This paper reports on a study that examined the effects of student-level orientation to schooling on students' perceptions of a desirable school environment. The study involved 762 students in grades 7-12 in 4 Hong Kong secondary schools. The students completed a survey on their perceptions of independent learning, affinity to teachers, learning repertoire, and orientation to learning. Students with high orientation to learning (those with scores at or above the mean) were compared with students with low orientation. Analysis of variance found that students high in orientation to learning scored significantly higher in the other three measures. The results showed that students who looked forward to lessons, worked hard, put in a lot of effort, and believed that hard work would be rewarded were likely to be independent learners who got on well with teachers and coped well with the learning and teaching patterns of the school. This suggests that school-improvement policies or initiatives that aim to facilitate independent learning, nurture students' affinity to teachers, and provide a favorable learning repertoire should also consider students' positive orientation to learning that would assist them to become lifelong learners. (Contains 1 appendix and 26 references.) (AUTHOR/WFA)
Orientation to Schooling and School Improvement

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Abstract

Seven hundred and sixty-two students of 7th to 12th grades in four Hong Kong secondary schools completed a survey asking about their perceptions in independent learning (3 items), affinity to teachers (4 items), learning repertoire (4 items) and orientation to learning (4 items). The reliabilities of the 4 scales were good (alphas = .70, .72, .71, and .74, respectively). Principal component analysis supported the 4 factors and the correlations among them (rs from .19 to .51) showed that the factors were distinct from each other. Students with high orientation to learning (those with scores at or above the mean) were compared with students with low orientation. Analysis of variance found that students high in orientation to learning scored significantly higher in all of the other 3 measures. Thus the results showed that students who look forward to lessons, work hard, put in a lot of effort and believe that hard work is rewarded are likely to be independent learners who get on well with teachers and cope well with the learning and teaching patterns of the school. This suggests that school improvement policies or initiatives that aim to facilitate independent learning, nurture students' affinity to teachers and provide a favorable learning repertoire should also consider students' positive orientation to learning that would assist them to become lifelong learners.
Introduction

Right after the World War II, academics have devoted tremendous effort to the improvement of the performance of schools to foster students' learning. There are numerous papers, policies, Acts, reforms, changes, improvement schemes, etc., in different countries aiming at the ultimate goal of helping our students to learn better and adapt better to the ever-changing world. MacBeath and Mortimore (2001), Hopkins (2001) and Louis, Toole and Hargreaves (1999) have reviewed concisely what governments and academics have done in the past 30 years in relation to the improvement of school performance, using various terms such as school effectiveness, school improvement, effective schools, school development, or school-based management. Many different countries have a number of nation-wide initiatives to improve their school effectiveness and different places may have different focuses. Of the many variables that may be of interest to educators and researchers, the present study focuses on four of the variables described by Hopkins, West, Ainscow, Harris and Beresford (1997)—independent learning, affinity to teachers, learning repertoire and orientation to learning—and examines their relationships. Whereas most school development initiatives have emphasized school-level and system-level improvements, the present study examines the effects of student-level orientation to schooling on students’ perceptions of a desirable school environment.

The Education Scene in Hong Kong

Since the issue of the Hong Kong Government's first Education Commission Report in 1984 (Education Commission, Hong Kong, 1984), reforms in the Hong Kong education sector have been vigorous and fast. A number of school improvement initiatives have been introduced. They include “target-oriented curriculum”, “school management initiative”, “school-based management”, the development of a general studies curriculum, the merging of special education with the mainstream, the widespread introduction of a Putonghua (the official language in mainland China) curriculum in both primary and secondary schools, the use of information technology techniques in instruction, the mandatory submission of school development plans to the Education Department, and the formal implementation of staff appraisal system in schools (Curriculum Development Council, Hong Kong, 2001; Curriculum Development Institute, Hong Kong, 1999, 2000; Education Commission, Hong Kong, 2000, 2002). Whereas most of these reforms have been at the school level with the purpose of improving school effectiveness, the ultimate purpose is to improve students’ learning.

