Characteristics of Chinese Primary School Students' EFL Learning Strategies

Jieqiong Wu

School of Foreign Languages, Hubei Engineering University, Xiaogan, Hubei, China

Abstract—It is beneficial for teachers' effective teaching to be aware of the characteristics of students' learning strategies. This paper employed "Questionnaire of Primary School Students' EFL Learning Strategies" of high reliability and validity and examined Chinese primary school students' EFL learning strategies. 700 students participated in the investigation. Results indicated that the general situation with respect to participants' EFL learning strategies was not optimistic. The most frequently used was cognitive strategy, followed by meta-cognitive strategy, and the least frequently used strategy was social/affective one. In addition, interaction between school, gender and grade was significant, the scores obtained were closely associated with individual school's teaching level, and girls gained more scores than boys.

Index Terms-EFL learning strategies, cognitive strategy, meta-cognitive strategy, social/affective strategy

I. LITERATURE REVIEW

Learning strategies are important for students' effective learning. They can be categorized into common strategies and subject learning strategies. Although there have been many researches that aimed at common learning strategies, results revealed that those common strategies proved to be ineffective for a specific subject learning (Wu, 2000). Hence researchers have begun to focus on subject learning strategies.

Foreign language learning strategies were among the earliest subject learning strategies that drew researchers' attention. At the initial stage, scholars outside China focused on vocabulary memorizing strategies and went into details about the application and effectiveness of specific strategies (Saragi, 1978; Pressley et al., 1998). Chinese researchers investigated the overall situation of EFL lexical memorizing strategies used by Chinese learners (Zhang & Zhang, 2002). For example, Chen (2007), Chen & Zhang (2001) examined Chinese children's vocabulary strategies and found that participants used various memorizing strategies but seldom used the strategies of high levels. Yao (2000), Yao, Wu & Pang (2000) discovered the characteristics of vocabulary strategies employed by Chinese high school students of different grades and learning levels. In addition, the effectiveness of EFL vocabulary strategies were also confirmed or verified. For example, Gong's (2003) result revealed that learning strategies exerted an influence upon beginners' L2 lexical memory representation and processing. By means of comparison between good and poor learners, Ding (2006) found that good learners were more inclined to employ effective strategies of high levels. Simultaneously other researchers expanded their researches on EFL learning strategies to other areas such as reading and writing (Chen, 1994; Goh, 1998).

The overall situation of EFL learning strategies is similar to that of EFL vocabulary researches in a great sense. Through investigation of high school students and adults and comparison between good and poor students in terms of EFL learning strategies, some researchers found the positive relationship between English achievements and use of strategies (Ellen, 1981; Wen & Wang, 2004). In addition, several Chinese teachers from primary and high schools summarized effective EFL learning and teaching strategies from their teaching experience and empirical studies (Zhou, 2006; Zhang, 2008).

From the above literature review, it can be concluded that in China researches with regard to English learning strategies lack an overall knowledge of current primary school students' EFL learning strategies. Most of Chinese researches on learning strategies are limited to cognitive and meta-cognitive ones, neglect resource management strategy and affective one (Gong, 2003). Due to the features of English, among the various strategies affective ones prove to be a set of complicated psychological factors and easily affected by individual affection during language learning (Stern, 1883). Krashen's "affective filter hypothesis" with respect to L2 acquisition, Bloom's "emotional goal classification system" and Weiner's "emotional motivation attribution theory" all verified the inseparable relationship between cognition and affection. The main function of English is social communication. At present most of the researches on primary school EFL learning strategies neglect the two important factors of affective and social strategies. Hence special attention ought to be given to this field.

