



# Investigation into the Perceptions of Students, Parents, and Teachers in China's Education Reform in Grades 7 and 8

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## **Abstract**

*The objective of this study was to examine how and to what extent Grades 7 and 8 teachers have implemented educational reforms in China that have had a direct impact on students, teachers, and parents. Major sources of data for this study were separate anonymous surveys for teachers, students, and parents. The study concluded that teachers and parents liked the reform initiatives. Most teachers were able to make changes that supported the reforms that include curriculum planning, teaching strategies, student evaluation, and special education. Teachers lacked in-service professional development and resources, especially in the rural areas. Teachers experienced difficulties that arose from the conflict between activity-based learning and exam-oriented systems. Parents and society need to change their mindsets of valuing exam achievements. Chinese educators are at the crossroads of whether the 'quality' movement is what the students and society need at this time or make changes in the high stakes examination. Leaders who want to implement change will have to pay attention to the voices of stakeholders.*

**Keywords:** *Education reform, international education, middle school, activity-based learning, students, parents*

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## **Introduction**

In the 1990s, large-scale education reform orchestrated by provincial, state, or national governments emerged around the world (Fullan, 2000). Whitty, Power, & Halpin (1998) studied reforms in Australia, England, New Zealand, Sweden, and the United States. Each country had its unique history and context, but all of the governments introduced policies that sought to reformulate the relationship among government, schools, and parents and develop closer links among objectives, programs, teaching, and student evaluation. Reform in education often demands changes in practice that challenge classroom teachers (Sowell, 2005; Fullan, 2000). Teachers initially report feeling overwhelmed and under-supported (Helsby, 1999; Lasky & Sutherland, 2000; Soucek & Pannu, 1996; Taylor, 1997; Ryan & Joong, 2005). These feelings result because changing the curriculum and resultant transitioning require teachers to alter the “specific blueprint for learning that is derived from the desired results—that is, content and performance standards” (Wiggins & McTighe, 2006, p. 6). Educational change increases tension as outcomes are measured and results are evaluated against standards. These changes can trigger resistance, debate, and passivity within teachers. Teachers do not resist change; they simply resist the transitions required to change because transitioning requires letting go of tried and true lesson plans, activities, and assessment modes in order to move into a new reality (Sowell, 2005). This is an important realization since teachers play key roles in reform as the agents of change who work directly with students (Clarke, 1997; Fullan, 2001). Fullan (1996) explains, “We need to first focus on how teachers make sense of the mandates and policies because there will be no educational reform until after teachers interpret the policies and make decisions based on their beliefs about the new demands” (p.12). We must also pay attention to the influence of reforms on students (Earl & Sutherland, 2003). Fullan & Stiegelbauer (1991) posed the question: “What would happen if we treated the student as someone whose opinion mattered in the introduction and implementation of reform in schools?” (p. 170). Levin (2000) claimed there must logically be a role for students in shaping the nature of schooling and hence of reform. What about the role of parents? Do their opinions matter? According to Ma, Lam & Wong (2006), in China, most parents have only one child in the family and “it is simply natural that they expect their only child to enjoy high quality education” (p. 210). The objective of this study, therefore, was to investigate the perceptions of teachers, students, and parents on the implementation of education reform in China. This research drew attention to reforms that had direct impact on teachers and, in turn, on students and parents. Topics studied include curriculum planning, teaching strategies, assessment and evaluation strategies, special education programs, high-stakes examination, sex and gender attitudes, and parental involvement.

China has, for a long time, adopted a centre-periphery curriculum development system. Virtually all schools follow the national curriculum (Ma et. al, 2006). For over 3000 years the curriculum demanded that students study the same material, memorizing texts and writing examinations in a manner that conformed to a prescribed style of written argumentation within the Confucian tradition (Armstrong, 2003). In 1999, the Chinese Department of Education introduced its 'quality education' reform. Similar policy and curriculum changes were made in England and Ontario, Canada. The *Outline of Reform on Curriculum in Basic Education* was published in 2001 and about half of the schools had already implemented the reform by 2003 (Liu & Qui, 2005). This reform required major changes in the schools. In curriculum content, student understanding and application of concepts were emphasized. In classrooms, special attention was aimed at each Chinese teacher's use of *varied* teaching and learning methods and to a *variety* of assessment modes (Liu & Qi, 2005). There was imminent pressure to cater to individual difference and, to promote generic skill development and high-order thinking instead of rote learning (Zhong & Cui, 2003). These changes required extensive transitioning as traditional modes of teaching, predominately lecturing, needed to be replaced by a *variety* of new modes of instruction which seemed to be the centrepiece of this educational reform effort. However, there has been little attention paid to the reform in China because of restricted access to data and language barriers.

