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**Prof. Dr. Teoman Kesercioglu
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Message from the Editor-in-Chief

I am very pleased to publish first issue in 2015. As an editor of International Online Journal of Primary Education (IOJPE), this issue is the success of the reviewers, editorial board and the researchers. In this respect, I would like to thank to all reviewers, researchers and the editorial board. The articles should be original, unpublished, and not in consideration for publication elsewhere at the time of submission to International Online Journal of Primary Education (IOJPE), For any suggestions and comments on IOJPE, please do not hesitate to send mail.

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Table of Contents

Articles

EMIRATI SCIENCE TEACHERS' BELIEFS, SELF-CONFIDENCE, CHALLENGES FACED, AND THEIR REPORTED PRACTICE

Melissa Mcminn, Martina Dickson, Hanadi Kadbey

PEDAGOGIC REFLECTIONS ON CHINESE EQUITY ISSUES: INVESTIGATING DISPARATE PERFORMANCE OUTCOMES IN PRIMARY MATHEMATICS

Ting Liu

THE APPLICATION OF PEDAGOGICAL STYLISTICS IN ELT LITERATURE AND LANGUAGE TEACHING COURSES

Behbood Mohammadzadeh

INVESTIGATING FOURTH GRADE PRIMARY SCHOOL STUDENTS' PERCEPTIONS ABOUT ACTIVE CITIZENSHIP THROUGH THEIR DRAWINGS

Ceren Çevik Kansu, Yücel Öksüz



EMIRATI SCIENCE TEACHERS' BELIEFS, SELF-CONFIDENCE, CHALLENGES FACED, AND THEIR REPORTED PRACTICE

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ABSTRACT

Amidst an ambitious education reform agenda, Abu Dhabi, United Arab Emirates, has pledged that 90% of the education sector be Emirati by 2030. The reforms aims to move away from traditional style teaching and learning and towards a student-centred, hands-on, inquiry approach, a vastly different approach to the one which current Emirati teachers experienced themselves as students. This study investigates the beliefs about how students best learn science and the actual teaching practice of nine Emirati teachers in Abu Dhabi's elementary public schools. Items pertaining to teachers' self-confidence, and the barriers and challenges they face in teaching science were also analysed to further explain any correlations, or lack thereof, between beliefs and practice. The findings suggest that while a lack of confidence and other barriers and challenges do impede on ideal teaching practice, many teachers self-report attempting to teach according to their beliefs nonetheless.

Key Words: Emirati Science Teachers' Beliefs, Self-Confidence

CONTEXT

In 2006, the Abu Dhabi Education Council began an ambitious reform programme to improve the quality of education in government-run public schools, which predominantly serve Emirati students. A new science curriculum was adapted from the Australian New South Wales curriculum, which was implemented gradually into public schools with the support of Education Advisors. This outcomes-based curriculum was markedly different to the previous curriculum, which was heavily centred on a prescribed textbook. The role of the Education Advisors was to not only to support teachers implementing the curriculum, but also to provide professional development for existing teachers to improve pedagogy, moving them away from the traditional, teacher-centred styles that were predominant in the UAE and most Arab states at the time (Shaw, Badri&Hukul, 1995; United Nations Development Programme and KSA, 2003 as cited in Alghamdi& Al-Salouli, 2012) and towards a student-centred, hands-on, inquiry approach. In 2010, the New School Model (NSM) was launched in Grades 1-3 in all public schools. As part of this stage in the reform, Science, along with Maths and English, was to be taught through the medium of English by English medium teachers (EMTs). While several initiatives prior to the NSM had piloted programmes in which Science be taught in English (e.g. SAMIE: Science and Maths in English), this was the first time for it to be mandated across all public schools (Dickson & Kadbey, 2014). Each year since 2010, the NSM has rolled out into the subsequent grade, and at the time of writing is deployed in Grades 1-7.

The NSM and the new science curriculum places an emphasis on critical thinking and requires teachers to develop and implement student-centred strategies, inquiry-based learning and exploratory approaches. This is in stark contrast to the way Emirati teachers learned Science in schools themselves.



The reform also impacted teacher education in the emirate with a dedicated teachers' college being established in 2007 offering a Bachelor of Education at no cost to Emirati students, and other established universities also offering education programmes. Currently, the vast majority of EMTs have been recruited from overseas (e.g. USA, UK, Australia, New Zealand), however the Abu Dhabi 2030 Vision aims to have 90 percent Emiratis in the education sector by 2030 (Constantinou, 2009; as cited in Sharif, Hossan& McMinn, 2014).

LITERATURE REVIEW – TEACHING PRACTICE AND CONFIDENCE IN SCIENCE

Emirati teachers' are not an anomaly when it comes to being required to teach in a pedagogically different way than they were taught themselves. Many authors (e.g. Al Ghamdi& Al-Salouli, 2012; Garbett, 2003; Kelly, 2000; Elliot, 2000) have commented that the school science experience of most pre- and in-service primary and early childhood teachers was a passive, teacher-centred collection of facts. If student-centred, hands-on and inquiry approaches are not modelled effectively to teachers during their professional education, it is likely to affect their confidence in using such approaches in their own teaching. Temiz and Topcu (2013) assert it is necessary to provide pre-service teachers '...with constant opportunities to practice with respect to constructivism' (p. 1439).

Despite a plethora of writings about pre- and primary school teachers' hesitancy to teach science and recommendations made to rectify this (e.g. Appleton, 2008; Mulholland & Wallace, 1996; Tytler, 2007), little improvement has been noted in this area (Fleer, 2009). Appleton (2002) claims that in Australia, science is often missed from the curriculum, and when it is included, the teaching strategies used are not consistent with contemporary science programmes. Aside from, or perhaps due to, teachers' own experiences with science education, this hesitation has often been attributed to a lack of confidence regarding the teachers' own science abilities (e.g. Walan&Rundgren, 2014; Fleer, 2009; Watters and Ginns, 1996). Walan and Rundgren (2014) found that one contributing factor provided by early childhood teachers to explain why they excluded science were their own science anxiety and low self-efficacy with respect to teaching science.