As for the measurement instruments, on most occasions researchers employed the STLL questionnaire worked out by Oxford (Chen, 2007; Li, 2005). Based upon questionnaires by Oxford, Ellis and O'Malley, some people also complied questionnaires by themselves (Yao, Wu & Pang, 2000). The point was that these questionnaires merely involved vocabulary learning strategies. Questionnaires by Oxford, Ellis and O'Malley had a history of about twenty years and did not intend to aim at primary school students. In addition, for L2 learners, the first difficulty they meet might be L1

transfer. As far as young learners are concerned, negative transfer L1 to L2 may reveal its own characteristics (Lynne, 2001). Most of L2 strategy questionnaires outside China are complied with English as L1 and other languages as foreign languages, thus do not suit Chinese primary school students. Accordingly there is an urgent need to work out EFL learning strategy questionnaires with Chinese as L1 and English as L2 or foreign language, which aim at Chinese primary school students and are capable of revealing participants' characteristics of EFL learning strategies.

II. METHODS

A. Participants

This research employed random sampling, chose 700 students from seven primary schools in Xiaogan, Hubei province, PRC. 689 (98.4%) questionnaires were returned and 677 (96.7%) were valid. Among the participants 358 were males and 319 were females, 182 were from grade four, 275 from grade five and 220 were from grade six. The researcher randomly chose 100 of them to retest, gave out 100 questionnaires which were all returned and valid. Among the 100 students 47 were males and 53 females.

B. Instruments

Based upon the strategy classification theory proposed by McKeachie (1981), O'Malley & Chamot (1990) as well as the relevant questionnaires complied by Oxford (1993), Ellis (1994), O'Malley & Chamot (1990), the researcher worked out the "Questionnaire of Primary School Students' EFL Learning Strategies". Firstly, the researcher determined the pre-test questionnaire after a series of discussions and interviews with experienced teachers. Secondly, she made an explorative factor analysis of the pre-test result, had the questionnaire retested, made confirmatory factor analysis, verified the validity and reliability (internal consistency reliability) of the questionnaire. The questionnaire consisted of three parts, testing three categories and six kinds of learning strategies. Among them there were 14 items of meta-cognitive strategies, 15 items of cognitive ones, including practice strategy, compensation and memory strategies. There were 13 items of social/affective strategies, including active hint strategy, active longing and social supporting strategies. Cronbach's alpha coefficients were respectively 0.96, 0.93, 0.89 and 0.86 for the general questionnaire, meta-cognitive strategy, cognitive strategy and affective/social strategy, and the retest reliability coefficients were 0.89, 0.82, 0.82 and 0.73 for the general questionnaire and each of its components, indicating that the questionnaire had fine homogeneity and stability.

The researcher investigated 52 senior primary school teachers and had the questionnaire validity tested by experts, whose degree of agreement was from 60% to 100%, and 60% or above agreed to 38 of the items (90.48%), revealing that expert validity was fine. With English achievement as criterion, the correlation coefficient with respect to the strategy questionnaire was 0.58. Research by Meeus & Dekovic indicated that the correlation between standardized achievement test and school achievement was usually of intermediate or medium level (about 0.5-0.6), which meant that the criterion-related validity of the questionnaire was also fine (Meeus & Dekovic, 1995).

The researcher tested the construct validity of the questionnaire by means of confirmatory factor analysis. Result showed that the fitting index x^2/df was 2.13, fitting index for each component (GFI, NFI, IFI and CFI) ranged from 0.86 to 0.92, both approximately 1. The RMSEA value was 0.044<0.05, indicating that both of the expert validity and construct validity for "Questionnaire of Primary School English Learning Strategies" (QPSELS) were fine.

The QPSELS used five-point Likert scale with one point meaning "never", two point "seldom", three point "sometimes", four points "often" and five points "always". The higher scores the participants got, the more frequently they used the relevant strategies.

III. RESULTS

A. Chinese Primary School Students' Use of EFL Learning Strategies

The mean scores ranged from 3 (sometimes) to 4 (often), indicating that the participants' use of EFL learning strategies were not optimistic. The mean scores for the rest components of the questionnaire and its sub-dimensions ranged from 2.63 to 3.66. For the details, see table 1.