### *Educational Significance*

Teachers seldom implement a curriculum exactly as stated. They adopt a practical stance in deciding what to teach and how to teach it (Doyle & Ponder, 1976/77). Studying teachers' implementation can therefore help us understand the change process. Educational transitions involve human, personal, and political factors (Levin, 2000). Human factors include the attitudes and capacities of teachers, students, and parents. Personal factors include such elements as philosophy, values, and social and ethical orientations. Educational change efforts reflect political pressures such as government ethos, rationalization, flexibility, and budgetary support. Few large-scale reform studies concern China. This study sheds some light on the topic.

Leaders in China and other jurisdictions who want to implement change will have to pay attention to both human and personal factors that make a difference in successful implementation of school reforms. Findings and recommendations from this study will assist Department of Education officials, researchers, school administrators, teachers and parents in designing, adapting and implementing exemplar strategies on teaching, assessment, meeting the needs of students with special needs, and addressing issues such as gender equity, post-secondary opportunities and high-stakes examinations. This study also gives us insight into educational

reform experiences in culturally different context. Results will be useful to stakeholders and educators in China and globally.

### **Perspectives: China Education Reform “Quality Education”**

In 1999, “quality education” reform was introduced in China. Major changes included the introduction of new curriculum, student-centred teaching and learning, and the development of special education. According to Aibe Chen from the Department of Education (as quoted in Kappa Delta Pi, 2002), Chinese classrooms are usually teacher-centred and very structured, and students are passive learners. Chinese education tends to emphasize book knowledge rather than practical ability. Because of government examinations, all teachers have the same syllabus and must follow it. China is trying to change the rigid situation through curriculum reform. Chen concluded that Chinese teachers must learn how to teach students in different ways and adapt some of the strategies used in the West, e.g., activity-based and group learning. As parts of the reform, new textbooks and syllabi have been developed, new assessment and evaluation strategies have been introduced, and more flexibility has been given to local schools. In-service workshops were offered to teachers. Chen concluded that the biggest challenge for teachers will be how to integrate new methods and yet maintain the strength of Chinese education with an emphasis on basic knowledge and skills. Chinese reform has another roadblock. Graduates at each level wishing to continue their education take an entrance examination into junior and senior secondary schools and colleges respectively. Zhang (2004) stated that the solid tradition of exam-oriented education had affected courses, teaching methods, teacher-student relationships, and the system of evaluation. Because reform conflicts with China's traditional school system of entrance examinations, it remains doubtful whether “quality education” efforts will be successful. Zhang (2004) also claimed that there was little research on “quality education” in China, and that it was very important to carry out a comprehensive research on reform efforts and the development of basic education.

### **Research Methods and Sources of Data**

Major sources of data for this study were separate anonymous surveys for teachers, students, and parents. Surveys for the first two stakeholders were adapted and translated from surveys conducted in a study on teachers’ and students’ perceptions of Ontario education reform (Ryan & Joong, 2005). Sample questions in both surveys involved ranking (5-point Likert scale) of how often a teaching or evaluation strategy is used for a course. The parents’ survey contained questions pertaining to the reform. All three surveys contained questions on high-stakes examinations, gender attitudes, and parental involvements. Questionnaires were field tested at a school to ensure that respondents understood and could complete all items as expected. This test-retest method meant that refinements were made to all elements within the survey, especially the questionnaire items, in order to

facilitate reading, interpretation, comprehension, and completion. The population for this study involved Grades 7 and 8 students in Guangxi Autonomous Region, a poor region in western China. Nine sample schools were selected representing large and small urban cities, remote areas, ethnicities, and varied SES (socio-economic status) backgrounds in the Region. At each sample school, 25 randomly selected teachers, 100 students, and their parents completed questionnaires. Students completed the questionnaires in class. Since the students and teachers questionnaires were used previously in studies in Canada (Ryan & Joong, 2005) and modified for this study, and all questionnaires were field tested, concerns with validity and reliability were addressed. Teachers and parents completed the questionnaires individually at their own time. Coding was performed by 24 undergraduate students working in pairs in China with periodic verifications by researchers. SPSS software was used to develop percentages for closed question responses. The open-ended items were scaled on a continuum from "strongly disagree" to "agree." These were also counted, and the frequencies of the responses were then converted to descriptive data such as percentages.

