
The Negative Influences of Exam-Oriented Education on Chinese High School Students: Backwash from Classroom to Child

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Abstract

This essay describes the various problems China faces on account of its exam-centric education system and pedagogy. Along with interviews and focus groups, this study draws on survey responses from 43 Chinese high school students enrolled in the Yunnan Province's No. 10 school. Moreover, this essay explores the policy arguments and key assumptions underlying this pedagogical approach as well as the negative influences exam-oriented education systems have on Chinese students, who view education as nothing more than merely passing examinations. This particular approach, at its worst, can stifle a student's imagination, creativity, and sense of self, qualities crucial for a child's ultimate success in and out of the classroom. The study suggests moderate pressure to excel in school, when paired with de-emphasizing high-stakes testing, better motivates students and improves student success and psychological health, both in terms of academic success and also a productive adulthood.

Keywords: backwash, China exam system, exam-oriented education

Introduction

For Chinese students, the aim of learning focuses solely on passing examinations. This process begins early; indeed, Chinese formal education emphasizes testing beginning at age two, beginning with the initiation of the "three-point life" of *home-*

school-home (Nicholas Kristofk, 2011). School begins at 7:00 AM with morning-reading class followed by a 10-minute break every 45 minutes until noon. Next, afternoon classes begin at 14:30 pm and continue to 18:00pm. Excluding the morning reading class, Chinese students have eight classes each school day. On average, each class has 3 or 4 tests per subject, allowing for few, if any, extracurricular activities or hobbies on account of the high volume of daily homework assignments. This study examines the backwash of this highly exam-centric education for Chinese high school students, and considers how this exam-oriented education may negatively affect the education process, socialization, and ability to learn beyond studying for testing requirements.

Varied Views on the Exam System Backwash

Backwash is defined as the “influence of testing on teaching and learning” (Luxia, 2007), “the connections between testing and learning” (Shohamy, Donitsa-Schmidt & Ferman, 1996, p. 298); for Messick (1996) as “... the extent to which the introduction and use of a test influences language teachers and learners to do things they would not otherwise do that promote or inhibit language leaning” (Cited in Brown, 2000). Specifically, Messick (1996, cited in Manjarres, 2005) argues;

If a test is deficient because it has construct under representation or construct-irrelevant characteristics, then good teaching cannot be considered an effect of the test, and conversely, if a test is construct-validated, but there is poor teaching, then negative backwash cannot be associated with the test.

Every test causes different instances of washback, which, depending on context, may be harmful or beneficial to its environment. Andrews et al. also note in their research, “the impact of a test can be immediate or delayed” (2002, cited Manjarres, 2005).

Washback influences teaching and learning across a gamut of contexts, but can be observed most plainly in the context of “high-stakes” testing where results can profoundly impact a student’s life for decades to come. In particular, test scores determine which universities a student may attend, if any. Madaus (1990 in Shohami, Donitza-Schmidt & Ferman, 1996) also comments that “high are such situations where admissions, promotions, placements or graduations are dependent on the test.” Tests ostensibly quantify what students know in relation to their peers, but only within a certain narrowly-defined context.

In modern communities, testing is to control the educational system in a scientific and unbiased manner. Tests are one of the ways of evaluating learning and teaching efficacy. Testing exists to “(1) create or reinforce the identity of the state, (2) increase the sense of belonging to the state, (3) select and allocate individuals to roles or tasks that benefit the collective, and (4) introduce hyper-accountability to ensure uniformity and standardization” (Glenn Fulcher, 2009). In the field of education, there is consensus that the testing process has an influence on both teaching and learning, which is termed “washback” in language education (Alderson & Wall, 1993, Qi Luxia, 2007). This influence may be positive and negative impact depending on the context of the test. Fulcher and Davidson also point out (2007) the notion of effect-driven testing;

... ultimately, it should be these test effects that drive the final design decisions about crafting particular items and tasks. We believe in “effect-driven testing”: test creation in which the ultimate test design decisions are driven by the impacts that the test will have on stakeholders. (p. 50–51)

The Role of Exams in the Chinese Educational System

China’s Ministry of Education designed China’s current education system. It is a state-controlled system of public education that emphasizes a ¹nine-year compulsory system (Liu, 1992). This includes preparation time for the National College Entrance Examination (NCEE) or *gaokao* (Brandenburg and Zhu, 2007).

By 2008, adult illiteracy rate in China dropped to only 3.58%. Elementary school and junior secondary school enrollment jumped to 99.5% and 98.5% respectively (China facts: Literacy rate, 2009).

