual development, identification with the school, teaching methods, school management skills, and the correlation between socio-economic background and student performance. Besides, in the newly developed, national Chinese PISA, ‘softer’ subjects such as physical education, art, and moral education are also part of the assessment. As the chairman of the Ministry of Education’s School Inspection Commission, He Xiuzhao, concedes, China had previously lacked the ability and the tools to assess the quality of compulsory education and to adequately diagnose existing problems and their causes; PISA was to be employed to learn about effective assessment methods, in order to build up an indigenous system of performance and quality assessment (MOE 2015b). Even though the Chinese PISA has been conducted twice so far, involving each time ca. 6,500 schools, 200,000 students, and between 70,000 and 100,000 teachers (MOE 2015a; 2016), results have so far not been published. Even though the Chinese PISA has been conducted twice so far, involving each time ca. 6,500 schools, 200,000 students, and between 70,000 and 100,000 teachers (MOE 2015a; 2016), data have so far not been made accessible; so far, only a report has been published which summarizes the results for the years 2015 to 2017 (National Assessment Center for Education Quality 2018).

Chinese Academic Responses to Shanghai’s PISA Success

The successes of the Shanghainese PISA performance in 2009 and 2012 were met with both skepticism and enthusiasm among Chinese educationists. On one side, the high PISA performance was seen as having seriously undermined the argument for reform: why change a system that has proven to be of high quality, even according to international standards? Similar to the reaction of some Finnish reformers in light of the Finnish PISA success story (see e.g. Lundgren 2013; Sahlberg 2011), also Chinese educationists worried that the excellent PISA results would bring an end to educational reform – of a system that was considered highly problematic in many aspects (see e.g. Fang 2015). Many educational scholars chose to not reciprocate the overly admiring Western reactions regarding the Shanghainese performance and rather displayed wariness and self-criticism (Yang 2011).

On the other side, the Shanghainese success story was used to argue for the effectiveness of the educational reforms implemented so far. Shanghai had long been considered a pioneer of educational reform. Particularly the above-mentioned PISA representative Zhang Minxuan – who had also been responsible for implementing educational reforms in Shanghai prior to PISA – interprets the excellent performance of Shanghainese students as reflecting the extensive investment in educational reform (see e.g. Zhang and Kong 2013; 2012; Zhang, Xu and Sun 2014). Conversely, others attribute China's drop to the tenth place in the most recent PISA ranking to the negative effect of educational reform: rather than seeing the extended sample (and thereby greater socio-economic diversity of participants) as a reason for the deteriorated results, it is assumed that effective traditional teaching and learning methods have been abandoned too quickly in favor of Western imports, leading to poorer student performance (Lü 2017).

The academic responses to and utilizations of China's PISA performance can be categorized into four types: a first faction of academics hold that China can learn from PISA, as PISA is seen to epitomize the idea of a modern, future-oriented education; besides, this faction regards PISA as providing valuable knowledge about how to adequately assess educational quality. A second faction uses the Shanghai example to argue that the time has come for China to teach something to the world (rather than the other way around), for example in terms of study discipline and respect for the teacher. A third faction concedes that the Chinese educational system may lead to better test results but doubts whether this can justify the sacrifices that Chinese families are forced to make in order to attain these results. A fourth type of response is to regard the PISA results as a non-finding: this group is not surprised over the fact that Chinese students are best at passing tests, but is reluctant to draw any conclusions from this in terms of educational quality. Some push this attitude of reluctance further and maintain that PISA does not measure aspects that should be regarded relevant for Chinese students and schools, such as space for creativity, leisure time, and inclusive education. It should be noted that this categorization only takes into account the instances when PISA is utilized as an argument in the educational-political debate; it excludes the large group of researchers who, like their Western counterparts, use PISA for data-mining purposes, without taking a clear normative stance on PISA.³ Hence, only articles of a clear debate character were included for this categorization.

Looking West: Learning from PISA

Learning from PISA is understood differently, depending on the respective educational-cum-political agenda. Firstly, and closest to the official mission, PISA is supposed to improve China's ability to professionally assess its educational system, as has been mentioned above with regard to both the Ministry of Education and those who were in charge of implementing PISA in Shanghai. As researchers point out, prior to China's participation in PISA, only exams and grades were used as indirect indicators for assessing the system's quality (Wang and Jing 2013). The multi-dimensional approach as employed for PISA has turned out to be an eye-opening experience for Chinese educationists (Yang 2011). In a slight twist of the mission of improving the *system's* assessment, some see PISA also as a useful instrument for re-thinking the way that *examinations* are designed and organized in China. Over recent years, experiences from PISA have helped to improve the design of the nation's university entrance examination (*gaokao*), by putting more emphasis on critical thinking (Wang and Jing 2013).

Secondly, PISA is expected to modernize and raise the quality of Chinese education and school management. Since PISA is judged to reveal a nation's quality of education and foresee this nation's "competitiveness" in the "global society of the future", it is also expected to show "which way Chinese education should go" (Pan 2012, 47). As PISA is considered to assess what is needed for the future, it is expected to support China in modernizing its education system; this modernization entails above all the need to acquire skills in interactive problem-solving, flexible knowledge application and abstract thinking beyond school subject boundaries – all areas where Chinese students, despite their otherwise stunning

results, continue to reveal weaknesses (Ren et al. 2016). In terms of school management, the PISA results show, according to many educational researchers, the need for more school autonomy, as this would have a positive effect on student performance (Wang and Jing 2013).