## **Results**

### *Students' Voices*

Of the 699 student respondents (a return rate of 78%), 56% were female and 44% were male students, and 57% were in Grade 9 and 43% in Grade 10. Ethnic groups were mostly Zhuong (66%), Han (14%), and Maonan (13%). The mean number of courses sample students took was 10 (SD=1.5). Compulsory courses include Chinese literature, English, Math, biology, history, geography, and politics. According to student respondents, in general, teacher talk was the most often used teaching method; individualized work, questioning, and discussions were sometimes used. Teachers rarely used group work, activities, and student presentations. When asked what the preferred teaching method was for each course, student respondents offered a variety of answers depending on the course. Preferred methods were teacher talk and individualized work in mathematics, experiments/demonstrations and teacher talk in science, group work and discussions in politics, teacher talk and activities in physical education, and teacher talk, listening to music, and musical activities in music. It is clear that students preferred a variety teaching strategies whereas teacher talk was the dominant strategy used by teachers. As for student evaluation, examination and tests were often used and class-work and homework were sometimes used.

**Table 1** Correlation between Course Variables in Student Sample (n = 699)

	Course Interest	Course Difficulty	Course Quality	Classroom Behaviour
Course Achievement	0.548**	-0.323**	0.238**	-0.129**
Course Interest		-0.213**	0.331**	-0.094*
Course Difficulty			-0.110**	0.175**
Course Quality				-0.013

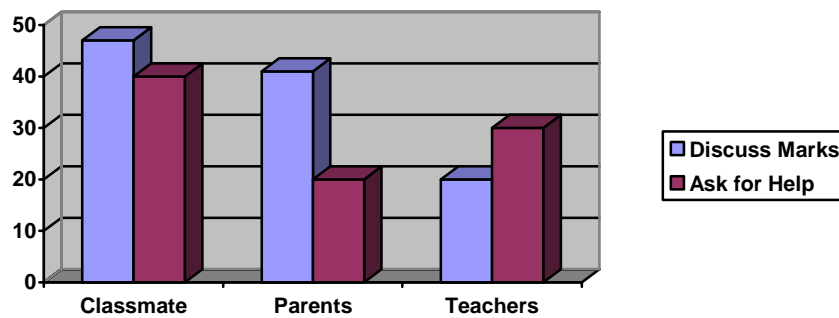
\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

Correlation between students' perceptions of course variables is shown in Table 1. There were significant correlations between course achievement and course interest (.548\*\*), course difficulty (-.323\*\*), course quality (.238\*\*) and classroom behaviour (-.129\*\*). This means that course performance was influenced by student behaviours, and the quality, interest, and easiness of the courses as perceived by students. There was a positive significant (.175\*\*) correlation between course difficulty and classroom behaviour. More difficult courses meant worse behaviours because if students do not understand, they tend to act out or start chatting.

The mean numbers of hours spent on homework and studying were 1.96 hours and 1.62 respectively, giving a total of almost 3.5 hours per day. Tao (2003) had similar finding that in order to achieve good results, students were often overloaded with homework and had no time to develop their own interests.

When asked to whom they would go to discuss school marks, most would always/often go to friends/classmates or parents than teachers (see Figure 1). Similar results were obtained when asked to whom they would ask for help when having difficulties. In fact, two-thirds of the sample students would try to solve the problems themselves. On gender issues, three-quarters of the respondents claimed that there is no relationship between gender and ability and achievement. Over 85% of the student respondents claimed that their families would want them to go to university if they had the ability. However, about half of student respondents claimed that their families would have difficulties in sending them to universities for financial reasons. When asked in an open-ended question for their opinions on the examination system, about half of the respondents did not reply. Of those who responded, 41% said it's not good. On the issue of dating while in school, top responses were: to have normal friendships, focus on studies at this age, and date as long as it did not affect school work.