A teacher's subject knowledge impacts on their ability to make science ideas and understandings accessible to young learners. A lack of subject knowledge could cause teachers to want or require a controllable environment. A study of teachers of older students showed that the less the teacher knows about science concepts the more often learning experiences are teacher-centred (Carlsen, 1991). Garbett (2003) also noted that "[T]he less competent the teacher is, the more difficult it is for them to follow the child's lead and explore topics by asking the right questions, initiating the appropriate activities or directing the line of inquiry with confidence" (p. 468-9).

Teachers of differing science content knowledge may also lack confidence in their abilities to implement effective science programmes for children. Bandura (1993) asserts that there is a difference between possessing knowledge and skills and being able to use them well. That means that the practice of teachers with the same knowledge and skills may differ depending on their self-efficacy. Watters and Ginns (1996) claim that to positively change self efficacy, "...teachers need to have experienced success, vicarious experiences, or be exposed to effective and powerful persuasive arguments" (p. 66).

Alternatively, teachers who are cognizant of 'best practice' may face insurmountable barriers or challenges, real or perceived, to teach the way they would ideally like. No research is required to substantiate the impediments to teaching practice, be it organizational obstacles, lack of resources, lack of support from administration or parents, classroom management, or the language of instruction.



The personal beliefs of teachers about how students best learn science are also known to have an effect on how teachers plan and implement science programmes. Teachers' pedagogies and practices are not always aligned with each other as shown by Brickhouse and Bodner (1992), whose research subject's beliefs and actions around science teaching were contradictory.

Many articles discuss the beliefs teachers hold about the importance or relevance of science (e.g. van Aalderen-Smeets, van der Molen and Asma, 2012), but scant research examining what teachers believe about how students best learn science exists.

This investigation aims to determine how the three aforementioned elements (1- theoretical pedagogy, 2- barriers and challenges and 3- confidence) influence the actual teaching practice of Emirati teachers in Abu Dhabi.

METHODOLOGY

Surveys were constructed using surveymonkey™ and emailed to principals at 60 public, cycle 1 (grade 1-5) schools in Abu Dhabi, with the request that they forward the survey to their science teachers. The survey items were developed from and linked to the reviewed literature. Out of a total of 248 respondents, only 9 who completed the survey identified themselves as Emirati. It is this smaller group that is the focus of this paper. Due to the feminization of cycle 1 education, all participants are female, and all had less than 10 years of teaching experience. This is due to the fact that before 2009, science was taught through the medium of Arabic by science specialist teachers who have since been replaced by the EMTs. Native Arabic speakers are required to have an IELTS score of 6.5 to be employed in Abu Dhabi's public schools as an English-medium teacher, as such the survey was conducted through the medium of English.

The survey consisted of a variety of questions relating to the teaching of science. For this paper we will focus on the responses to particular questions under 4 themes; self-confidence, barriers and challenges faced, teachers' beliefs about how children learn, and actual teaching practice. Participants responded using a 4-point Likert scale and were given the opportunity to write comments at the end of each section, if they wished. Teachers were asked about their practices in the classroom to see how closely aligned their reported practices were with their beliefs on how students best learn science. Teachers were also asked about their own confidence in teaching science and about the barriers and challenges they perceive. These questions were asked as it was hoped the answers would shed some light on reasons *why* if beliefs and practice did not correlate, or enlighten us on the obstacles teachers were overcoming in order to teach according to their beliefs.

The main guiding research question was:

How do Emirati teachers' self-confidence, science teaching beliefs, and perceptions of barriers and challenges they face, impact on their science teaching practice?

Participants have been assigned pseudonym names for discussion purposes.

RESULTS AND DISCUSSION

Exploratory, Collaborative and Hands-on Learning

In terms of providing hands-on opportunities for learning science, the reported confidence levels of the participants correlated well with the actual teaching practice. That is, the four teachers who claimed to



always use hands-on activities in their lessons and one who often did, rated themselves as confident or extremely confident. It is interesting to note that three of these five teachers agreed or strongly agreed that they found it hard to manage students' behaviour while teaching science in an active way, yet appear to be forging ahead anyway. Two teachers, Dalal and Mariam, who stated they are confident, only sometimes include hands-on learning. These teachers also agreed that managing behaviour is difficult for them, which may go some way to explain this, however does seem to contradict the confidence rating. It could mean that they feel confident in *planning* hands-on activities, but are less confident about the *implementation* of them, or they could be facing behaviour management issues with the specific class they are currently teaching.

The other two participants', Ibtisam and Zainab, both feel unconfident and only sometimes provide opportunities for their students to be involved in hands-on learning. While Ibtisam agreed that managing behaviour was a challenge, Zainab disagreed, indicating that her level of confidence has more impact on her teaching practice than the student behaviour barrier in this instance.

Table 1: Science teaching practice

	I incorporate scientific inquiry skills in my science classes.	I provide opportunities for students to work in pairs or very small groups	I encourage collaborative learning among my students	I actively involve students in hands-on activities and investigations.	I allow my students to explore and discover science concepts on their own with minimal teacher input.
Alia	3	4	4	4	1
Basma	3	2	3	3	2
Dalal	2	1	2	2	3
Fatima	2	4	4	4	3
Ibtisam	3	3	3	2	2
Mariam	2	No response	4	2	1
Nahla	3	4	4	4	3
Raheema	3	4	4	4	3
Zainab	1	3	2	2	2

1 = never/rarely; 2 = sometimes; 3 = often; 4 = always

The survey also asked participants whether they believed students remember a scientific fact when they discover it by exploring and observing by themselves rather than when they read it or hear about it from a teacher. All nine Emirati teachers agreed or strongly agreed that this was the case, yet only four often allowed their students to explore and discover science concepts on their own with minimal teacher input. This is significant as Fitzgerald, Dawson & Hackling (2012) found in their study that one crucial way to enhance science teaching and learning was to focus on inquiry, "...whereby students investigate, construct and test ideas and explanations about the natural world" (p. 985).