The ideological base of this modernization process is interpreted differently. Some relate the process to domestic policies like the Ten-Year Plan for educational development in China and its stress on quality and equality of education, thus seeing the PISA participation as the natural extension of national policy implementation (Wang and Jing 2013). The assessment tools provided by PISA, according to these researchers, will help to level out inequalities in terms of family background and urban-rural divide (Lu 2017). Others regard PISA as a sort of break with the socialist tradition, according to which education had primarily been expected to adjust to a society's economic, political, and cultural needs. This socialist outlook is judged to have resulted in a continuous reproduction of the past, turning graduates into "standardized educational products" (Pan 2012, 51). In contrast to this social engineering mind-set, PISA is seen as nurturing an orientation towards the future and a positive attitude towards taking risks and moving towards the unknown. Instead of simply acquiring knowledge, students, so it is argued, are now pushed towards learning how to learn.

Thirdly, PISA is seen to improve policy-making in a context that has long been characterized by arbitrary, despotic governing. Becoming integrated in a transnational assessment regime is judged to enhance the pressure on policy-making to become based on scientifically substantiated arguments. As Wang and Jing express it, "[c]urrently, regarding many hard-to-solve problems in education, there is no lack of experts with the knowledge, skills and wisdom, but unfortunately there is a gap between research in education and administrative work in education" (2013, 175). PISA, so it is hoped, would transplant the international logic of scientific assessment and policy recommendations to the Chinese context, and thereby professionalize Chinese policy-making.

Looking East: China as an Educational Role Model

"Chinese students'" intelligence, skills and knowledge, as well as their hardworking spirit are stronger than among foreign students, and in particular stronger than among American students, who are admired by everyone', rejoices Ji with "a feeling of gratification" (2011, 18). But rather than simply showing that Chinese students perform better than their American peers, PISA seems to prove to these researchers that it is still important to accumulate knowledge and skills, as these lie at the base of all innovation and creativity. This faction dismisses the more child-centered approaches as have been influencing educational reform, arguing that "a so-called creative education, which encourages the child to play as much as he likes, is a lie that deceives oneself and others" (Ji 2011, 18).

The better performance of China and more generally Asian countries is attributed to "many influential factors from Chinese traditional culture"; these traditional patterns, researchers caution, should not be changed through reforms, but "Western educational thought" should be "appropriated through indigenization" (Lü 2017, 14). Likewise, Zhou notes that for many educational experts, the good PISA results mean that China should stop reforming its education along Western lines, as the results "prove that [...] our basic education has many bright spots, and there is no need for all kinds of chaotic reform, lest we reform away our own strengths and advantages" (2011, 37). In general, educationists in this faction emphasize the necessity of China choosing its own path (Zhao 2010): PISA has shown that China is on the right way, and is capable of building its own, both modern and indigenous, system of education.

Some take this argument further and claim that the West can learn from China, both with regard to the quality and equality of education. Huang (2016) describes his experiences from a Chinese-English teacher exchange in mathematics instruction that, following Shanghai's PISA success, was initiated in 2014, noting the British teachers' insufficient subject knowledge, excessive curriculum decentralization, and too little

time spent on homework. Interestingly, many of the aspects that he regards negatively have previously been noted positively by Chinese reform-minded educationists. For example, he judges the English teacher and school autonomy as much more inefficient than the Chinese centralized model; he criticizes the strong focus on the student's own creativity in solving problems, instead of having more teacher-led discussion; and he is highly skeptical towards dividing students into different groups according to their abilities while teaching: "'Differentiated teaching' is an important reason for why today so many [English; BS] students have fallen behind in mathematics; differentiation, individuality have already become 'excuses' for abandoning students!" (Huang 2106, 27). By introducing "Asian mathematics education", which contains elements such as frequent exercise and repetition for all, England, according to Huang, has embarked on the right journey.

Even with regard to educational equality, PISA is thought of being able to teach the West a Chinese lesson. Lu and Zhu (2011) note that there were no large performance differences among students and schools in Shanghai,⁴ and how this has prompted a variety of researchers becoming interested in the Shanghainese model of managing low-performing schools, including OECD researchers. Some propose openly to turn Shanghai into an "educational trade zone" (Song, Yu and Mi 2014, 35); through branding the Shanghainese model and actively copying the marketing policies of the United States, Australia, and Singapore, this zone should become a strong competitive player in the global educational market.

Students as Testing-Machines, or Individual Welfare?

"If it is weekend, and you are not sitting in a tutoring class, you are on your way to a tutoring class", Zhou (2011, 37) quotes a popular saying. As he and many others criticize, there is little learning outside the spaces constrained by school and parents, and learning only serves to achieve high exam results; students generally find no joy in studying, as all learning occurs under pressure (Li 2012). Many educationists in this faction do not disagree that China's educational model is efficient and successful, but wonder whether it is worth the price that students and their parents are paying. Besides, the huge investment does not seem to be economical: when correlating time investment and performance, Chinese students turn out to be inefficient in comparison with their peers in other countries (Wang and Jing 2013) – an aspect that was also frequently remarked upon in the Chinese social media, which noted the high performance of Finnish students while enjoying a low amount of homework and tutoring. Chinese education is seen as following a paradoxical logic: basic education focuses on talents and exerts high pressure on students, while university students enjoy carefree lives; the reverse would be appropriate (Zhou 2011).

Scholars in this group do not question the high performance or the validity of PISA, but they show themselves shocked by the contextual factors, such as homework overload, lack of enthusiasm and low extent of self-directed learning; as well as an excessive focus on exceptional talents and exaggerated expectations towards what the school can deliver – which after all is only one part of the social whole (Yang 2011). The ultimate goal of this kind of education, these critics argue, is the optimization of students who are already privileged in the first place, as they are found to profit much more from tutoring classes than their less fortunate peers, in contrast to US-American students (Zhou and Zou 2016). Thus, most scholars in this faction do not see PISA itself as a problem but rather the uncritical embrace of the high Chinese results, and the overly optimistic interpretation of these results regarding the present state and future direction of Chinese education; this naive enthusiasm, these scholars worry, may dampen reform efforts to make learning more of a joy and less of a burden for Chinese students. PISA as an assessment tool, rather than as a ranking tool, is mostly welcomed by these scholars since they can use the PISA data to demonstrate their argument.