However, only a small cohort of junior school studies continues their formal education in the senior secondary schools required for admittance to Chinese universities. The junior high schools teach the students a variety of science subjects (chemistry, physics, and biology) in addition to other subjects (e.g. history, geography, and vernaculars), which are compulsory; indeed, only at the senior level of Chinese high school allows for electives. Among the compulsory subjects in the senior level are the Chinese language, English, and mathematics, whereas the three other optional subjects are selected from a total of six (three from pure science subjects and three from social science subjects), namely history, geography, politics, physical sciences, biology, physical education, music, and the fine arts (Doug McBean, 2008). The 3+X system is common for all senior secondary high schools in China. They follow the uniform curriculum and the same set of textbooks. “Normally, almost all senior secondary school graduates wish to seek tertiary education, but only about half of them eventually attain their goal” (Luxia Qi, 2004).

Examinations play a pivotal role in student success. In China, students face numerous examinations as soon as they start their schooling (Luxia Qi, 2004).

With the rapid growth in primary education enrolment and improvements in retention and transition rates, the demand for secondary education is on the rise. In response, governments across the region use examinations as gatekeepers of access to schooling, indicators of learning outcomes, and as a means of quality control (Peter Hill, 2010).

In China, the National Higher Entrance Examination, the key of university entrance exam, is taken by students at the end of grade 12. Only top-performing students in high-stake tests may enroll in prestigious universities, get recruited for satisfactory jobs, and enjoy opportunities that are off-limits to lower scoring students.

China adopts a highly selective educational system, with fewer students at the higher end of the educational ladder. Students who have succeeded climbing high the educational ladder are those who have passed various competitive examinations, such as the NMET (Luxia Qi, 2004).

¹ 6 years in the primary school starting at the age of 6 and the next 3 years in junior secondary school

Downsides of the Strictly Exam-oriented Educational System in China Criticism

Students in China are taking a key exam that will determine their future. Focusing solely on exams, the *gaokao*, often comes at the cost of students losing their imaginations and creativities (Rob Schmitz, 2011). Despite rigid and uniform school standards, the Chinese tend to favor the American education system. New York Times columnist Nicholas Kristof (2011) wrote about this paradox:

Chinese themselves are far less impressed by their school system. Almost every time I try to interview a Chinese about the system here, I hear grouching rather than praise. Many Chinese complain scathingly that their system kills independent thought and creativity, and they envy the American system for nurturing self-reliance – and for trying to make learning exciting and not just a chore.

How exam-oriented education is perceived?

Exam-centric education causes extreme stress for students because tests are regarded as a means to prove their worth. This is a filtering process that selects a few for the higher educations. On a broader sense, exam-centric means a system that controls what students do and do not know. Thus, it sometimes manifests as an oppressive force to one's academic and social lives. Such education that holds examinations as its core component downplays the ultimate purpose of education: critical thinking.

Overview of High School Students in China

All Chinese high school students have the same objective, *gaokao*. Doing well in tests carries favour in the *gaokao*, which demands memorizing significant volumes of information for the purpose of passing tests. The high scores are also deciding factors behind getting a chance to attend elite universities. China's grueling, ultra-competitive *gaokao* exam, demands most Chinese students spend years of continual memorization and writing preparing for the exam. By the time a student reaches the age of 15, he or she has spent four or five hours a day, for over the course of nine years learning to write a minimum of 3,000 characters. Stephen Wong (2009) wrote in the Asia Times, "It's possible that no other country has as many exams as China." From school admissions and job recruitment to promotion in the civil service, exams are an inseparable part of Chinese life. Studies suggest there are currently existing 200 government-organized nationwide examinations and nearly 40 million people appear for them each year, perhaps more, if local-level tests are included in the list.

The Source of Pressure for the Chinese High School Students

An exam-centric education assigns student aptitude based only on test scores, oftentimes leading to the marginalization, if not outright disregard, of lower-performing students. In China, scores, not people, define worth. Chinese parents and teachers consider scores to be the only evaluating criteria for the students. Therefore, high scorers garner praise whereas low and mediocre scores lead to punishment. This violates the foundational education policy objective of equal opportunities for all merit standards. Exam-oriented education centers around tests and the demand

of getting an entry to the high schools and universities. High school teachers teach often completely ignore a student's creativity or ability to reason abstractly.

An exam-oriented education system not only increases a students' burden but also restricts a student's ability to learn using techniques that a particular student finds most effective. A pile of ten or more books on the desk is a common sight inside Chinese high school classrooms, half of which are exercise books, which elucidates the pressure to pass the college entrance examination. Further, most Chinese teachers, parents, and students believe university enrollment is only way to success. According to survey results, 70% Chinese high school students who fail the entrance examinations believe they have few, if any, career prospects, a belief that profoundly de-motivates students. As causes of anxiety, examinations stand second to none.

Recently, quality supplemental education tutoring has become very fashionable in China, which focuses on training a student's talents on music, painting, and fine arts. But even "the second classroom" is not free from the tests, which should have been otherwise justified as the important means for realizing equality, democracy and social justice.