The most interesting responses in this data set were those of Alia and Mariam. Alia agreed that students remember a scientific fact better by exploring and observing it for themselves, and rated herself as extremely confident in both providing hands-on learning opportunities and utilizing a student-centred approach. She also disagreed that managing behaviour was a challenge for her. Yet, she rarely or never allows her students to explore and discover science concepts on their own. Mariam also rarely or never allows students to explore for themselves, despite also agreeing or strongly agreeing that students learn best this way, but she is not confident in providing a learning experience in science which is primarily student-centred and agrees that students' behaviour is a challenge. This indicates that Mariam's confidence and the barrier she perceives students' behaviour to be have a greater impact on her teaching



practice than her beliefs about how students best learn science. Alia’s self-contradictory responses indicate there may be another reason for not including opportunities to exploring scientific concepts in her teaching, not covered by the questions in this survey.

Basma, Ibtisam and Zainab only sometimes allow students to explore science concepts independently regardless of the fact that they all agree or strongly agree that this is how students learn best. Both Basma and Ibtisam agree that behaviour management is an issue and both lack confidence in providing a student-centred science experience (Basma, not confident; Ibtisam, not at all confident). Zainab rated similarly to Basma and Ibtisam, yet disagreed that managing behaviour was a barrier, suggesting it was her lack of confidence that had the greatest impact on her teaching practice here. Dalal, Fatima, Nahla and Raheema often allow students to explore scientific concept for themselves. All are confident or extremely confident about providing student-centred learning except for Dalal who disagreed here, but interestingly only Fatima disagreed that student behaviour was a barrier, while the other three agreed or strongly agreed that this was the case. This denotes that the challenge Dalal, Nahla and Raheema face with managing behaviour is not enough to deter them from providing exploratory activities that require minimal teacher input for their students.

Table 2: Beliefs about how students learn science

	Students understand science best when they discuss concepts with their partners.	Students learn science more effectively when they work in groups and share ideas.	Students broaden their scientific inquiry skills by communicating, sharing and reviewing each other’s results.	Students remember a scientific fact when they discover it by exploring and observing by themselves rather than when they read it.	Students remember a scientific fact when they discover it by exploring and observing by themselves rather than when they hear about it from their teacher.
Alia	4	4	2	3	3
Basma	3	3	3	4	4
Dalal	2	2	1	3	3
Fatima	4	4	4	4	4
Ibtisam	3	3	4	4	4
Mariam	4	3	4	4	3
Nahla	4	4	4	4	4
Raheema	3	4	4	4	4
Zainab	3	3	3	3	3

1 = strongly disagree; 2 = disagree; 3 = agree; 4 = strongly agree

“A different skills set is needed in today’s scientists. We can no longer focus on a niche area. Collaboration is now the norm. We are all living in a connected world.” (Peacock, 2007, cited in Tytler, 2007).

With the exception of Dalal, all teachers agreed or strongly agreed that students understand science best when they discuss concepts with their partners and learn science more effectively when they work in groups and share ideas and results. Dalal disagreed with all three related learning beliefs statements and responded that she rarely or never provides opportunities for students to work in pairs or very small groups and only sometimes encourages collaborative learning among her students. Dalal lacks confidence in facilitating student-centred settings and agrees that managing student behaviour is a factor. On the other hand, Ibtisam often provides opportunities for small group work and collaboration, despite being not at all confident in student-centred learning and agreeing that behaviour management is an issue. As



discussed previously, a lack of confidence in teaching science, especially in a student-centred setting, could be attributed to a lack of scientific knowledge on the part of the teacher. Furthermore, a lack of effective modelling of student-centred instructional approaches during pre-service training could affect teacher sureness in implementing these approaches. The subject knowledge and training of these teachers is outside the scope of this study, however may explain the low confidence levels of these teachers. Further research is required in this area to clarify this relationship.

It is pleasing to see that on at least three occasions, teachers have overcome their own lack of confidence or the behaviour management barrier they face in order to teach in a hands-on, collaborative way. However, both students’ behaviour as a barrier to science teaching and learning and the teachers’ own lack of confidence clearly have an (almost equal) impact on the practice of several teachers in this study. Professional development sessions on effective behaviour management and on science inquiry teaching methods may help these teachers to overcome these challenges in order to teach the way they believe students learn best. If teachers are lacking in science ability, the inquiry training may need to be specific to topics currently taught in order to be readily utilised, at least in the short term, while some ongoing up-skilling in scientific content knowledge be undertaken.

For Dalal, who does not agree that students learn best through discussion and collaboration with peers, the above suggested professional development may help, but it is likely that she will need to observe the positive effects of such teaching methods for herself in order to change her beliefs and subsequently, practice.

Interestingly, all participants responded positively that the medium of English language is a barrier that affects students’ understanding of scientific concepts, with six of nine teachers strongly agreeing. Clearly this has implications for discussions during exploratory, hands-on and group work. As instruction in English is a mandated element of public schooling in Abu Dhabi, there is no easy solution to this challenge. Science, in itself, is a language, and to complicate things further, many words used in primary science education have different meanings in other contexts, for example; weight, force, solid and matter.

Van Laere, Aesaert, van Braak, (2014) found in their study of 1761 students in Belgium, those “...with a home language that is different from the language of instruction experience difficulties with science subjects” (p. 2772).

Despite strongly agreeing with all of the beliefs about learning items, Fatima, a grade 2 teacher, upholds the Belgian findings: “If the student cannot understand the language, s/he cannot do any of these statements”. We must assume that the language Fatima is referring to here is English. Fatima’s students’ first language will be Arabic, and although Fatima is herself bilingual, she indicates that language can be a significant barrier to learning science nonetheless.