TABLE 1							
CHINESE PRIMARY SCHOOL STUDENTS' USE OF EFL LEARNING STRATEGIES (N=677)							
	Total Scores	Meta-cognitive Strategy	Cognitiv Strategy	Attective/Social Strategy			
М	3.40	3.49	3.60		3.18		
SD	0.76	0.88	0.78		0.77		
Cognitive Strategy				Affective/Social Strategy			
	Practice	Compensation	Memory		Active Hint	Active	Social
	Tractice	Compensation				Longing	Support
М	3.61	3.64	3.57		3.65	3.66	2.63
SD	0.86	0.94	0.86		0.96	0.95	0.89

It can be seen from table 1 that among the three categories of strategies, the most frequently used was cognitive

strategy, followed by meta-cognitive strategy, and affective/social strategy was the least frequently used. One-way ANOVA analysis indicated that the differences between them proved to be significant (F=49.34; P<0.001). Post-hoc test revealed that the scores of cognitive strategy were significantly higher than those of meta-cognitive strategy (p<0.05), which was apparently higher than affective/social strategy (p<0.001). As far as standard deviation was concerned, meta-cognitive strategy was higher than the other two strategies, indicating that there were big individual differences between participants for the use of meta-cognitive strategy.

As for the sub-scales of cognitive and affective-social strategies and their sub-dimensions, the mean scores ranged from 3.5 to 4 except social supporting strategy which had a mean score of 2.58, at the level of below the average, indicating that Chinese primary school students did lack social strategy in their EFL learning. Of the cognitive strategies, they obtained the highest scores for compensation strategy, followed by practice strategy and memory strategy. Of the social/affective strategies, active hint and longing strategies were better than social supporting one.

B. Analysis of the Variables That Affected Primary School Students' EFL Learning Strategies

Taking gender (male and female), schools (good, medium poor) and grades (grade 4, grade 5 and grade 6) as independent variables, and total scores of strategies as dependent variables, multiple factors analysis of variance was made. It was found that the main effect of schools and gender was exceedingly significant (F=28.17, 17.19; p<0.001), good schools gained significantly more scores than medium schools which obviously got more than poor schools. In addition, female students gained much more than male ones. The interactive effect for school×grade, school×grade ×gender was significant (F=4.00, 2.61; p<0.01, p<0.05). And the other interactive effects were not significant (p>0.05).

The researcher made further analysis of the interactive effect between grade and gender. For male students at good schools, starting from grade 4, scores for strategies were much higher than other schools; differences between grades were not significant, although there were gaps between high and low scores (F=1.75, p>0.05). At medium schools, differences between grades were significant (F=8.64, p<0.001). Grade 4 obtained 2.96, grade 5 got 3.13, and grade 6 gained 3.59 which was significant higher than grade 4 and 5; there were no significant differences between grades (F=1.58, p>0.05). In addition, as far as grade 4 was concerned, there were significant differences between schools with regard to the total scores (F=8.17, p<0.01); good schools got 3.76, medium schools 2.96 and poor schools 2.90; the total scores for good schools and poor ones. For grade 5, there were no significant differences between schools concerning the total scores (F=1.94, p>0.05). For grade 6 there were significant differences between schools in total scores (F=9.12, p<0.001) with good schools 3.46, medium schools 3.59 and poor schools 2.75. Good schools and medium schools were higher than poor schools but there were no significant differences between good schools and medium schools and medium ones.

For female students at good schools, starting scores for strategies were higher than other schools; there were significant differences between grades in total scores (F=4.22, p<0.05); grade 4 obtained 3.86, grade 5 got 3.61 and for grade 6 it was 3.94; grade 6 was significantly higher than grade 5, and there were no significant differences between grade 4 and grade 6 (p>0.05). At medium and poor schools, there were no differences between the three grades (F=2.80, p>0.05; F=0.22, p>0.05). For grade 4, there were significant differences between schools with respect to scores for strategies (F=3.73, p<0.05) with good schools 3.86, medium schools 3.46 and poor schools 3.23; scores for good schools were significantly higher than those of medium and poor schools and there were no significant differences between good and medium schools. For grade 5, there were significant differences between schools in scores for strategy use (F=7.16, p<0.01) with good schools 3.61, medium schools 3.76 and poor ones 3.05; scores of good and medium schools. For grade 6, there were significant differences between schools (F=10.05, p<0.001) with good schools 3.55 and poor ones 3.09; scores of good schools were significantly higher than poor ones 3.09; scores of good schools were significantly higher than poor ones 3.09; scores of good schools were significantly higher than poor ones 3.09; scores of good schools were significantly higher than poor ones 3.09; scores of good schools were significantly higher than poor ones 3.09; scores of good schools in terms of strategy use.