School Effectiveness

A desirable school environment may be reflected at both the student and the school levels. At the student level, the ultimate aim is perhaps development into an independent learner who can pursue new knowledge and skills the whole life. In the turbulent times of Hong Kong in the past few years—the return of sovereignty to China, the sudden economic downturn, China joining the World Trade Organization, the worldwide change into a knowledge-based society, etc.—the drastic changes have triggered the agenda for fundamental changes in the Hong Kong education system, as
spelt out in the “Reform Proposals for the Education System in Hong Kong” which was approved by the Hong Kong Government in October 2000. The concept of learning for life and learning through life is highly advocated in the reforms (Curriculum Development Institute, Hong Kong, 1999, 2000; Education Commission, Hong Kong, 2000, 2002). As a consequence, school improvement would mean, at least partly, the extent to which the school can provide a nurturing environment for the development of independent learners.

*Developing the independent learner*

While a number of changes have occurred in recent years, including changes in the admission systems for all the three sectors of primary, secondary and university education, reforms in the school curriculum, improvement in teaching methods and the assessment mechanisms, increase in senior secondary school places, expansion in the provision of post-secondary education, the most important of all changes is probably the promotion of a culture of continuing education (Curriculum Development Council, Hong Kong, 2001; Education Commission, Hong Kong, 2000, 2002). Thus in line with the worldwide promotion of lifelong learning (UNESCO, 2000), even though most of the recent attempts to change appeared to be at the system or school level, one of the most important outcomes of all reforms is the development of students into independent learners who are willing to and capable of pursuing lifelong learning.

Hence, in the era of knowledge explosion, knowledge and information have increased to such an extent that they have become almost unmanageable. People’s judgment of the standard of good quality and acceptable standards has also changed and has in fact kept on elevating day after day. The globalization of economy has further created an unprecedented situation in which educators may find it almost impossible to educate appropriately the next generation to cope with the evolving changes. Solutions that once worked well in a certain place may not be effective in a new environment or in a different context. This may explain why it seems that policy makers, academics, administrators and teachers are unrest in terms of offering new ideas, new methods and new solutions to handle the issue of effective schooling. Thus it would be essential for a learner to be reasonably organized and suitably self-disciplined to become an independent learner and the school should be a place that provides such an environment so as to effectively nurture the characteristics of independent learners. Thus a desirable school environment is one that develops in the students the capability of learning to learn (Curriculum Development Council, Hong Kong, 2001; Ford & Opitz, 2002; Line, 2000).

*Affinity to teachers.*

Whereas the ability of a school to provide an appropriate environment to develop independent learners may be an important indicator of school effectiveness, another indicator of school effectiveness is probably the level of student affinity to teachers. Hopkins, West, Ainscow, Harris, and Beresford (1997) has identified this as an important aspect for school improvement because the way teachers interact with their students in the school may have direct and tremendous impacts on student behaviour and achievement outcomes. Thus if students get on well with the teachers in the school, if the teachers are found to be helpful and encouraging, and if the students are willing to approach their teachers when in need of help, then the school is more likely
to be effective.

**Learning repertoire.**

Yet another indicator of school effectiveness that is important to examine is the way learning activities are conducted in the school. According to Hopkins et al. (1997), schools that are effective would likely display a variety of learning and teaching activities. Naturally, an effective school would tend to accommodate effective teachers. However, the teachers in a school can hardly be effective unless they are allowed to follow their ideals and apply their personal philosophies in educating the younger generation (Fereshteh, 1996). Thus in an effective school, we would expect the teachers to use a wide range of learning strategies and activities in the classroom when different teachers have different philosophies and teaching approaches that may be unique. In an effective school, the activities in the classrooms ought to be interesting and there tends to be a lot of group work involving the participation of different students. School improvement should therefore emphasize learning repertoire as one of the important aspects.