Table 3: Science teaching confidence

	Teaching science inquiry skills	Providing a learning experience in science which is primarily student-centred	Providing hands-on opportunities for learning in science
Alia	4	4	4
Basma	2	2	3
Dalal	2	2	3
Fatima	1	3	3
Ibtisam	2	1	2



Mariam	2	2	3
Nahla	3	3	3
Raheema	4	4	4
Zainab	1	2	2

1 = not at all confident; 2 = unconfident; 3 = confident; 4 = extremely confident

Table 4: Barriers and challenges to teaching science

	I find it hard to manage students' behaviour while teaching science in an active way	I find English language a barrier that affects students' understanding of scientific concepts
Alia	2	3
Basma	3	3
Dalal	3	4
Fatima	2	4
Ibtisam	3	4
Mariam	3	4
Nahla	4	4
Raheema	3	4
Zainab	2	3

1 = strongly disagree; 2 = disagree; 3 = agree; 4 = strongly agree

The Teaching of Inquiry Skills

The levels of confidence for teaching inquiry skills correlate well with the teaching practice of our Emirati teachers. That is, those that were not at all confident sometimes or rarely/never incorporated scientific inquiry skills in their science classes, and those that felt confident or extremely confident, included inquiry skills often in their teaching. No teachers, however, claimed to always incorporate inquiry skills in science classes. Interestingly, Basma and Ibtisam both claimed to be unconfident in teaching inquiry skills and yet often included them in their practice, and Fatima who professed to be not at all confident in this area, sometimes incorporated skills into her teaching. This indicates that these three teachers are striving to include inquiry skills despite their lack of confidence, placing an assumed importance on such skills.

In the comments section for barriers and challenges in the survey, Fatima wrote: “I suggest to have a teacher only teaching science so that she can put more attention on this important subject to our [sic] future of our learners.” This opinion may be a reflection of Fatima’s confidence (not at all confident in teaching inquiry skills) but seems to be not uncommon among primary school teachers. For example, in their study involving pre-service and in-service primary teachers in The Netherlands, Asma, van der Molen, & van Aalderen-Smeets (2011), found that many teachers expressed the importance of teaching science in primary schools, but did not necessarily see themselves as the ones to do it. Instead, like Fatima, they suggested specialist science teachers do this.

Dalal, a grade 3 teacher who only sometimes includes inquiry skills in her teaching, wrote: “Students in cycle 1 school [sic] have very basic skills to learn science so most skills are not suitable to their age like recording data or working in groups” - a statement which could be tempered with her self-admitted lack of confidence in teaching science skills.

**CONCLUSION**

It is positive to see that most of the teachers in this study hold predominantly ‘best practice’ beliefs about how students learn science. Many are endeavouring to teach according to these beliefs despite their own low confidence and the barriers or challenges, perceived or real, they face.

Hesitancy to teach science, or an unwillingness or inability to teach science in a student-centred, hands-on, exploratory way has often been linked with a lack of teacher confidence. However, positively, research has shown that when teachers gain greater confidence and self-efficacy through continuing professional development, they are able to go on to teach science in a more effective manner and are able to improve the attitudes of their students in this area (e.g. Osborne & Dillon, 2008; Osborne, Simon & Collins, 2003). This has implications for the future professional development of our Emirati teachers, more than half of whom claimed to be unconfident or not at all confident in at least 2 of the 3 survey items pertaining to confidence.

If teachers believe student behaviour will be hard to manage during hands-on, exploratory type activities, then may be less likely to include these in their practice. Professional development in this area is also likely to be beneficial for two-thirds of the teachers in this study.

The other surveyed barrier to teaching science, the English language, is less simple to rectify. The use of English as the only medium of instruction to teach science in ADEC government schools may need to be revisited. Research into the effect of the language of instruction on the performance of students is suggested.

In some instances beliefs and practice were paradoxical, and the lack of inclusion in practice did not correlate with a lack of confidence and or student behaviour management concerns. This signifies that other barriers or challenges are impeding teaching practice and it is likely that these are case-by-case issues that may be investigated and rectified in individual schools.

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PEDAGOGIC REFLECTIONS ON CHINESE EQUITY ISSUES: INVESTIGATING DISPARATE PERFORMANCE OUTCOMES IN PRIMARY MATHEMATICS

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Abstract

In recent years a considerable literature has accumulated to reveal that the education of Chinese migrant children in urban settings remains segregated predominantly in migrant schools, while migrant students with high socioeconomic status have mainly become integrated with urban students in public schools. This study is concerned to compare and contrast academic performance indicators which characterize migrant students in segregated schools, as opposed to integrated schools. Results of the study reveal that the mathematics performance levels of migrant children segregated in migrant schools exhibit an increasing gap in achievement, compared to migrant children attending public schools. The implications of these disparities and inequities are discussed, with an aim to encouraging policy makers to recognize that reform of the segregation patterns for Chinese migrant students is clearly imperative.

Keywords: China, segregation, mathematics achievement, migrant children

Introduction

In the latest ‘National New-type Urbanization Plan (2014-2020)’, the Chinese government has ambitiously targeted 60 percent of its people living in cities by 2020, and intends to grant 100 million migrants with what has now come to be called ‘urban household designation’. During this urbanization process, the issue of the particular ways in which rural-urban migrant children’s education is determined takes on a role of national importance that we believe will no doubt figure prominently in either improving or diminishing the educational outcomes and chances of academic success for Chinese migrant students. Previous studies have revealed that there exist diverse processes and disparate outcomes of assimilation for migrant students, depending upon whether these processes lead some groups to integrate successfully into mainstream urban schooling, or whether others are lead into segregated migrant schools of minimal resources and teaching skills (Portes & Zhou, 1993; Zhou, 1997). In recent years Chinese policy has been inclined to allocate placement for migrant children of higher socioeconomic status into urban public schools of advantage, while migrant students of lower socioeconomic status tend to be segregated in migrant schools of disadvantage (Chen & Feng, 2013; Lu & Zhou, 2013). Given the substantial structural barriers which ensure that a large fraction of Chinese migrant children are kept segregated in low-quality migrant schools, our paper will be concerned to explore the consequences of inequitable public school placements are similar to those predicted by studies on segmented enrolment assimilation in western countries.

Moreover, given that the Chinese educational system relies upon test scores as a primary criterion in the selection process for academic promotion, the school outcomes in mathematics for migrant children are essential conditions needing to be satisfied to secure any substantial hope for their upward mobility and opportunity for future success (Lai et al., 2014). Moreover, the level of migrant children’s mathematics achievement is also vital in promoting the future success for the nation’s economic development (Perry & McConney, 2013). In the following section, the brief review will focus on studies related to the education



of migrant children in urban areas, thereby addressing considerable attention on the few Chinese studies that have examined the segregated and desegregated provision of primary education, particularly in relation to migrant children's achievement in mathematics.