Independent-sample t test was made with gender as independent variable (see table 2) and result indicated that there were significant differences between male students and female ones with respect to the total scores of EFL learning strategies and three sub-scales with females much better than males.

Taking teaching level (good, medium and poor) as independent variable, one-way ANOVA analysis was made (see the result in table 3). It can be seen that from school of comparatively lower teaching level to that of higher level, primary school students' total scores of English learning strategies and scores with regard to each of the sub-scales and dimensions gradually increased and there were significant differences between scores of sub-scales (p<0.001). Post-hoc LSD test indicated that good schools were significantly higher than medium ones which was higher than the poor ones in term of the total scores of English learning strategies and all the sub-scales (p<0.001, p<0.01). Nevertheless, for the affective/social strategies, good and medium schools were also at comparatively low level.

DIFFERENCES BETWEEN STRATEGY QUESTIONNAIRE AND THE THREE SUB-SCALES (M \pm SD)							
Gender	Total Scores for Strategy Questionnaire	Meta-cognitive Strategies	Cognitive Strategies	Affective/Social Strategies			
Male (358)	3.24±0.76	3.27±0.88	3.42±0.79	3.00±0.76			
Female (319)	3.65±0.70	3.74±0.82	3.81±0.70	3.38±0.73			
t	7.31***	7.15***	6.74***	6.56***			

TABLE 2 DIFFERENCES BETWEEN STRATEGY QUESTIONNAIRE AND THE THREE SUB-SCALES (M \pm SD)

IABLE 3						
DIFFERENCES BETWEEN SCHOOLS OF DIFFERENT LEVELS						
WITH RESPECT TO CHINESE PRIMARY SCHOOL STUDENTS' EFL LEARNING STRATEGIES (M \pm SD)						

Strategies	Good Schools (279)	Medium Schools (299)	Poor Schools (99)	F
Total Scores of Strategy	3.65±0.72	3.37±3.74	3.01±0.71	26.61***
Questionnaire				
Meta-cognitive Strategy	3.74 ±0.82	3.44±0.87	2.93±0.81	35.02***
Cognitive Strategy	3.85±0.74	3.50±0.76	3.24±0.72	29.58***
Affective/social Strategy	3.33±0.74	3.15±0.75	2.84±0.77	15.76***

IV. DISCUSSION

A. Chinese Primary School Students' Insufficient Use of EFL Learning Strategies

From the above results it can be clearly seen that participants' use of EFL learning strategies were not optimistic and that there was much room for improvement. The results of this research revealed that the total scores of strategies, meta-cognitive strategy, cognitive strategy and affective-social strategies all ranged from "yes, sometimes" to "yes, in most cases", and even between "no, in most cases" and "yes, sometimes". In short, Chinese primary school students' use of EFL learning strategies proved to be not optimistic. On the one hand, as students began to have initial access to English at primary school, The learning and use of EFL strategies were also at the initial stage, there were not many students who could use the relevant strategies by themselves. On the other hand, it was one of the reasons that Chinese EFL teachers neglected strategy teaching on many occasions. The evolution process of strategies turned out to be slow and unbalanced without necessary guidance (David, 2005), in particular for primary school students, since they were incapable of making full use of the strategies at will so as to improve their learning efficiency. Teachers' clear and explicit strategy direction would be of great help to students' use of strategies (Liu, 1997). Nevertheless, in China the teaching objective of many teachers' lies in the fact that students are supposed to keep ahead in various tests so that teachers are always eager to teach students language and test skills, neglecting strategy teaching. In addition, some EFL teachers still emphasize learning by rote, believing that English words should be recited, which indicates that teachers apparently lack the awareness of teaching students EFL learning strategies. Since the 1980s, Chinese people began to become crazy about English, various methods have emerged since then but whether they are scientific and effective have not been verified. Even English teachers may be doubtful and confused about them, it is therefore hard for them to teach students effective learning methods. Hence teachers are not only to pay special attention to ensuring EFL learning strategy teaching, but also to teach them in a scientific and effective way. Simultaneously, in China primary school English learning is at the initial stage, and beginners of English are supposed to be taught EFL learning strategies and form good habits of learning, which will exert significant effect upon their future learning of English.