**Orientation to Learning**

Whereas an effective school would be expected to display the favourable characteristics of independent learning, affinity to teachers and learning repertoire described above as indicators of school effectiveness, different students in the school may have different perceptions about these characteristics. Hopkins et al. (1997) describe orientation to learning as students’ interest in learning, their willingness to work hard and to invest an effort in their academic pursuit. These affective aspects are believed to be important at the student level. Consistent with research in the areas of school motivation (e.g., McInerney, Roche, McInerney, & Marsh, 1997; McInerney, Yeung, & McInerney, 2001) and self-concept (e.g., Marsh & Yeung, 1997a, 1997b; Yeung & Lee, 1999; Yeung et al., 2000), the perceptions of a student about his or her ability and liking of schooling and the willingness to invest an effort in academic work will have strong impacts on academic achievement.

Thus students who are motivated, willing to put in an effort, and like to work hard at school may be expected to have a favorable perception of the school environment in terms of student affinity to teachers and the learning repertoire at school. Also, they may tend to develop into independent learners. In contrast, those students who are unmotivated, unwilling to invest an effort, and dislike schooling may be expected to feel unfavorably about their teachers, do not find lessons interesting and are not ready to develop into an independent learner.

Consistent with these expectations, McCall, Smith, Stoll, et al. (2001) reported results obtained from the study of students’ attitudes in a classical longitudinal study, the Improving School Effectiveness Project (ISEP), carried out in Scotland from 1995 to 1997. It was observed that among other important issues, there was a downward trend of scores for students, from P4 to S4, responding to the items “liking for school” and “interest in school work”, showing that attitudes do not vary in the same manner as academic attainment. However, the scores for items such as “fairness of teachers” and “encouragement from teacher to do well” were fairly stable from P4 to S4. The perplexing message is the students’ dropping of orientation to learning in secondary school.
Perhaps as students' orientation to learning drops, their perceptions of the school environment may continue to drop as well. Consistent with McCall et al. (2001), Wong and Yeung (2002) have also shown that high school students in Hong Kong may experience significant drops in their school motivation and academic self-concept as they proceed from junior to senior secondary classes. Thus the drop in student orientation to schooling may be a serious concern in any attempt of school improvement. Students who do not have the motivation to do well in their academic work and who do not feel good about their learning are unlikely to perceive any positive characteristics of an effective school. Then all the seemingly good deeds of school improvement at the school and system levels would hardly be useful if many of the students do not benefit from them.

This paper presents the results of a quantitative study in Hong Kong on 762 students of 7th to 12th grades from four secondary schools on the association of their orientation to learning with their affinity to teachers, independent learning attitude and their learning repertoire. It is hypothesized that students high in their orientation to learning would have more positive perceptions of a desirable school environment reflected in the form of the capability in developing independent learners, students’ affinity to teachers and a remarkable range of learning repertoire. The study is important because this will shed light on how to promote an appropriate school environment for the lifelong learning of students to cope with the ever-changing society.

Method

The Sample

The participants were 766 students from four secondary schools in Hong Kong (21% from 7th grade, 20% from 8th grade, 21% from 9th grade, 21% from 10th grade, 5% from 11th grade, and 12% from 12th grade). The analysis was based on survey responses from students who had complete data (N = 762).

Material

Apart from items for collecting demographic data, there were a total of 15 items forming four constructs. They were Orientation to Learning, Affinity to Teachers, Learning Repertoire, and Independent Learning. The students responded on a Likert-type scale from 1 = absolutely disagree to 4 = absolutely agree. The items of the four constructs were adapted from the student-level conditions questionnaire of the “Improving the Quality of Education for All” (IQEA) project (Hopkins, West, Ainscow, Harris, & Beresford, 1997; Hopkins, 2001) and are presented in the Appendix. The responses were coded such that higher scores reflected more favorable perceptions. For the construct of Independent Learning, there were originally four items, but one item was deleted in the present study because it unreasonably lowered the reliability of the scale when it was included. Thus Independent Learning had only three items whereas the other scales had four items each.
Statistical Analyses

Preliminary analysis

We first examined the alpha reliability of each of the four constructs. Then we conducted a principal components analysis to test the ability of the 15 items to form 4 distinct factors. Based on the constructs established in the preliminary analysis, the scale mean of each construct was computed by taking the average of the items pertaining to that construct. We examined the correlations of these four scale means to scrutinize the discriminant validity of the measures. Support for discriminant validity of the measures requires the four factors to have reasonably low correlations such that they are distinct from one another.