School segregation of migrant children in Chinese urban schools

In most developed and developing countries, the process of urbanization has significantly reinforced the rural-urban migrant movement. The successful integration of large numbers of migrants into society remains one of the greatest challenges any country will face. In North American and European countries, early school segregation seemed to be most pronounced in the largest metropolitan areas, where it has been found that public school disparities of segregation reflecting racial composition (Clotfelter, 1999), socio-economic background differences and ethnic school segregation are acutely manifest (Deshingkar & Grimm, 2005; Frankenberg, Siegel-Hawley, & Wang, 2010). Despite years of effort to institutionalise the US Civil Rights Project of School Desegregation, urban schools across America and particularly in the South have preserved, if not intensified, the segregation and socioeconomic stratification processes which by their very nature place children in disadvantaged and academically disabling schooling contexts. Given such situations and the protracted exposure of schoolchildren to inferior educational opportunity, it should come as no surprise that the achievement gap between segregated and non-segregated schools has widened (Garcia, 2008).

Given the quite considerable array of differences amongst countries, it is understandable that the degree of school segregation and socio-cultural assimilation is likely to differ. It is a salutary reminder to note that the social phenomenon of 'internal migration' distinguishes China from many other countries. The rapid escalation of economic development in recent decades has caused a large number of peasants to seek better education and employment opportunities in urban areas (Cheng, Guo, Hugo, & Yuan, 2013). Because of the deliberate structural orientation of government policy, however, these migrant children are often segregated from urban mainstream culture and schools. In China, the historically embedded and dualistic system which fosters a hiatus between rural and urban areas divides Chinese people into agricultural and non-agricultural groups. However, as the process of urbanization continues to burgeon, it is clear that rural-urban migrant people have become the largest social class, both distinct and separated from 'rural' and 'urban' people. Moreover, the inflexible household registration system inhibits migrant people from obtaining equal allocation in welfare, employment, and public goods attainments, in comparison to urban residents (Goodburn, 2009). Correspondingly, Chinese migrant children are classified as being 'out-of-district' children seeking education in urban public schools, making it virtually impossible for them to transfer to schools of better educational opportunity (Li, Zou, & Wang, 2009).

Specifically, urban public schools are only allocated resources for urban children who hold the non-agricultural registration status within the school district (Wei & Hou, 2010). This being so, migrant children's educational funding remains allocated to their family's rural homes, even though their parents have migrated to an urban area. Consequently, the resulting shortage of educational funds in urban areas undermines the capacity of the local educational authorities to accommodate for all students, migrant and urban. Some urban public schools occasionally recruit migrant children, on the condition that they can meet the requirements of extra high tuition fees (Goodburn, 2009). Nevertheless, for the majority of migrant children who hold the agricultural household registration, fewer opportunities are doubtless available for enrolment in urban public schools than for urban children generally (Wang, 2012). To tackle these challenges, private migrant schools have been established to provide educational opportunities for children, without the limitation of household registration and expensive school admission, but at the expense of being 'quite frankly in miserable condition' as well as having 'poor equipment, and few



qualified teachers' (Xia, 2006, p. 39).

Given efforts made during the last decade, the Chinese government is gradually taking measures to ameliorate the problems which surround the integration of migrant children in urban areas. Several regulations and laws have been promulgated to guarantee the access to urban public schools for migrant children. According to government statistics, the proportion of migrant children enrolling in public school grew to about 60 percent in Beijing, the Capital of China (Wang, 2009). Despite these improvements in Beijing, the general problem has persisted and scholars are now addressing the preliminary evidence which contrasts migrant students' disadvantaged learning environments in segregated migrant schools in comparison to public schools.

Given that the Chinese educational system relies upon test scores as a primary criterion in the selection process for academic promotion, the school outcomes in mathematics of migrant children are essential conditions to be satisfied to secure any substantial hope for their upward mobility and opportunity for future success (Lai et al., 2014). Moreover, the level of migrant children's mathematics achievement is also vital in promoting the future success for the nation's economic development. In the following section, the review will focus on studies related to the education of migrant children in urban areas, addressing our attention on the few Chinese studies that have examined the segregated and desegregated provision of primary education, particularly in relation to migrant children's achievement in mathematics.

School segregation and educational outcomes

School segregation is an important factor in explaining certain differences in educational outcomes amongst migrant individuals. Ever since Coleman (1966) published his research on the impact of ethnic and socioeconomic school composition on students' academic achievement, the effect of segregation on migrant students' academic achievement and the ambiguities surrounding the concept of 'segregation' has remained insufficiently articulated. Despite these persistent ambiguities, a general consensus has nevertheless emerged that while there are certain benefits associated with students attending diverse schools, it is also evident that, conversely, there exists an array of adverse effects for students who are segregated in schools where poor and minority students are concentrated, such as an increase of mortality (Inagami et al., 2006), a lower achievement level (Schnepf, 2007), and a sense of persecution (Thomsen, Green, & Sidanius, 2008). It is salutary to remind ourselves, however, that the problem cannot be reduced simply to the issue of 'segregated schooling'. For example, it is incontestable that 'private schools' are in essence, a form of segregation, but a considerable literature has accumulated to show that the academic performance of private school pupils is generally superior to students attending public schools (Figlio & Stone, 2012; Lubienski, Crane, & Lubienski, 2008). Similarly, there are a number of progressive, but so-called segregated schools, which focus on pupils from lower socioeconomic backgrounds, whose performance levels are outstanding. So, the problem of disparate academic performance levels does not admit of straightforward reduction to segregated schools as the causally- defining characteristic of likelihood of academic success. The analysis of these issues needs to be much more precise with regard to the peripheral variables which give sense and substance to the concept of a 'segregated school' (Fiel, 2013; Orfield & Lee, 2005). We submit that the concept of school segregation is not monolithic in interpretation, but rather, multifaceted, and we believe this is an insight of paramount importance in advancing our understanding of inequities in Chinese migrant education in particular.