Do Assessment Tests Reflect Educational Quality?

In March 2017, *China Education Daily* reported on a roundtable on PISA with three prominent Chinese educationists, who expressed their concerns that the Chinese high performance in PISA would be conflated with a general high quality of Chinese education. PISA, it is argued, can by no means be used to understand the educational quality of an entire country; persistent problems such as the excessive focus on exams and results, rather than on learning and processes, cannot be adequately reflected in assessments like PISA (Yu, Lai and Shi 2017). High test scores are judged to disguise the fact that Chinese students are largely extrinsically motivated, have little self-efficacy, little epistemic and procedural knowledge, a rather weakly developed attitude of scientific inquiry, and a lack of global and environmental awareness – all aspects that are of paramount importance for today's global knowledge society (Zhang, Wan and Xue 2017).

The PISA successes show above all one thing, according to Wu (2015): the conducive influence of the Chinese, or Asian/Confucian, traditional educational culture for achieving high test results; while Western, reform-oriented countries all performed poorly, he maintains, Confucian cultures achieved top results. Wu concludes from this that it was not educational reform in Shanghai that played a role for the good PISA results, but rather Shanghai's continued embeddedness in the Confucian culture. In the end, however, the PISA results reveal nothing more than that Asian students are good at solving test items; important qualities like creativity, critical thinking, and application of knowledge are largely missing from these formalized assessments. Consequently, Wang, Jing and Tong (2017) argue that China should move towards more diversified assessment methods; educational quality means also spending less time on cramming and more time on innovative thinking and character building.

Putting too much faith in PISA as a valuable and trustworthy instrument of assessing educational quality may lead to severe disappointment in the future, when China's excellent students may not be able to deliver what is expected of them, as the judgment of their potential was based on the wrong premises, incorrectly assuming that PISA had the power to foresee how these students would develop in the future: "... in a few years, the public will wonder: with all these Chinese fifteen-year olds who had become 'the world's best' early on, why is it that in the end they have not turned into outstanding talents (Zhou 2011, 38)?"

International Student Assessments and their Discontents: Agendas behind the Debate

As can be seen from this debate, China's PISA success is judged to be both a curse and a blessing. The following sections will probe into the agendas behind these different stances.

Mixed Blessings: Grounding Educational Reform, or Making China Great again?

Those who welcomed PISA did so with very different motives: while some point to the worrisome contextual factors, which indicate the stress and pressure that the Chinese school system is putting on students, others instrumentalize the general high Chinese ranking for proving the system's excellence and superiority to Western models. The latter motive can be differentiated into two underlying rationales, which may however partially overlap. On one side, Shanghai's success is used for internal, domestic distinction. People like the above-mentioned Zhang Minxuan, who both represent PISA-Shanghai and stand for educational reform, use various channels to praise the innovativeness and efficiency of the Shanghainese education system (for an English version, see for example Zhang, Xu and Sun 2014), highlighting how Shanghai has been able to "introduce great reforms in order to raise the quality of the teaching force" "in a short span of about 30 years" (Zhang, Xu and Sun 2014, 160). While this strategy can be read as using PISA in order to legitimate

educational reform domestically (see e.g. Tan 2017), the special role that Shanghai has been playing – both in domestic politics and in educational policy-making – has to be taken into account too: Since the early 1980s, Shanghai has been the vanguard of educational modernization and experiment, and this role has not always been unquestioned by the central leadership and other, regional governments (Deng and Zhao 2014). PISA can therefore serve to re-assert Shanghai's role of an educational pioneer.

On the other side, PISA has been increasingly used to brand the Shanghainese system as a model for global export. Particularly PISA 2012 gave rise to what could be called an educational branding literature, advocating and selling educational policy innovations by pointing to high-performing educational systems, including Shanghai (see e.g. Lee, Lee and Low 2014). Such a marketing strategy was reciprocated on the Chinese official side. For example in 2014, the temporary Vice Minister of Education, Liu Limin, expressed his pride to finally not just *receive* expert-teachers in order to develop Chinese education, but to be able to *dispatch* expert-teachers to improve foreign education systems – in this case, math teachers to the United Kingdom (see Dong 2016). Or as expressed even more blatantly by the Deputy Head of Shanghai's Educational Bureau, Ding Xiaoding: "As concerns pushing Chinese education to reach the world and increasing the influence of Shanghai and of our country in the global educational structure, this is of strategic importance" (see Dong, 2016).

PISA's Threefold Curse

Just like the embrace of PISA, caution or even suspicion towards this international assessment program originate also in differing concerns and agendas connected to these concerns. Three types of concerns can be considered most relevant in the Chinese context: (i) PISA as undermining reform and making the undesirable visible; (ii) PISA as disturbing the balance in national-regional educational policy-making; and (iii) PISA as compromising China's national independence in assessment, judgment, and policy-making.