Comparisons Between Students With High and Low Orientation to Learning

The critical concern of the present study was whether students with a high or low orientation to learning differed in their affinity to teachers, learning repertoire, and independent learning. We first examined the scale mean of the Orientation to Learning construct and then divided the sample into two groups such that all group 1 students had a score for Orientation to Learning lower than the scale mean and group 2 students had a score higher or equal to the scale mean. A one-way analysis of variance (ANOVA) was then conducted for each of the other three variables, namely, Affinity to Teachers, Learning Repertoire, and Independent Learning. The analysis was conducted with SPSS (Nie, 1994; Norusis, 1994a, 1994b, 1994c).

Results

Preliminary Analysis

The alpha reliability estimates for the four constructs were good (alphas = .70, .72, .71, and .74 respectively for Independent Learning, Affinity to Teachers, Learning Repertoire and Orientation To Learning). Principal components analysis of the 15 items with varimax rotation (Nie, 1994) revealed four distinct factors with eigen values of 4.82, 1.82, 1.11, and 1.03 respectively explaining 59% of the total variance. As expected, the 15 items formed four distinct a priori constructs. The items of each of the four constructs were averaged to form a scale score. The correlations among the four scale scores were examined. These correlations are presented in Table 1. The correlations were small to moderate (rs ranging from .19 to .51), providing support for the discriminant validity of the four constructs.

Table 1. Correlations Among the Four Constructs

<table>
<thead>
<tr>
<th></th>
<th>Independence</th>
<th>Affinity</th>
<th>Repertoire</th>
<th>Orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independence</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affinity</td>
<td>.30**</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repertoire</td>
<td>.19**</td>
<td>.50**</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Orientation</td>
<td>.43**</td>
<td>.51**</td>
<td>.44**</td>
<td>--</td>
</tr>
</tbody>
</table>

Note: ** p < .001. N = 762
**Between-Group Differences**

To test whether students with a high or low orientation to learning differed in their affinity to teachers, learning repertoire, and independent learning, we divided the sample into two groups based on the scale mean of the Orientation to Learning construct. Group 1 students had a score for Orientation to Learning lower than the scale mean. Group 2 students had a score higher or equal to the scale mean. The mean score for Orientation to Learning was 2.38. Thus, students with a score lower than 2.38 were placed in group 1 and those with a score equal or greater than 2.38 were placed in group 2. The means and standard deviations of the scores of the three dependent variables (i.e., Independence, Affinity and Repertoire) for the two groups of students are presented in Table 2. The one-way ANOVAs found that for all three variables, namely, Affinity to Teachers, Learning Repertoire, and Independent Learning, the scores were significantly higher for group 2. Thus students high in Orientation scored significantly higher in Affinity to Teachers, \( F(1,760) = 134.94, \text{MSE} = 0.31, p < .001 \), in Learning Repertoire, \( F(1,760) = 113.56, \text{MSE} = 0.32, p < .001 \), and in Independent Learning, \( F(1,760) = 104.00, \text{MSE} = 0.38, p < .001 \). In sum, students with a higher Orientation to Learning tended to have a higher affinity to teachers, higher learning repertoire, and high independent learning capabilities.