It is relatively clear that migrant pupils who attend schools with a greater share of children from higher socioeconomic backgrounds were found to perform better academically (Guo, 2011). In contrast, segregated minority schools tend to produce students who have lower levels of educational attainment,



fewer job opportunities, a reluctance to pursue demographically integrated relationships later in life, and an increased likelihood of holding parochial and prejudiced attitudes (Linn & Welner, 2007). Currently, Chinese urban schools that provided educational opportunities for migrant children consist of integrated public schools and segregated migrant schools. Public schools, established by the government to provide educational opportunities for urban children, have been accessible to a proportion of migrant students. This type of school was generally equipped with qualified teachers, well-furnished environmental facilities, and adequate funding, primarily providing educational opportunities for non-migrant children (Li et al., 2009). In contrast, migrant schools, a type of private school sponsored by local communities or private business institutions, played a complementary role in providing educational opportunities for migrant children in urban areas. However, due to insufficient funding within the public educational system, these migrant schools were often poorly-resourced in terms of educational infrastructure and teaching quality (Xia, 2006).

Several studies on the mental health state of migrant children from segregated schools located in lower socioeconomic backgrounds have revealed that Chinese migrant children in these circumstances are likely to suffer slight psychological health problems (Tao, Xu, Zhang, Gu, & Hong, 2004) and develop poor learning habits (Liu, 2007). In contrast, the adaptive capacity of migrant children in public schools is better than that of migrant children in segregated migrant schools, regardless of the student's grade level (Li et al., 2009). Migrant children enrolled in public schools display more satisfaction with their academic experience than do migrant school students in segregated schools (Xie, 2007). Other studies have focused on migrant children's mathematics achievement and indicated that migrant children in public schools perform better in academic achievement than migrant students in segregated migrant schools. Interestingly, no significant difference in mathematics achievement was found in circumstances where migrant children were integrated with urban children in public schools. Comparative studies of school segregation have revealed that children from migrant families of higher socioeconomic backgrounds serve to increase the likelihood that their children will attend public schools (Lu, 2012). In a later study it has been postulated that socioeconomic differences in family background may in part explain the achievement gap between students attending public schools, compared to segregated migrant schools (Guo, 2011; Lai et al., 2012). However, others have argued that school segregation is in itself likely to be a sufficiently important contributing factor in explaining the comparatively lower levels of performance in mathematics exhibited by migrant students (Chen & Feng, 2013), but we have suggested that the subtle variables which would substantiate this conclusion unequivocally have not yet been teased out.

Given the racially isolated contexts of many migrant schools in China, it is crucial to examine closely the potential for harmful outcomes associated with the current convention of focusing exclusively on test score-related dimensions of examination. We submit that new legislation is sorely needed to ensure that mechanisms are instituted which ensure that migrant students who were enrolled in segregated schools are afforded equal opportunities for access to quality education capable of maximizing their true potential, as assuredly as happens in urban public schools. This being so, it is critical that disparities in performance outcomes in segregated and integrated schools are accurately reflected, in order to better understand how best to foster social integration and achieve equality within Chinese education.

Objectives and research question

With a view to improving academic achievement for all migrant children, both in segregated migrant schools and in urban public schools, this study will endeavor to provide sufficient empirical findings on the disparities which characterize the experience of migrant students in situations of school segregation and desegregation, with special reference to the academic performance of migrant students in terms of



mathematics achievement. This study therefore critically examines the disparities which exist in the levels of mathematics achievement displayed by migrant children in segregated schools, on the one hand, and migrant children in urban public schools on the other, with an aim to advance our present understanding of the respective roles played in achieving academic success by school types. Consistent with this objective, and as a guide to developing this study, we have framed the following specifically directed research question of ‘What are the differences in the levels of mathematics achievement displayed by migrant children enrolled in segregated schools, in contrast to integrated public schools?’

Method

This study is in alignment with the National Bureau of Statistics of China (2011) that defines migrant workers as people who have left their rural regions, but maintain their agricultural household registration for working in urban areas for more than six months continuously. Their children who have been brought into urban schools for transient education are called migrant workers' children, or ‘migrant children’. In this study, we shall focus on these two types of schools in which migrant children have been placed in urban areas. These include: private migrant children’s schools (migrant schools) and public integrated schools (public schools).

This study was conducted in four primary schools in Shanghai in 2013. The ethical approval of this study was granted by Australia Human Research Ethics Committee (HREC) (No.H-2012-0355). All participant students are children enrolled in years 2 to 5. The age of participant students varied from 8 (year 2) to 11 years old (year 5) on average. In order to control for educational differences between central and peripheral districts in Shanghai, all of the participant schools were selected within one of the suburban districts. The same mathematics test was conducted within the primary schools as the final examination of the semester. Students’ scores were collected and evaluated by the local Ministry of Education.

The mathematics test scores of all participants were provided by participating schools. In this study, the mathematics test set is in accordance with the Shanghai curriculum standards and has been designed to satisfy the requirements as stipulated by the State Education Commission for each corresponding grade level. The tests varied by grade level to accommodate different curriculum requirements for each semester. The examination process consists of three sections: the first being devoted to number and computing (20%); the second to concepts comprehension (40%); and the third to problem-solving (40%). Each grade level employs the mathematics test separately. The math test score scale is 0-100 points. To assess students’ mastery of mathematics across grade levels, scores of 60 points or above is the level required to pass the exam. Below 60 points signifies failing in the exam, and 80 points or above represents an excellent result.

Results

Summaries of Demographics

In the sample of 1808 children, there were 839 migrant children, and 969 urban children, accounting for 46.4% and 53.6% of the sample respectively (see Table 1). In total, 478 students in migrant schools and 1330 children in public schools participated in the study. The participants were categorized into three categories: migrant school children (26.4%, n=478), migrant children in public schools (20%, n=361), and urban children in public schools (53.6%, n=969). In total, 1048 boys (58.2%) and 760 girls (41.8%) participated in the study.