Among all the strategies, participants used cognitive strategies most frequently and affective/social strategies least frequently. Seen from the scores for sub-scales, cognitive strategies got significantly higher scores than meta-cognitive ones (p<0.05) which was significantly much higher than affective/social strategies (p<0.001). Among the sub-dimensions of cognitive strategies, compensation strategy obtained the highest score, followed by practice strategy and memory strategy got the lowest score. Memory is one of the important parts at the initial stage of EFL learning. The comparatively low score for this strategy revealed that Chinese primary school students failed to memorize English knowledge in an effective way and that there is urgent need to develop and train students' EFL memory strategy. Chen (2007) found that when memorizing English words, Chinese children seldom used meta-cognitive strategies and depended upon cognitive strategies most of the time, which coincided with the result of this research. Primary school students were so young, they were at the initial stage of English learning, and their general development of meta-cognition is immature. At the same time, most of the teachers often neglect students' development of meta-cognitive abilities. Cognition is closely associated with meta-cognitive strategies whose prediction of achievement is significantly stronger than that of cognitive strategies. L2 teachers are supposed to make every effort to be aware of learners' cognitive regulations in their practice teaching, and teach students cognitive and meta-cognitive strategies in everyday teaching, remove the traditional cramming method so as to achieve the objective of empowering them to fish since "give a man a fish and you feed him for a day; teach a man to fish and you feed him for a lifetime (Tang, 2005). Grade 4 to 6 at primary school is the crucial stage for the transition of concrete thinking to abstract one (Lin, 2009). Accordingly teachers should lay more emphasis on the development of students' meta-cognitive abilities in EFL teaching.

Of the three strategies, the most pessimistic were affective/social ones with merely 3.16 points. As for the

sub-dimensions, active hint obtained the highest score, followed by active longing and social support at last with 2.58 points only, indicating that Chinese primary school students still had a long way to go in interpersonal communication in English and making full use of social resources to promote their EFL learning. In addition, in this dimension even good schools were at comparatively low level with regard to strategy use. Primary school EFL learning is easily affected by personal affective factors which even affects language learning the same as the cognitive factor (Stern, 1983). The affective filter hypothesis for L2 learning proposed by Dulay & Burt and also Krashen suggested that foreign language learners might be affected by affective filter so as to produce different learning results. Situational learning theory believes that learning is not a set of isolated abstract knowledge and that learners obtain knowledge and experience by means of participating in the social practice activities. Language as a tool of communication is doomed to being associated with specific situations. If students simply learn English knowledge solitarily and fail to combine theory with practice, there will be great gap between language contexts at the initial learning stage and future practice or transfer situation so that transfer will be completely impossible (Yao, 2000; Yao, Wu and Pang, 2000), which might also account for why Chinese students used to learn "dumb English" and "deaf English".