**Figure 1** Whom do Students go to for Help

### *Parents' Voices*

Of the 468 parent respondents (return rate of 52%), 70% were males and 30% were females. Their occupations were farmers (40%), small business owners (12%), professionals (11%), government employees (6%), teachers (4%), and unemployed/ retired (5%). The self-ranked SES of parents included high (2%), medium (41%), and low (57%). Educational backgrounds included primary (15%), junior secondary (40%), senior secondary (32%), technical college (7%), and university (5.6%).

*Satisfaction with Curriculum and Teaching.* Of the parent respondents, 49% were satisfied with the curriculum and teaching, 8% were not, and 43% had no opinion. When parents were asked in an open-ended question what areas need improvement, their top responses were: more practical and relevant courses (90 respondents); development of students' creativity, interest, and potential (43); more optional courses (40); reduction of the course load (35); improvement of teaching strategies (32); use of new resources/computer technology (21); and more disciplines (14).

*Curriculum Reform.* Parent respondents were given a list of reform initiatives in the schools and asked to rate their level of agreement on a 5-point Likert scale, "disagree" meant they chose 1 or 2, and "agree" meant 4 or 5. Results are in Table 2.

**Table 2** Parents' Perceptions of Reform Initiatives (n = 468)

	<i>Agree</i>	<i>Disagree</i>
Parents and teachers support and encourage each other	69%	7%
School encourages parents to make suggestions for improvements	67%	8%
School administrators and parents support each other	65%	9%
School has enough resources to undergo new educational reforms	64%	9%
School goals are designed to improve curriculum and teaching	61%	6%
School finds the right balance between the number of changes	41%	13%

In general, about two-thirds of the parent respondents were satisfied with the reforms. It is clear that parental involvement was high in the sample schools.

*Gender and Education and the Examination System.* Over 62% of the parent respondents claimed that they would want girls to go to continue their studies if they have the abilities. However, almost 60% of parent respondents claimed that their families would have financial difficulties. When asked for their opinions on the examination system, 44% said exams should be kept, 34% suggested modifications, 4% suggested abandonment, and 16% had no opinion.

#### *Teachers' Voices*

The 154 teacher respondents (return rate of 68%) from nine sample schools completed the teacher questionnaires. Of these, 53% were female and 47% were male teachers, 62% teach Grade 7 and 38% teach Grade 8. The mean teaching experience was 12.5 years. Sixty-eight percent completed teachers college studies and 27% completed university studies (usually without teacher training). Teachers respondents were well distributed across subject areas with the top four being Chinese literature, Math, English, and science. Mean class size was 52, but teachers preferred smaller classes, with a mean of 44. Each teacher gave an SES spectrum estimate for his or her own school. The results were low (61%), middle (23%), and high (4.4%). These numbers are comparable to those of parents' own estimate above.

*Education Reforms and Changes.* The following were reform initiatives in the sample schools as perceived by the teacher respondents: school administration and management systems (65%); curriculum, teaching, and evaluation strategies (47%); and teacher professional development (37%).

*Curriculum Planning, Teaching Strategies and Student Evaluation.* On average, teacher respondents spent 26 hours each week preparing classes/marking. A majority (82%) used the new national curriculum materials. Most (64%) claimed that the curriculum was good while 4% claimed otherwise. Most claimed that they did not receive sufficient resources (73%) and professional development (78%). Ma, Lam, and Wong (2006) had similar findings in their study. Teacher respondents would like to receive more professional development in teaching methods (77%), classroom management (68%), curriculum development (66%), use of computers in the classroom (64%), and assessment strategies (44%). Teaching methods used most often included teacher talk (88% replied always or often), questioning (58%), discussions (48%), activities (43%), and individualized learning (41%). Teachers sometimes used group work (28%), experiment/demonstration (28%), and student presentations (17%). As for student evaluations, teachers often used traditional tests (78%) and exams (61%). They also used classwork (74%), homework (56%), and performance/essay (33%). When compared with students' responses to similar questions, it seems that teachers claimed that they used more



varieties of strategies than the students claimed. About one-third (37%) of the teacher respondents claimed there was little to no management problems and about twenty percent of the teacher respondents often experienced problems. They said that concentration time on task was between average (45%) and good (49%). Top reasons given for lost time included: lack of self-discipline by students, boredom with school, and lack of basics and/or interests. In general, 41% of teacher respondents were satisfied (versus 4% unsatisfied with 55% in-between) with their courses. Areas that needed improvement included curriculum and teaching strategies using student-centred learning, student-teacher relationships, student motivation, and use of technology.