Regarding the first, and as has become apparent from the discussion presented so far, many educationists fear that too positive results in PISA would undermine the drive for educational reform, as China's high ranking would confirm the status quo, or even reverse some of the previous reform efforts that have been striving for more child-centered and less exam-oriented learning. Additionally, we can observe a shift in performance in regions where public school reform has been extensive – namely a performance shift in favor of private schools, which unlike their public counterparts can afford to implement educational reform to a much lesser extent (HZJS 2015). Parents in wealthy, pro-reform regions increasingly opt for private schools and can thereby continue to expose their children to conventional ways of teaching and learning. This is a trend that has so far not received much attention in the Chinese educational literature, although the public-private performance gap can even be read from the PISA data (Schulte 2017b). Perhaps the obvious conclusion to draw is too inconvenient: conventional schooling and cramming seem to be more conducive for achieving outstanding test results than their modernized counterparts. The government's recent ban of for-profit private schools from compulsory education may indicate that it is not willing to tolerate a two-track development, i.e. a school system characterized by a conventional pedagogy, and a reform track (see NPC 2016). Disengaging from PISA may therefore be motivated by the fear that such assessment programs will reveal the conduciveness of the pre-reform system for achieving good learning results, which in turn could lead to an exodus of families from public to private schools.

As concerns national-regional educational policy-making, Shanghai's special role in the reform process has been pointed out in the previous section. The relationship between Shanghai as the center of reform and the rest of the country has been no easy-to-keep balance, and the continuous emphasis on Shanghai as an exemplary model of educational reform risks to irritate educationists and policy-makers outside Shanghai. The notable drop in rank in PISA 2015, after other regions had joined Shanghai in the sample, may have been the final straw to break the Shanghainese dominance in the educational reform discourse. As Zhu

Yongxin remarks at the above-mentioned roundtable on PISA, "for China to build self-confidence in education, it is not Shanghai or Beijing where things are done and self-confidence is gained, but only if we work on the education of the entire country will we really succeed in building self-confidence" (Yu, Lai and Shi 2017). To even out the educational-political landscape and dispose of factionalism is also a distinct characteristic of the present administration under leader Xi Jinping in general (see Lam 2015). The data and information that become available through PISA threaten to disturb the national-regional balance in educational reform and development.

Finally, questioning PISA may also reflect the quest for national independence from global assessment and ranking systems, whose tools and strategies China has only limited means to control (i.e., as one of many participant countries). On one side, China may be generally both tired and wary of taking part in what by many participants is regarded a competition in who has the best educational system. Chinese educationists have frequently pointed out that contrary to e.g. the US-American perception of PISA as a world-wide educational race, PISA's value lies in providing data for recognizing strengths and weaknesses in international comparison, rather than coming first in any ranking:

The unhealthy trend of putting excessive emphasis on the ranking of PISA or other assessments is the old custom of 'grade-ism'; as a nation with a particularly long history and culture of examinations, Chinese educational circles ought to be the first to realize this. (Wang and Jing 2013, 177)

On the other side, education is still considered a national core project whose leaders do not tolerate any unfiltered influence, or even interference, from abroad. It is no coincidence that a translated journal article by Thomas Popkewitz (2015), which discusses PISA as a colonizing instrument that imposes Western norms on other countries, has attracted comparatively wide attention in China.⁵ From this perspective, the fact that a potentially malevolent power like the United States sheds excessive praise on the Shanghainese system seems particularly suspicious. As Yang (2011, 9) remarks, the instinctive Chinese reaction is that "everything the enemy praises, we should oppose", assuming that the Western powers intend to hinder China from choosing the right path in educational development.

Conclusion

The publication of the PISA 2015 results was followed by a conspicuous official silence. While the Chinese-language BBC reported on the deteriorated Chinese performance already on the same day, and Chinese social media were buzzing with the news and possible underlying reasons, the Chinese government only published a short, descriptive press release the day after, without any comments or suggestions (Liang, 2016). The National Institute for Education Assessment, who was in charge of PISA 2015 in China, has until today not issued any press release on the results (the last news release being from the beginning of 2016). Also the Ministry of Education's Bureau of Education Inspections, who oversees educational quality and who according to the OECD (2016a) plays a key role in educational management, did not react. Instead, the Ministry of Education's news outlet was dominated by an initiative for strengthening ideological education, which had just been launched by president Xi Jinping (see Wu and Hu 2016). In light of the various agendas and strategies as discussed above, this official reaction is somewhat ambivalent: it could mean that the decreased PISA rank was unexpected, and interfered with plans to brand and market Chinese education globally. Alternatively, the silence could reflect the Chinese government's reluctance to let global assessment regimes dictate national news and agendas.

Interestingly, many of the academic responses as presented in this chapter have gone through various stages of reflection and projection: reflecting and projecting upon foreign educational systems; upon these scholars' own, Chinese educational system; and, in a sort of double hermeneutic move, upon foreign

reflections and projections upon the Chinese school system. These reflections and projections are not simply interpretative-cognitive processes, but are embedded in transnational, hegemonic educational regimes that attempt to define and sanction ways of assessing educational quality, often at odds with local understandings of educational quality and political constraints. Chinese educational scholars are well aware of the Western reactions to the Chinese PISA performance (Yang 2011). Some have specifically studied and categorized these reactions, just as this chapter is doing with regard to the Chinese responses.⁶ Others treat, again in parallel with this and many other contributions to this volume, claims regarding PISA, and school systems assessed by PISA, not as analytical facts but as discursive positions in processes of policy negotiations and justifications. Wu talks specifically of “analyses based on blackbox-like thinking” (2014, 69) when referring to the West’s numerous speculations about China’s PISA success. He maintains that rather than departing from contextual knowledge, Western scholars like the PISA coordinator Andreas Schleicher “produce explanations from perspectives [that are fed by; BS] their own imaginations” (Wu 2014, 69).