Table 1 Descriptive statistics of participant sample

Grade	Migrant school		Public school	N	Percentage
	Migrant children	Migrant children	Urban children		
Year 2	174	122	275	571	31.6
Year 3	104	89	261	454	25.1
Year 4	108	70	230	408	22.6
Year 5	92	80	203	375	20.7
Total	478	361	969	1808	100.0
(N/%)	(26.4%)	(20%)	(53.6%)		

Mathematics Achievement Levels

The mathematics achievement levels of migrant school students, migrant children in public school and urban children in public school were compared. In years 2-5, the mean levels of children’s mathematics scores were varied. Among the three types of students, urban children in public schools scored the highest level of test scores in years 2-5, followed by the migrant children in public schools, but the achievement gap was very small. However, migrant children in migrant schools achieved the lowest mathematics achievement levels among the three types, and the achievement gap was larger. As illustrated in Chart 1, the pattern displayed clearly revealed that migrant children and urban children in public schools achieved a similar mathematics performance level in year 2-5, but migrant school students fell behind systematically.

Specifically, the achievement outcome of migrant school children in year 2 scored at the level of 86.6 points (SD=9.7), while migrant children in public schools achieved a higher average level of 94.7 points (SD=4.3). In year 3, urban children achieved a higher level (91.5 points) (SD=4.2) than the achievement level of migrant children in public schools (89.7 points) (SD=5.1). Migrant children in migrant schools scored at the lowest level of 78.5 points (SD=13.6). In year 4, the achievement gap was as large as 14.5 points between migrant children in migrant schools (77.5 points) (SD=7.1) and migrant children in public schools (91.9 points) (SD=15.4), but the gap was only 0.4 points between urban children and migrant children in public schools. Similarly, year 5 migrant school students performed at the level of 69.5 points (SD=21.3), while migrant children and urban children in public schools scored 89.7 points (SD=7.1) and 91 points (SD=6.3) respectively.

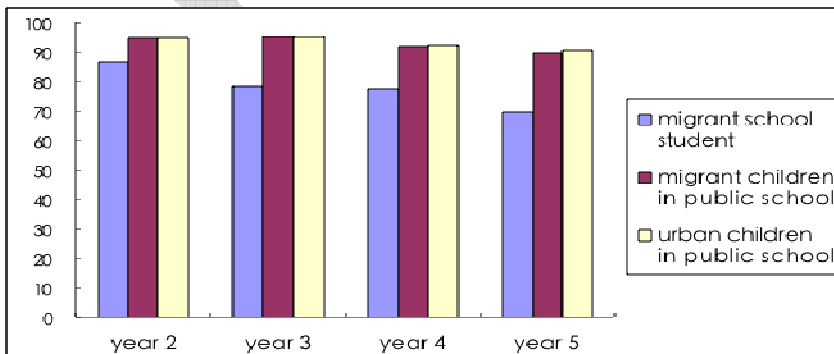


Chart 1 Mathematics test score in years 2-5 in three types of children



In both types of schools, the failure rate increased as the grade level increased. However, public school students had a steady increase in the failure rate from years 3 to year 5, whereas there was a sharp increase of the failure rate from years 2 to 5 in migrant schools (see chart 2 and chart 3).

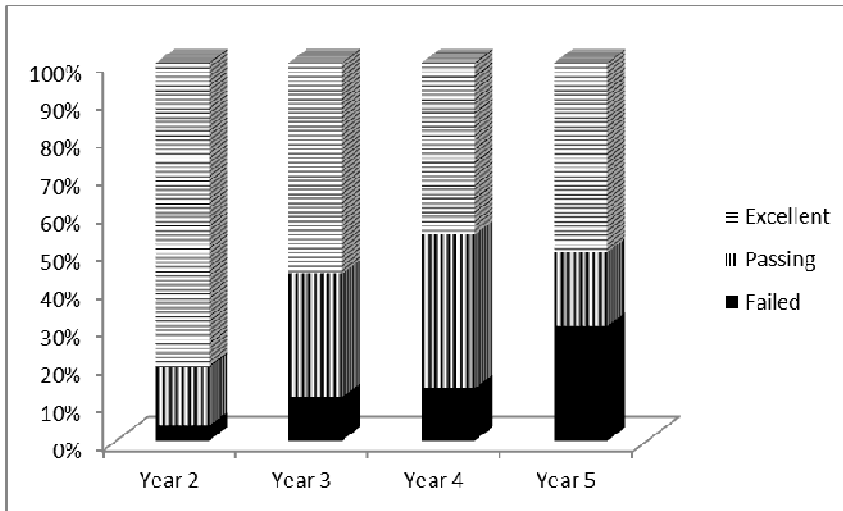


Chart 2 Rate of mathematics achievement levels in migrant schools

In contrast, in public schools the failure rate for migrant children was much lower than that in migrant schools. A statistically significant difference was found between the categories of mathematics achievement levels and school type: $\chi^2 (4, N=839) = 307.9, p < .001$, and between mathematics achievements categories and the grade levels: $\chi^2 (6, N=839) = 76.1, p < .001$.