There may be two reasons for the lack of affective/social strategies. Firstly, there is a lack of communication opportunities. It is emphasized that in children's L2 teaching, interpersonal communicative intelligence activities can not be completed/finished by themselves and they need to learn language knowledge through cooperation with others. At present in China primary school English classroom overuses teaching or training methods, lacks interactive and communicative activities. Besides, students can not rapidly learn to communicate and lack opportunities of learning to communicate, interact with each other and look for social support (Zhang & Zhou, 2012), which has led to the lack of affective/social strategies. Secondly, for quite a long period of time Chinese students have received examination-oriented education which more or less makes them lose interest in learning. Hence it turns out to be impossible for them to make use of affective hints to increase their learning interest and motivation. Active hint and longing strategies mean to intentionally increase the self intrinsic learning motivation and interest with positive affections. Due to the limitations of age, thinking pattern and social experience, it is difficult for primary school students to form active emotional orientation by themselves and accordingly need positive guidance from teachers and parents who are supposed to make use of active hint and longing strategies to promote the occurrence of positive affections. Simultaneously, language itself has the social properties. Primary school students are imaginative, active and lively. Accordingly in primary school English teaching, teachers should adhere to the characteristics of "from life and used for life" and combine EFL teaching with students' daily life so as to make teaching activities full of vitality. Sun and Dong (2001) found that it proved to be practical for children to learn English vocabulary with the help of multimedia cartoon movie context, which would apparently provide basis for situation teaching and the improvement of students' social communication. Teachers have to guide students to appropriately make use of social resources, increase opportunities of having contact with English and avoid "giving up eating for fear of choking".

B. Differences between Schools, Genders and Grades in Term of EFL Learning Strategies

In this investigation, school level was an important factor that affected primary school students' use of EFL learning strategies. There were significant differences between schools in total scores, sub-scales and various dimensions with regard to EFL learning strategies. The higher the level, the better the students' use of EFL learning strategies. At primary school stage, school education might produce influential effect upon strategy development, which implies that school environments are of significant importance and that a favourable atmosphere will be of tremendous help to EFL learning. Besides, gender factor was also one of the important components that affected primary school students' EFL learning strategies. Female students were better than males in terms of total scores of strategies, sub-scales and their dimensions. As for the impact of genders upon learning strategies, there were various results due to different subjects and ages. Some researches found no significant differences between genders with respect to primary mathematic strategies (Liu, Huang, 2005), others found that females did better than males (Si, 2002). In addition, result revealed that females did better than males in junior high school Chinese learning strategy (Liu, 2006). English is a subject that need more memorizing and female students prove to be more patient and interested and have accumulated more strategies, which might be the important reason why female students in general did better than males in English achievement.

In addition, schools, grades and genders may also exert comprehensive influence upon the use of primary school EFL strategies. Students from schools of different levels revealed different characteristics in their learning strategies. Generally speaking, students from good schools had a higher starting point but fluctuated during the development process; students from medium schools did worse than those from good schools but had the greatest potential; students from poor schools had low levels of strategy but there was much room for improvement.

Good schools had the highest starting point in their scores of strategies but fluctuated during the development process. Grade 4 students from good schools obtained higher scores than those from medium and poor schools. As for grade 5 and 6 students, both males and females, there were no obvious differences between students from good schools and those from medium ones in their use of strategies; females got comparatively low scores when they were in grade 5, but there were no differences between grades for males. Comparatively speaking, good schools laid more emphasis on strategy teaching and students accordingly could learn more EFL strategies. In addition, grade 4 students were beginners of English, strategies for them had apparent characteristics of extrinsic obtainment, which might cause

students to over-evaluate their own levels of strategies. After a year of learning when they were grade 5, some frequently used strategies began to be integrated and internalized, and some of the students simply could not persist in the learnt strategies or began to reveal their own drawbacks of strategy use. On these occasions good schools gradually lost their superiority in EFL learning strategies. Accordingly good schools have to pay attention to strategy teaching from beginning to the end and make every effort to avoid the drawbacks of strategy use. Females from good schools obtained comparatively higher scores for strategy use, but they should be cautious about the possible appearance of bottleneck and persist in strategy practice. On the other hand, male students have to strengthen strategy learning and increase their strategies as their English knowledge increases.

At medium schools, development of strategies proved to be slower than good ones, but students' total levels of strategies increased as grade increased, hence had great potential. There were no significant differences between good schools and medium ones at grade 5 and 6. Males' strategies developed rapidly at this stage but there were no obvious differences between grades for females, which indicated that for students from medium schools, as their English knowledge increased, their strategies also increased, mainly due to the rapid development of male students' strategies. At grade 5 and 6, as examination for the admission of junior high school drew near, medium school teachers were eager to improve students' English achievement, laid emphasis on English knowledge teaching but neglected teaching students EFL learning strategies. On this occasion females students were more easily affected by teachers. Compared with male students were more inclined to field-independence (Li, 2000), and continued to increase their strategies in EFL learning. Hence at grade 6 at medium schools, teachers have to pay special attention to strategy teaching for female students and inspire them to discover effective strategies by themselves so as to lay a solid foundation for future study.