Imagining the other as a means to project something on one’s own educational wish list upon a foreign context, to then argue for educational borrowing from this context, has been an often-observed and analyzed phenomenon within comparative education (see e.g. Zymek, 1975, as one of the earliest examples of this strand of research). Regarding more recent argumentative projections for the purpose of policy borrowing, You and Morris (2016) have shown how policy makers in the United Kingdom have projected their ideas of school autonomy on East Asian countries, to then argue for more school autonomy in their own system. As mentioned earlier in this contribution, also Chinese researchers and debaters reference, both in a positive and in a negative way, to school autonomy, which they assume to be the dominant form of school governance in England (on negative referencing, see e.g. Waldow, Takayama and Sung 2014). Just like their British colleagues, they construe school autonomy as a phenomenon to their liking (or disliking), in order to frame their own standpoint, get their argumentative point across, and woo for (or argue against) a tool of educational governance that has allegedly proven to work (or fail) in other contexts. Similarly, to scandalize PISA as suspicious, and as a potential weapon of Western imperialism, supports the Chinese quest for national independence from transnational assessment regimes, or alternatively, the Chinese intention to continue with educational reform despite deteriorating PISA results. Thus, both positive and negative referencing is not a mere statement of facts, or a presentation of analytical findings, but constitutes (i) a *conceptual tool* for ordering, categorizing, and interpreting empirical reality; (ii) a *strategic tool* for arguing for or against a particular approach or reform; and (iii) a *political tool* for legitimizing (or delegitimizing) the ideology underlying these approaches or reforms.

To establish references to other educational systems, or even to construe entire reference societies that for longer periods of time affect and dominate national educational discourses (see e.g. Steiner-Khamsi 2012, on reference societies), can therefore be considered an academic and ideological struggle about which direction to take in educational development and reform (or counter-reform). Drawing originally on Luhmann, comparative educationists have framed these processes as externalization (Schriewer 1990; Takayama, 2010). In the literature, most attention so far has been paid to how local, regional, national, and transnational actors externalize to the outside world: to alleged phenomena and developments internationally, located in contexts other than their own. It has been noted how ideas, such as reforms and new pedagogies, need to resonate in the host context if they are to successfully integrate with their new environment (e.g. Steiner-Khamsi 2004). Schriewer and Martinez (2004), however, point to processes that alternate with externalizations to the outside, and which they consider at least as important as international externalization: referencing to a constructed ‘inside’, in the sense of construing traditions, (national) pasts, and heritages that are ‘rediscovered’ and established as exemplary models (or alternatively, as deterrent examples). Schriewer and Martinez conclude that there is no continuous, ever expanding internationalization and establishment of reference societies; rather, over the course of history, the two different forms of externalization – to the international world, and to one’s own history – occur in what

could be best described as a cyclical process. Judging from China's growing unease about PISA, and its recent attempts at reviving and rejuvenating socialist and partially Maoist traditions in educational development, it seems that the country is on the point of switching its externalization mode to a strengthened reflection, and thereby modeling, on its own history, which emphasizes above all self-assertion, self-control, independence, and the primacy of ideology.

Notes

- 1 China has been able to considerably improve its performance with regard to both patents and international, high-impact journal publications, although the surge in research citations may be at least partially attributed to practices of internal, localized citations (George and McKern 2014; Tang, Shapira and Youtie 2015).
- 2 English translations of Chinese article titles, if provided with the article, were included in the bibliography, even if the translation was faulty; in case no translated title was provided, my own translation was added. All direct quotes from the articles are my own translations.
- 3 However, most of these researchers would implicitly feel at home in the first category, in that they accept the basic methodological and normative premises of PISA as an adequate instrument for assessing educational quality.
- 4 This was not confirmed in PISA 2015, which on the contrary attested Chinese schools a comparatively strong segregation of low and high performing schools (see Schulte, 2017a).
- 5 To utilize postmodern arguments for purposes of national self-assertion has been a Chinese strategy since the 1990s (see Schulte, 2004). In academia, this strategy was reflected in attempts at establishing an indigenous social science, claiming that 'what is called social science today is Western social science' (Yang 1994, 51).
- 6 For example labeling these reactions as admiration of the Chinese school system; self-reflection upon one's own shortcomings vis-à-vis the Chinese success; pointing to the lack of innovative thinking among Chinese students (despite or because of their excellent performance); and emphasizing the excessive focus on academic performance within the Chinese school system, at the expense of other activities such as arts and sport (Lu and Zhu 2011).

References

- Deng, M., and Zhao, Z. (2019), "The Education System in Shanghai: Negotiating the Nature of Education", *The Asia-Pacific Education Researcher*, 23(4): 805-812.
- Dong, S. (2016), "Yingguo weihe san ci pai jiaoshi fu Shanghai qujing" [Why England Sent Teachers to Shanghai Three Times to Collect Experiences], *Jiaoyubao*, November, 11. Retrieved from http://news.jyb.cn/world/gjgc/201611/t20161111_682231.html.
- Fang, F. (2015), "Meiguo de jiaoyu zhen de bi Zhongguo cha ma" [Is American education really worse than Chinese education], *Dangdai Jiaoyujia*, 9: 67-68.
- George, Y., and McKern, B. (2014), "Innovation in Emerging Markets – The Case of China", *International Journal of Emerging Markets*, 9(1): 2-10.
- Huang, X. (2016), Yingguo shuxue jiaoyu de xianshi yu xiangwang - jianyu Zhongguo shuxue jiaoyu bijiao [Reality and Dream of Mathematics Education in England: Comparison to China], *Bijiao Jiaoyu Yanjiu*, 319(8): 24-56.
- HZJS = Hangzhou Zhongxiaoxue Jiaoyu Shixun (2015), "2015 Hangzhou minban chuzhong he gongban chuzhong zhongkao chengji duibi" [Comparing the 2015 Results from Middle School Entrance Examinations Among Private and Public Lower Middle Schools in Hangzhou]. *Bendibao*, June 24, Retrieved from <http://hz.bendibao.com/edu/2015624/56868.shtm> (accessed December 7, 2017).
- Ji, L. (2011), "Shanghai xuesheng PISA duoguan dailai de xinwei" [The Gratification of Shanghaiese Students Becoming the World Champions in PISA]. *Nei Menggu Jiaoyu*, (5): 18.