*Meeting the Needs of Students with Special Needs.* Little more than one-third of the sample teachers answered this open-ended question. The percentage of "special" students in their classes was mostly under 10%. Most of the identified needs involved learning and behavioural difficulties. Provisions were made by teachers (42%), by the school (30%), and by the students/parents (28%). Teachers provided modified curriculum and extra individual help and for learners with learning difficulties, special seating arrangements for behavioural or "active" students, and enrichment for gifted students.

*Teachers' Personal Opinions of Changes in Education and Students.* Major changes in the reform involved changes in curriculum, textbooks, teaching strategies that included activity-based learning and group work, meeting the needs of special education students, and the use of information technology. Negative effects of the reform as perceived by sample teachers included reduction in student motivation, management issues, and deterioration of teacher-student relationships. Most teacher respondents offered positive comments about 'quality education reform' as changes reflected on societal changes. What follows are typical anecdotal comments made by sample teachers. One teacher said, "The government put more money in education, students pay less, and we have better classrooms and dormitories." Another said, "Schools have more facilities. More students have the chance to do experiments." However, a few claimed, "We don't have enough facilities, teaching reform is just all talk and no action." This is especially true in rural schools. One teacher described the change as, "in the past, students begged teachers for education, but now teachers are begging students to accept education." When compared with previous students, most teachers who responded felt that current students have weaker backgrounds, are less motivated, and have poorer attitudes. One rural teacher said, "Influenced by society, many countryside students' study attitudes are getting worse." Another said, "Most students in Grades 7 and 8 don't know how to study by themselves. Students don't have active attitudes towards studying. Their abilities are getting weaker." Yet another said, "Great change happened. Students don't have enough motivation and active attitude. Their abilities are worse. Some of them even make progress in

cheating.” One teacher explained, “The Law of Compulsory Education changed students’ attitudes to negative.” Another major reason is the thought that, “education is useless” in our society, as job opportunities for the educated are few. This is especially true in rural areas. On the other hand, some students were more active and independent and were better at problem solving and critical thinking skills. One teacher said, “Students’ study attitudes don’t change. But their abilities change. They think faster and deeper.” Quite a few respondents expressed the frustration mentioned by Tao (2003), that the exam-oriented teaching and learning had greatly restrained the creativity and potential of students. One teacher said, “There are few changes in education for all-round development, our teaching is still test-oriented.” Another said, “Traditional test-oriented teaching is still very common. But teaching methods and teaching concepts have obviously changed.” Quite a few teachers felt that the traditional exam system is in conflict with “quality education.” However, as one teacher summed up, “the idea of ‘Quality Education for All’ has already been carried out.”

### **Conclusions**

This study drew attention to many educational reforms that have had direct impact on teachers and, in turn, on students and parents in China. The reforms include curriculum planning, teaching strategies, student evaluation, special education, and high-stakes examination. In general, about half of the teacher respondents and parents were satisfied with the reforms. Teachers indicated that there was inadequate support in terms of resources and professional development, especially in the two key areas of the current reforms: teaching methods and curriculum development. Resources in rural schools are scarce and teachers in rural schools have to go to cities for training (Ma et. al, 2006). Within teaching practices, most teachers claimed that they were using a variety of teaching methods, although teacher talk still dominated. Participant students indicated that their teachers used lecture and individualized learning methods predominantly. As for student evaluations, both sample teachers and students claimed that traditional tests and exams were used most often. Provisions were made by teacher respondents in meeting the needs of special needs students in mainstreamed classes. Teachers also pointed to the negative effects resulting from reforms or societal changes. These effects included low student motivation, management issues, and lack of respect for teachers. Results suggested that reforms had a direct impact on both students and teachers. On gender and equity issues, when asked if girls should have the ability to continue their studies, a majority of the respondents from all three groups claimed that they should. On dating, most parent and student respondents thought that it is normal for students to date as long as it does not interfere with schooling. On the issue of the examination system, only 38% of the parent and 41% of student respondents claimed that they should be modified or abandoned.