As for poor schools, their general strategy levels were not optimistic, and there were no obvious differences between the three grades in terms of strategy scores. As for the starting point of strategy, at grade 4 there were no gender difference between poor schools and medium schools. As grade increased, there gradually appeared differences between poor schools and medium schools, indicating impact of school environments on students' learning strategies. Therefore even at poor schools, if teachers are well aware of the importance of strategies and teach EFL learning strategies in the classroom, they are still capable of arousing students' consciousness and interest in English and EFL learning strategies so that students may keep ahead with those from medium schools.

V. CONCLUSION

From the above discussion, the following conclusions can be arrived at:

(1) Chinese primary school students' use of EFL learning strategies was not optimistic, ranging from "sometimes it is" to "in most cases it is", even from "in most cases it is not" to "sometimes it is". Among the three categories of strategies, the use of cognitive strategies proved to be the best or the most frequently, followed by meta-cognitive ones and affective/social strategies were at the bottom, in particular the social supporting strategy which need urgent improvement.

(2) The main effects of gender and school were significant. Female students were superior to males in terms of EFL Learning strategies; scores of strategies were closely associated with the teaching level of schools; scores of affective/social strategies were comparatively low for all the participants.

(3) Interactive effects of gender, grade and school were significant. In other words, good schools had highest starting points but fluctuated during the development of the strategies; there were no obvious differences between grades for males while female students got low scores for strategies at grade 5; medium schools were lagged behind in their strategy development, but they had greatest potential; male students began to rapidly increase their strategies at grade 5, but there were no significant differences between grades for female students; students' from poor schools used EFL learning strategies much less frequently but their starting points were not that low. Schools of this category are supposed to strengthen teachers and students' awareness of strategies and strategy teaching, there is much room for the improvement of such schools.

REFERENCES

- [1] Chen, Y. (2007). Children's English vocabulary memorizing strategies and their relevant variables. *Essential English Education*, (2), 40-47.
- [2] Chen, Y. & Zhang, Y. F. (2001). Chinese children's English vocabulary memorizing strategies. *Foreign Language Research*, (4), 100-106.
- [3] Cheng, J. Y. (1994). Analysis of EFL writing instruction. Foreign Language Teaching & Research, (2), 56-61.
- [4] David, R. S. (2005). Developmental Psychology: Children and Teenagers (Zou, H. et al. Trans.) Beijing: Science Press.
- [5] Ding, Y. (2006). Comparative study of good and poor learners' EFL vocabulary learning strategies, *Foreign Language Research*, (6), 23-28.
- [6] Ellis, R. (1994). The Study of Second Language Acquisition. Oxford: Oxford University Press.
- [7] Oxford, R. L. (1993). Instructional implications of gender differences in second/foreign language learning styles and strategies. *Applied Language Learning*, (4), 56-68.
- [8] Ellon, B. (1981). The role of conscious strategies in L2 proficiency. The Modern Language Journal, 65 (1), 24-35.
- [9] Goh, C. M. (1998). Strategic processing and meta-cognition in second language proficiency. *RELC Journal*, (2): 43-52