- Lam, W. W.-L. (2015), *Chinese Politics in the Era of Xi Jinping. Renaissance, Reform, or Retrogression?* New York, London: Routledge.
- Lee, S. K., Lee, W. O., and Low E. L. (2014), *Educational Policy Innovations. Levelling Up and Sustaining Educational Achievement, Education Innovation Series*. Heidelberg, New York, Dordrecht, London: Springer.
- Li, B. (2012), "PISA di yi bing bu yiwei Shanghai you quan shijie zui hao de jiaoyu tixi - bu yuan zhudong xuexi shi Zhongguo jiaoyu de da wenti" [Ranking First in PISA Does Not Mean That Shanghai Has the Best Educational System in the World: The Unwillingness of Learning Actively is the Big Problem of China's Education], *Jichu Jiaoyu Luntan*, (5):37.
- Liang, X. (2016), "Jinghe zuzhi fabu zuixin guoji xuesheng pinggu xiangmu ceshi baogao: Zhongguo Dalu paiming xiahua" [OECD Report on the Newest PISA: Mainland China Sliding Down in Rank]. *Xinhua*, December 7. Retrieved from http://www.gov.cn/xinwen/2016-12/07/content_5144617.htm.
- Lu, J. (2017), "Quanmian, keguan de renshi Zhongguo jiaoyu de chengjiu yu buzhi" [Comprehensively and Objectively Recognizing the Accomplishments and Shortcomings of Chinese Education], *Renmin Jiaoyu*, (2): 25-32.
- Lu, J., and Zhu, X. (2011), "Ruhe kandai Shanghai 2009 nian PISA ceping jieguo - Zhongguo Shanghai zhongxuesheng shouci canjia guoji ceping jieguo fanxiang shuping" [How to Regard the Assessment Results from PISA Shanghai 2009: Discussing the Reaction to the Results from the First-Time Participation of Chinese-Shanghai Middle School Students in the International Assessment], *Shanghai Jiaoyu Keyan*, (1): 17-19.
- Lü, L. (2017), "Quanguo shiye xia de Zhongguo xuesheng shuxue suyang bijiao yu qishi: lai zi PISA de zhengju fenxi" [Comparison and Insight of Mathematical Literacy of Chinese Students Under Global Vision: From Evidence Analysis of PISA Data], *Jiaoyu Shengwuxue Zazhi*, 5(1): 10-14.
- Lundgren, U. P. (2013), PISA as a Political Instrument: One History Behind the Formulating of the PISA Programme. *Profesorado*, 17(2): 15-29.
- MOE = Ministry of Education of the People's Republic of China (2015a), *2015 nian guojia yiwu jiaoyu zhiliang jiance ceshi shunli wancheng* [2015 Monitoring Test of Quality of State Compulsory Education successfully completed]. Retrieved from http://www.moe.edu.cn/jyb_xwfb/gzdt_gzdt/moe_1485/201506/t20150629_191522.html.
- MOE = Ministry of Education of the People's Republic of China (2015b), *Jiaoyu zhiliang jiance: kaoshi pingjia zhidu gaige de tupokou* [Educational Quality Monitoring: Breakthrough Regarding the Reform of the Examination and Evaluation System]. Retrieved from http://www.moe.gov.cn/jyb_xwfb/xw_fbh/moe_2069/xwfbh_2015n/xwfb_150415/150415_mtbd/201504/t20150416_187221.html.
- MOE = Ministry of Education of the People's Republic of China (2016), *2016 nian guojia yiwu jiaoyu zhiliang jiance ceshi shunli wancheng* [2016 Monitoring Test of Quality of State Compulsory Education Successfully Completed]. Retrieved from http://www.moe.edu.cn/jyb_xwfb/gzdt_gzdt/s5987/201605/t20160527_246761.html.
- National Assessment Center for Education Quality (July 2018). *Zhongguo yiwu jiaoyu zhiliang jiance baogao* [Chinese compulsory education quality assessment report]. Beijing, <http://www.eachina.org.cn/shtml/4/news/201807/1749.shtml> (accessed December 17, 2018).
- National Innovation Center for Assessment of Basic Education Quality (October 16, 2017). *PISA 2018 (Zhongguo) yushi gongzuo shunli wancheng* [Preparatory work for PISA 2018 (China) successfully accomplished]. Beijing, <http://cicabeq.bnu.edu.cn/shtml/2/news/201710/727.shtml> (accessed December 17, 2018).
- NPC = The National People's Congress of the People's Republic of China (2016), *Yiwu jiaoyu bude ban yinglixing minban xuexiao* [Compulsory Education not Allowed to Run For-Profit Private Schools]. Retrieved from http://www.npc.gov.cn/npc/xinwen/lfgz/2016-11/01/content_2000338.htm.
- OECD (2014), *PISA 2012 Results: What Students Know and Can Do – Student Performance in Mathematics, Reading and Science*. Paris: OECD Publishing.
- OECD (2016a), *Education in China: A Snapshot*. Paris: OECD Publishing.
- OECD (2016b), *PISA 2015 Results (Volume I): Excellence and Equity Through Education*. Paris: OECD Publishing.