### Table 2. Means and Standard Deviations and Analysis of Variance Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Low</th>
<th>High</th>
<th>Multivariate F</th>
<th>MSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independence</td>
<td>M</td>
<td>2.92</td>
<td>3.38</td>
<td>104.00**</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>(0.57)</td>
<td>(0.56)</td>
<td>0.38</td>
</tr>
<tr>
<td>Affinity</td>
<td>M</td>
<td>2.23</td>
<td>2.69</td>
<td>134.94**</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>(0.55)</td>
<td>(0.55)</td>
<td>0.31</td>
</tr>
<tr>
<td>Repertoire</td>
<td>M</td>
<td>2.11</td>
<td>2.54</td>
<td>113.56**</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>(0.57)</td>
<td>(0.56)</td>
<td>0.32</td>
</tr>
</tbody>
</table>

Note: ** \( p < .001 \). \( N = 762 \)

### Discussion

The results showed that students who look forward to lessons, work hard, put in a lot of effort and believe that hard work is rewarded are likely to be independent learners. They get on well with teachers and cope well with the learning and teaching patterns of the school. On the one hand, the results suggest that a positive student orientation to learning is associated with positive affinity to teachers and a favorable learning repertoire that are believed to be characteristic of effective schools. On the other hand, the results also suggest that those students who have a low orientation to learning are unlikely to perceive these favorable characteristics of an effective school. While the result may imply that school improvement policies and initiatives that would facilitate independent learning, nurture the affinity to teachers and provide a favorable learning repertoire are likely to be associated with the
strengthening of students’ orientation to learning, thus assisting them to become lifelong learners, it may also imply that all those policies and initiatives at the school level may not be beneficial to those students who have a low orientation to learning.

Thus for school improvement, perhaps it is important not only to consider changes at the school and system levels, but also to consider attempts to change the affective aspects of individual students. As Louis, Toole and Hargreaves (1999) have pointed out that even though we may have known a lot about school improvement processes and effective schools, the difficulty lies with how to change those ineffective schools to become effective. Unfortunately, ineffective schools are often filled with unmotivated students who are unwilling to invest their effort in academic work. As the results of the present study have indicated, those students who are low in their orientation to learning are unlikely to benefit from the outcomes of an effective school.

More unfortunate is the continual drop in students’ orientation to learning through their school years (e.g., McCall et al., 2001; Wong & Yeung, 2002). If positive outcomes of an effective school are associated with students’ orientation to learning, as more and more students experience a decrease in their orientation to learning, it would mean that even fewer students would benefit from any positive outcome as a consequence of school improvement. Then what is the use of spending all the energy and revenue to improve at the school and system levels when many of the students do not benefit from the improvement?

Also, there were different views on the definition of “effectiveness”. In the latest worldwide trend of developing a culture of lifelong learning in society, “effective schools” should be able to nurture students with a long lasting orientation to learning. The present study has moved a small step forward providing academics, administrators and school teachers with a knowledge of the association of orientation to learning with some factors that are not too difficult to control in schools, though the major limitation is the unclear causal relationships among them.
References


Appendix

Response Items and Alpha Reliabilities of Factors

<table>
<thead>
<tr>
<th>Factor</th>
<th>Items</th>
<th>Alpha</th>
</tr>
</thead>
</table>
| Independent Learning    | 1. I can find the classroom books and equipment I need for lessons.  
2. My weekly attendance at school is good.  
3. My behavior in school is good. | .70   |
| Affinity to Teachers    | 1. I get on well with teachers in this school.  
2. Teachers in this school make us want to work.  
3. Teachers in this school are helpful.  
4. We discuss with teachers what work we should do. | .72   |
| Learning Repertoire     | 1. Lessons in this school are varied and don’t follow a pattern.  
2. I cope with the different teaching styles that teachers use.  
3. Lessons in this school are interesting.  
4. We are taught new ways of working, for example, how to work well in groups. | .71   |
| Orientation to Learning | 1. I look forward to lessons.  
2. I work hard in school.  
3. I put lots of effort into my homework.  
4. Hard work is rewarded in this school. | .74   |
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