- [10] Gong, S.Y. (2003). Current situation and problems on China's learning strategy research. *Psychological Sciences*, 26(1), 163-167.
- [11] Gong, S.Y. (2003). Empirical research on Chinese bilingual children's vocabulary memory representation and processing. (Unpublished doctoral dissertation). Chinese Academy of Science, P.R.C.
- [12] Li, R. J. (2005). Investigation of high school students' use of EFL learning strategies. (Unpublished master dissertation). Beijing Normal University.
- [13] Li, Z. (2000). Differences between learners' cognitive styles and foreign language teaching. *Foreign Language Teaching*, (3), 75-84.
- [14] Lin, C. D. (2009). Developmental Psychology (pp. 270-271). Beijing: People's Education Press.
- [15] Liu, D. Z. (1997). Teaching models of learning strategies and education technology. Discipline Education, (12), 42-50.
- [16] Liu, D. Z. (2006). Subject learning strategies and development: theories and empirical researches. Changchun: Jilin People's Press.
- [17] Liu, D. Z. & Huang, X. T. (2005). Characteristics of employment and development of primary school students' mathematics learning strategies. *Psychological Sciences*, 28 (20), 272-276.
- [18] Lynne, C. (2001). Teaching Language to Young Learners. London: Cambridge University Press.
- [19] McKeachie, W. J. et al. (1981). Teaching and learning in the college classroom. *National Centre for Research in Postsecondary Teaching and Learning*, (39), 153-160.
- [20] Meeus, W. & Dekovic, M. (1995). Identity development, parental and peer support: results of a national Dutch survey. *Adolescence*, 30 (1), 72-87.
- [21] O'malley, J. M. & Chamot. (1990). Learning Strategies in Second Language Acquisition. London: Press Syndicate of Cambridge.
- [22] Pressley, M. et al. (1998). Literary instruction in 10 fourth-grade classroom in upstate New York. *Scientific Studies of Reading*, (2), 52-65.
- [23] Saragi, J. (1978). ISP National GF Meister, Vocabulary Learning and reading. System, (6), 72-78.
- [24] Si, J. W. (2002). Primary school students' estimating ability. (Unpublished master dissertation). Xinan Normal University.
- [25] Stern, H. H. (1983). Fundamental Concepts of Language Teaching. Oxford: Oxford University Press.
- [26] Sun, Y. Q. & Dong, Q. (2001). The effect of parts of speech on Chinese children's vocabulary learning. *Psychological Development and Education*, (4), 32-37.
- [27] Tang, W. (2005). Critical factors for learners' linguistic competence: cognitive and meta-cognitive strategies. *Journal of Ningxia University (Humanities and Social Sciences)*, 27 (2), 32-37.
- [28] Wen, Q. F. & Wang, L. F. (2004). Empirical research on Chinese learners' learning strategies in the past 20 years. *Foreign Language and Literature Studies*, (1), 24-35.
- [29] Wu, Q. L. (2000). Cognitive Teaching Psychology. Shanghai: Shanghai Science and Technology Press.
- [30] Yao, M. L. (2000). Current situation about foreign language learning strategies. *Journal of Beijing Normal University (Social Sciences Edition)*, (5), 123-129.
- [31] Yao, M. L., Pang, H. & Wu, J. M. (2000). A study of junior school students' English words memorizing strategies. *Psychological Sciences*, 23(6), 682-685.
- [32] Yao, M. L., Wu, J. M. & Pang, H. (2000). The English vocabulary memorizing strategies of junior high school students. *Psychological Science*, 23(6), 100-106.
- [33] Zhang, H. W. & Zhang, D. J. (2002). Empirical research on the effect of memory organization training on high school students' English words memorizing. *Psychological Sciences*, 25(2), 501-503.
- [34] Zhang, L. (2008). Development of primary school students' EFL learning strategies. *Foreign Language Teaching at Primary and High Schools*, (7), 34-42).
- [35] Zhang, L. & Zhou, X. Y. (2012). Contrastive analysis of interpersonal intelligence activities in Chinese children's EFL course-book. *Chinese Language Teaching and Research*, (1), 11-18.
- [36] Zhou, X. X. (2006). Senior students' EFL vocabulary learning strategies at Fengye Primary School, Dalian. (Unpublished master dissertation). Dalian Maritime University.

Jieqiong Wu was born in Changde, Hunan, China in 1981. She received his master degree in linguistics from Hubei University in 2010. She is currently a lecturer in the School of Foreign Languages, Hubei Engineering University, Xiaogan, Hubei, China. She is interested in applied linguistics and English pedagogy.