- OECD (2016c), *PISA High Performers: China (Country Note)*. Paris: OECD Publishing.
- Pan, Y. (2012), "PISA jiazhiguan he pingjiaguan dui Zhongguo jiaoyu chuangxin de qishi" [The Implications of the PISA Concept of Values and Evaluation on the Education Innovation of China]. *Jiaoyu Fazhan Yanjiu*, 2: 47-52.
- Popkewitz, T. (2015), "Guoji xuesheng pinggu xiangmu (PISA) dui xuexiao kecheng yingxiang - chengji paiming, biao zhunhua ji xuexiao kecheng lianjinshu" [The Influence of PISA on School Curriculum – Ranking, Standardization and the Alchemy of the School Curriculum], *Jiaoyu Xuebao*, 11(2): 73-86.
- Ren, Y., Chen, C., Wu, M., and Yu, C. (2016), "Jujiao 'wenti jie jue', buqi wo guo gongmin kexue suzhi 'duanban' "[Focusing on 'Problem Solving': A Research on Remedy Limitation of Scientific Literacy of Chinese Citizens], *Kexue yu Shehui*, 6(2): 9-17.
- Sahlberg, P. (2011), "PISA in Finland: An Education Miracle or an Obstacle to Change?", *CEPS Journal: Center for Educational Policy Studies Journal*, 1(3): 119-140.
- Schriewer, J. (1990), "The Method of Comparison and the Need for Externalization: Methodological Criteria and Sociological Concepts", in J. Schriewer and B. Holmes (eds.), *Theories and Methods in Comparative Education*, 3-52, Frankfurt a.M.: Lang.
- Schriewer, J., and Martinez, C. (2004), "Constructions of Internationality in Education", in G. Steiner-Kamsi (ed.), *The Global Politics of Educational Borrowing and Lending*, 29-53, New York: Teachers College Press.
- Schulte, B. (2004), "East is East and West is West? Chinese Academia Goes Global", in J. Schriewer, C. Charle and P. Wagner (eds.), *Transnational Intellectual Networks. Forms of Academic Knowledge and the Search for Cultural Identities*, 307-329, Frankfurt, New York: Campus.
- Schulte, B. (2017a), "China", in S. Trumpp, D. Wittek and A. Sliwka (eds.), *Die Bildungssysteme der erfolgreichsten PISA-Länder: China, Finnland, Japan, Kanada und Korea [The educational systems of the most successful PISA countries: China, Finland, Japan, Canada and South Korea]*, 21-49, Münster: Waxmann.
- Schulte, B. (2017b), "Private Schools in the People's Republic of China: Development, Modalities and Contradictions", in T. Koinzer, R. Nikolai and F. Waldow (eds.), *Private Schools and School Choice in Compulsory Education. Global Change and National Challenge*, 115-131, Berlin: Springer.
- Sellar, S., and Lingard, B. (2013), Looking East: Shanghai, PISA 2009 and the Reconstitution of Reference Societies in the Global Education Policy Field. *Comparative Education*, 49(4): 464-485.
- Song, C., Yu, G., and Mi, H. (2014), "Zhongguo (Shanghai) zimaoshiyanqu jiaoyu fuwu maoyi guoji hezuo jizhi gouxian" [Political Innovation of Education Internationalization in Shanghai]. *Kexue Fazhan*, 72: 32-35.
- Steiner-Khamsi, G. (2004), "Blazing a Trail for Policy Theory and Practice", in G. Steiner-Kamsi (ed.) *The Global Politics of Educational Borrowing and Lending*, 201-220, New York: Teachers College Press.
- Steiner-Khamsi, G. (2012), "Understanding Policy Borrowing and Lending: Building Comparative Policy Studies", in G. Steiner-Kamsi and F. Waldow (eds.) *Policy Borrowing and Lending in Education*, 3-17. London: Routledge.
- Takayama, K. (2010), "Politics of Externalization in Reflexive Times: Reinventing Japanese Education Reform Discourses Through 'Finnish PISA Success'", *Comparative Education Review*, 54(1): 51-75.
- Tan, C. (2017), "PISA and Education Reform in Shanghai", *Critical Studies in Education*, 53(2): 1-16.
- Tang, L., Shapira, P., and Youtie, J. (2015), "Is There a Clubbing Effect Underlying Chinese Research Citation Increases?", *Journal of the Association for Information Science and Technology*, 66(9): 1923-1932.
- Waldow, F., Takayama, K., and Sung, J-K. (2014), "Rethinking the Pattern of External Policy Referencing: Media Discourses over the 'Asian Tigers' PISA Success in Australia, Germany and South Korea", *Comparative Education*, 50(3): 302-321.
- Wang, J. (2013), "PISA hou Shanghai jiang tui ziji pingjia tixi - 'Lüse Zhibiao' " [After PISA Shanghai Will Push Their Own Evaluation System - The 'Green Indicators'], *Dongfangwang*, December 4, Retrieved from <http://sh.eastday.com/m/20131204/u1a7809994.html> (accessed December 7, 2017).
- Wang, L., and Jing, A. (2013), "Women cong PISA xuetao le shenme - jiyu PISA Zhongguo shice de yanjiu" [What Have We Learned from PISA? Research on the PISA China Trial], *Beijing Daxue Jiaoyu Pinglun*, (1): 172-180.
- Wang, L., Jing, A., and Tong, W. (2017), "PISA Zhongguo duli yanjiu shijian dui goujian Zhongguo tese jiaoyu zhiliang pingjia tixi de qishi - jiyu PISA 2009 Zhongguo duli yanjiu" [Transition from PISA China Trial to Education Evaluation System with Chinese Characteristics - Based on PISA 2009 China Trial], *Jiaoyu Yanjiu*, (444): 114-123.