### **Discussion**

Observations from the literature review on the initial stages of the reform and results of this study indicate that teachers in China have dedicated themselves to the education of students and have made the necessary changes in their curriculum, teaching strategies, and student evaluation methods to adopt most of the reforms. A majority of teachers in this study were satisfied with reforms yet struggled with transitioning. Teacher respondents had difficulty changing from their current teaching mode (predominantly teacher talk) and student evaluation modes (tests and examinations). Teachers' perspectives differed from students' perspectives; teachers claimed they were using more activity-based teaching and supporting a greater variety of learning modes than before yet students indicated teachers continued to employ predominately teacher talk and individualized work methods. Teachers requested more in-service training and resources. As for inclusion of students with special needs, provisions (accommodations/ modifications) were made by teacher respondents as necessary. Classroom management needs increased as new modes of teaching and transitioning created new situations for students to deviate from expected behaviours. Revisions in teacher training would have an impact on the implementation of new modes of teaching and classroom management and the absence of these is noted herein as a reform flaw. Most of the teacher respondents indicated the need for more training in teaching methods (activity-based and group learning) and curriculum development, classroom management and the use of computers in the classroom. Change in education requires stakeholder involvement, precise timing, and large amounts of support for in-service training (Ryan & Joong, 2005; Earl et. al, 2002). Without resources and in-service training, teachers have struggled to bring about a portion of the planned governmental changes in pedagogy and practices as outlined in the reforms. Some incremental change has been possible, yet teacher respondents in this study reported feeling overwhelmed and under-supported as the large-scale reforms took hold. Ryan & Joong (2005) had similar findings in their study of reforms in Ontario.

With the current examination system, teacher respondents claimed that there was little room for introducing activity-based learning and other experimentation. Huang (2004) was correct in saying examinations still guide teaching and learning in schools, and that China should reform the examination system to improve the quality of education. However, only 4% of the parent respondents suggested that the exam system should be abandoned and 34% suggested that it should be modified. Tao (2003) suggested that reforms involve not only the entire education system but also society. Parents and other citizens need to place less emphasis on examination achievements. Zhang (2004) agreed with Tao (2003) that the solid tradition of examination-oriented education has affected the curriculum, teaching methods, teacher-student relationships, and the system of evaluation and selection. Chinese teachers, educators, and educational leaders should decide whether the 'quality' movement is what students and society need at this time. Educational leaders in both China

and other jurisdictions with high-stakes examination systems who want to implement change will have to make similar decisions.

### **Recommendations**

Aibe Chen from the Chinese Department of Education recommended that Chinese teachers integrate new methods and yet maintain an emphasis on basic knowledge and skills (Kappa Delta Pi Record, 2002). Huang (2004) recommended that teachers make favourable conditions for learning by experimentations. This includes making good use of resources and facilities, stimulating students' creative abilities, supporting cooperative learning, and using diversified evaluations. Sample teachers struggled to do this. In-service professional development and resources were lacking in rural areas and in some cases, poor performing schools. This hampered implementation. It is recommended that Department of Education officials and school leaders provide more funding for resources and in-service training, in particular, in rural schools where resources are less abundant and teachers are not as well trained as in urban areas. Ma, Lam and Wong (2006) had similar recommendations. Second, it is recommended that all teachers adopt, or continue to use, a variety of teaching methods, and reduce the amount of lecture time. Third, Department officials should "reform [the] examination system to improve the quality of education." (Huang, 2004) This recommendations was carried out since the the collection of data. For example, reform included local and provincial input of examination results as is done in some jurisdictions in the West.

Teachers play key roles in reform as the agents of change who work directly with students. Fullan (1996, p. 12) suggested that education reform depends on how teachers make sense of the mandates and policies. Reform needs widespread input, acceptance, and implementation if it is to have the desired effect. In the case of large-scale reform, the inclusion of the voices not only of teachers, but also of students and parents is crucial in the change process. Leaders who want to implement change will have to pay attention to the voices of stakeholders in deciding what to study as well as what to change. The school level factors that make a difference in the successful implementation of school reforms are the creation and attainment of a shared vision, the provision of necessary resources and professional development, and the establishment of a climate supportive of change.

Educational leaders and teachers in all jurisdictions should learn from the Chinese reform efforts. The Ministry of Education is paying attention to the stakeholders. It is also hoped that the findings and recommendations from this study will amplify the signals sent from similar studies concerning education reforms and assist stakeholders in designing curricula, in adapting exemplary teaching strategies, and in implementing quality assessment strategies.

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