The result of this exam-oriented education is a large number of weary students with inadequate psychological development, repressed personality and self-hatred, and a general lack in the development of other abilities.

Results and Discussion

Voices from students and teachers

Table 1.

| Province & Institution | No. of students | Grade | Pro-exam (%) | Anti-Exam (%) | Cheating (%) |
|-----------------------------|-----------------|-------|--------------|---------------|--------------|
| Yunnan, No.10 middle school | 43 | 11 | 58 | 42 | 60 |

The table above suggests a number of possible consequences of this system:

1. An imperfect exam system that assesses performance through a single, evaluation method based on a formalist content structure, the study period for which is not too unified and lacks an utilitarian approach, thereby, insufficient to test completely a students' genuine abilities and mere proxies regarding students' potential aptitude.

2. The students' learning attitude and learning objective are unclear. The majority students understand *why* they're learning outside of taking a test. This creates anxiety and inefficiency, causing tests to become an extremely painful experience.

3. Exam organization is not a rigorous process and reduces the authenticity of the results greatly. This also influences the credibility of the exam and affects a student's enthusiasm.

The situation demands "we need to first focus on how teachers make sense of the mandates and policies because there will be no education reforms until after

teachers interpret the policies and make decisions based on their beliefs about the new demands" (Fullan, 1996, p.12).

Cheating becomes a common phenomenon

Chinese high school students are over-burdened with homework on a daily basis that exceeds their normal capacities to memorize, oftentimes allowing students to recite knowledge, but lack the intellectual depth to synthesize or appreciate abstract concepts. Thus, to pass exams, they turn to cheating, a common thing in secondary schools, universities and in society as a whole.

Many educators say the culture of cheating takes root in high school, where the competition for slots in the country's best colleges is unrelenting and high marks on standardized tests are the most important criterion for admission. Ghost-written essays and test questions can be bought. So, too, can a hired gun test taker who will assume the student's identity for the grueling two-day college entrance exam. (Andrew Jacobs, 2010)

Why there are so many high school students cheating? Because of the nature of the competitive educational system that demands high test scores above everything else. Students worry about low performance, so attempt to mitigate the risk of failed testing by cheating on examinations. Secondly, some students want to pass the exam without studying. In both the cases, the psychological pressure caused by evaluation process that constitute the primary drawbacks of exam-oriented education. Too many tests make students get no time to digest knowledge, yet to escape the punishments and score as high as the rest, they choose to cheat. One success drives another, even when it involves cheating.

Conclusion

The modern examination system of China evolved indirectly from the old imperial examination system which, in the prior two millennia, helped to select the best administrative officials and maintained the peace of the country. In a country where connections are imperative in doing anything, it is difficult to find other fairer ways than the college entrance exams.

China's approach to education demands reform to sustain its relevancy. Educators should pay more attention to the teenagers overall harmonious development, which is only possible when the key premise of reform is opening up the education system gradually.

This is possible by starting pilot schools and running them in a non-bureaucratic way to create healthy competitiveness and to promote reform in the traditional schools. This will give rise to competition between the schools will improve their performance and overall quality, as it occurred within different industries and met great success.

Currently, the education department ignores several crucial issues and one of them is maintaining the urban-rural educational balance, which is opposed to the education department's chief responsibility of guaranteeing educational equity. The Ministry of Education should focus on making reasonable educational policies and monitoring the performance and efficacy. In other words, it must not interfere any more on anything other than the operations of the entire education system. This is

benefit students and teachers in several ways by changing the existing "standard answer-style" system and bringing in more options for an all-round development in students, especially by recognizing special, individual talents and creativity.

By unfolding the information and the evidence in terms of the validity and consistency of the test, teachers, as the major guide and organizer of the classroom, could reach a relatively sufficient level to assist student in varied aspects: learning styles correction, motivation enhancement, learning guiding, learning attitude fostering and self-assessment.

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APPENDIX

Questionnaire survey from the classroom

1. Do you think exam is help for your study?

- A. Yes
- B. No

2. How important about exam for a subject you think?

- A. Unimportance
- B. Normal
- C. Importance
- D. Very importance

3. Do you think that the importance of the course is necessary to reflect on the exam?

- A. Not necessary
- B. Normal
- C. Necessary
- D. Very necessary

4. How often the exam is happened? (Include quiz)

(_____)

5. Is there any cheat happened in exam?

- A. No have
- B. Few
- C. Many
- D. Extremely

6. Do you think you improve your knowledge because of the exam?

- A. NO
- B. Normal
- C. Yes

7. Do you fear exam?

- A. No

- B. Normal
- C. Yes
- D. Extremely

8. Do you think is that right about rank by score?

- A. No good
- B. Good
- C. Extremely

9. Do you like exam?

- A. Dislike
- B. Normal
- C. Like

10. Please briefly elaborated on your personal opinion and suggestion for exam.