- Wang, Y. (2014), "Shanghai huojiang tuichu xiaci PISA ceshi" [Shanghai Maybe Dropping out of Next PISA], *Xinmin Wanbao*, March 7, Retrieved from http://www.ecnu.edu.cn/_s64/b2/5e/c1835a45662/page.psp (accessed December 7, 2017).
- Wu, G. (2014), "Shanghai de PISA ceshi quanqiu di yi de aomi hezai - jiyu Zhongguo jiaoyu wenhua chuantong de shijiao" [Where is the Secret of Shanghai Being No. 1 in PISA - From the Perspective of the Tradition of Chinese Educational Culture], *Tansuo yu Zhengming*, (1): 68-69.
- Wu, G. (2015), "Zhongguo jiaoyu wenhua chuantong dui PISA ceshi jieguo de yingxiang" [The influence of the tradition of Chinese educational culture on the PISA results], *Jiaoyu Yanjiu yu Pinglun*, (1): 91-92.
- Wu, J., and Hu, H. (2016), "Xi Jinping: ba sixiang zhengzhi gongzuo guanchuan jiaoyu jiaoxue quan guocheng" [Xi Jinping: The entire process of connecting ideological-political work with education and pedagogy], *Xinhua News*, December 8, Retrieved from http://www.moe.gov.cn/jyb_xwfb/s6052/moe_838/201612/t20161208_291306.html (accessed December 7, 2017).
- Xu, D., Ji, M., Wang, M., and Liu, Z (2016), "Ruhe jiang luse biao zhi zhenzheng yongyu tisheng jiaoyu zhiliang" [How to Genuinely Use the Green Indicators to Raise the Quality of Education], *Renmin Jiaoyu Zazhi*, June 2, Retrieved from http://www.jyb.cn/Theory/jyfb/201606/t20160602_661591.html (accessed December 7, 2017).
- Yang, G. (1994). "Jiangcun jingji' zai renshi" [A Re-Evaluation of the Book 'The Economy of the Village Jiang'], *Du Shu*, 10: 50-57.
- Yang, H. (2011), "Zhongguo chuzhongsheng 'shijie di yi' de sikao - PISA ji qi ceshi jieguo de qishi" [Reflections on Chinese primary and secondary school students being 'the world's first' - PISA and what the assessment results reveal], *Renmin Jiaoyu*, (3-4): 8-10.
- You, Y., and Morris, P. (2016), "Imagining School Autonomy in High-Performing Education Systems: East Asia as a Source of Policy Referencing in England, *Compare: A Journal of Comparative and International Education*, 46(6): 882-905.
- Yu, H., Lai, P., and Shi, J. (2017), "Zhongguo de jiaoyu zixin zai naili" [Where is China's Educational Self-Confidence], *Zhongguo Jiaoyubao*, March 3, Retrieved from http://www.moe.gov.cn/jyb_xwfb/s5147/201703/t20170303_298082.html (accessed December 7, 2017).
- Zhang, H., Wan, D., and Xue, Y. (2017), "PISA 2015 Zhongguo xuesheng kexue chengji xiahua tedian ji yuanyin tantao" [Investigation to Decline of Science Score of Chinese Students in PISA 2015], *Jiaoyu Shengwuxue Zazhi*, 5(1): 1-9.
- Zhang, M., and Kong, L. (2012), "An Exploration of Reasons for Shanghai's Success in the OECD Program for International Student Assessment (PISA) 2009", *Frontiers of Education in China*, 7(1): 124-162.
- Zhang, M., and Kong, L. (2013), "Why Shanghai's Students Rank No. 1 in PISA (2009). An Exploration of Reasons for Shanghai's Success in the OECD Program for International Student Assessment (PISA) 2009", *China Daily*, July 16. Retrieved from <http://blog.chinadaily.com.cn/blog-1142759-11219.html> (accessed December 7, 2017).
- Zhang, M., Xu, J., and Sun, C. (2014), "Effective Teachers for Successful Schools and High Performing Students: The Case of Shanghai", in S.K. Lee, W.O. Lee and E.L. Low (eds.), *Educational Policy Innovations. Levelling Up and Sustaining Educational Achievement*, 143-161. Heidelberg, New York, Dordrecht, London: Springer.
- Zhao, Y. (2010), "PISA neng fou chengwei Zhongguo jiaoyu gaige de qiji" [Can PISA Become the Turning Point in Chinese Educational Reform?], *Shanghai Education*, 12(B): 44.
- Zhou, D. (2011), "Shanghai PISA ceshi gaosu Zhongguo shenme" [What Does PISA Shanghai Tell China?], *Jiaoyu Xunkan*, (6): 37-38.
- Zhou, J., and Zou, X. (2016), "Zhongmei xuesheng jiaoyu buxi jihui de yingxiang yinsu bijiao - jiyu 2012 nian Zhongguo Shanghai he Meiguo PISA shuju de shizheng tansuo" [Comparing the Private Tutoring Options Between Students in China and the United States - Evidences from 2012 PISA Survey and Investigation], *Jiaoyu yu Jingji*, (2): 44-52.
- Zymek, B. (1975), *Das Ausland als Argument in der pädagogischen Reformdiskussion: Schulpolitische Selbstrechtfertigung, Auslandspropaganda, internationale Verständigung und Ansätze zu einer vergleichenden Erziehungswissenschaft in der internationalen Berichterstattung deutscher pädagogischer Zeitschriften, 1871-1952* (Schriftenreihe zur Geschichte und politischen Bildung 19). Ratingen: Henn.