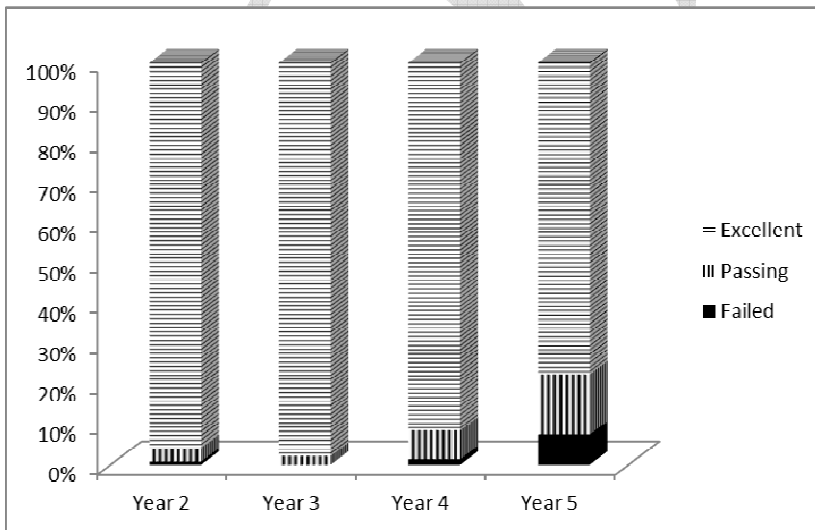


Chart 3 Rate of mathematics achievement levels in public schools



Discussion

This study investigates the equity implications of disparities in mathematics performance outcomes as they arise in contexts of the segregated education of rural-urban migrant students in Chinese urban schools. The present study achieves this objective through a comparison of significant differences in achievement outcomes between these different groups, across several specific mathematics achievement levels. Overall, we have been able to document the adverse consequence of school segregation by examining the disparities which arise for migrant children in different types of schools, within a particular domain of academic achievement. The concept of ‘segmented assimilation’ has accordingly been applied to facilitate a statistical strategy for developing a typology of vulnerability and inequity affecting differentially diminished outcomes for Chinese migrant groups (Lu & Zhou, 2013). The outcome of segmented assimilation has been employed in western countries, where children of non-white immigrants may not be afforded an equal opportunity for gaining access to the benefits of middle class white society, no matter how acculturated they become (Portes, Fernandez-Kelly, & Haller, 2005; Vermeulen, 2010; Zhou, 1997). Not being able to assimilate themselves into these sociocultural enclaves, or privileged social circles which deny them access, has in many cases proved to represent a form of cultural incarceration which condemns them to permanent subordination and disadvantage (Orfield & Lee, 2005). Within the USA the deplorable disadvantage and alienation which results from such inequities is being acknowledged, addressed, and rectified (Fiel, 2013; Lee, 2004). By parity of reasoning we have similarly applied the mechanism of segmented assimilation theory in the context of Chinese internal migration to reveal that the same sort of educational inequities are also manifesting in the Chinese situation (Lu & Zhou, 2013). We have endeavored to show, in other words, that there are similar problems facing migrant students in China. It is clear that their diminished academic performance outcomes result predominantly from their inability to gain access to urban public schools with better physical and human resources than is available in the segregated migrant schools in which they currently find themselves. Chinese society is now diverse and segmented, with an underclass residing in urban areas comprising a large portion of rural-urban migrant families (Cheng et al., 2013). This is a situation, we believe, that represents an egregious impediment to educational equity.

We submit that the goal of school integration, not school segregation, should become a far more determinate and resolute policy of educational equity than it currently is within the Chinese government, particularly, if it wants to improve the quality of education nationwide. The problem of segregated migrant students also sheds light on the drawbacks of the inflexible household registration system in the Chinese educational context (Goodburn, 2009; Wang, 2009; Yuan & Hou, 2012). This system not only serves as an impediment to the school performance of migrant children, but it also serves to divide Chinese society into two distinct cultural groups, one of which is urban and the other of which is rural. Part of the equity problem arises because the chance of genuine upward mobility for those who are culturally defined by the limitations of migrant education is institutionally dissipated by the inferior quality of its being segregated. Notwithstanding the latest policy for household registration reform, there remains a huge cadre of 200 million migrant people- roughly two-thirds of whom are excluded from city- resident status by 2020 (Li & Shi, 2014). The resulting shortage of educational funds by local government undermines the capacity of educational authorities to accommodate all students, migrant and urban. The disadvantages experienced by migrant children, as a consequence of school segregation, may impact so comprehensively that its negative influence will be felt irrevocably on the next generation across the entire nation.

Considerable evidence has now accumulated to confirm that there exists divergent assimilation paths for these new migrant groups in China with high socioeconomic and low socioeconomic, one of which is disposed towards upward assimilation and the other of is disposed towards downward assimilation (Lu &



Zhou, 2013). During their period of segregated education from urban mainstream schools, migrant students in urban areas integrate only peripherally and cosmetically into urban society. This is reflected not only the achievement level hiatus which exists between the two migrant groups, but is exemplified in the ever growing gap between segregated migrant students and urban children. As we witnessed in the body of the text above, the fact that migrant students in desegregated schools achieved as favorable test results as did urban children, should suffice to illustrate that they have the intellectual gifts and motivation to adapt effectively to urban culture. We believe that our own study has palpably indicated that given access to public school education, migrant school students should in principle be sufficiently able to improve their mathematics performance to a level of achievement which makes negligible the difference in their test outcomes from those of public school students.

Recently, China has unveiled its landmark blueprint to expand urbanization, and the target it has set for the completion of its ambitious plan is 2020. Therefore, the huge numbers of migrant children need to be educationally accommodated to achieve this goal. It is evident that the problem betrays a deeper truth that the local government of Shanghai has not yet come to comprehend the educational inequities, which inevitably arise in trying to accommodate migrant children by segregating them from the arena of public educational resource. Growing awareness of this issue has been reflected to some extent in the latest plan, where the new policy will give priority to small- and medium-sized cities by providing an opportunity to attract migrant populations in order to relieve the burden of expanded urbanization in the larger cities (Guan, 2014). In the meantime, there persists the equity problem of the increasing gap in the mathematics performance outcomes of migrant students in segregated schools, in contrast to urban public schools. Similarly, it is clear that the gap will additionally be widened as the length of migrant residency increases in urban areas. In any case, today's small and medium cities may in the near future also be confronted with the same problems of segregation in education for migrant children, as long as the migrant population continues to increase (Su, Fan, Fu, Liu, & Yang, 2014).

In the final analysis, it is evident that despite the government's noble efforts in improving migrant students' access to public schools, and gradually fostering a new awareness of the potentially negative influence of segregated education on migrant youth, the current situation of sequestering migrant students into segregated schools still exposes them to inequity and disadvantage (Chen, Wang, & Wang, 2009). One hope for amelioration emerging amongst some scholars and policy makers is that it is the goal of comprehensive integration of migrants into schools of quality that marks the most effective route towards the preservation of educational equality and equal access to educational resources across rural and urban groups (Wei & Hou, 2010). Of paramount importance also is the fact that migrant students who attend desegregated schools have access to social networks and personal friendships that are likely to have both an auspicious and beneficial socioeconomic influence on their lives.

Conclusion

This paper examines the ramifications of school segregation on migrant children's school performance by investigating the perspective of mathematics achievement in a Chinese urban setting. The results indicate that the influence of segregation school policy on the migrant population has been negative and has engendered inequities in academic performance, which could plausibly have been avoided. Our study reveals that the Chinese government's current policy of migrant segregation does not effectively deliver high quality mathematics education to migrant children in comparison to the delivery available in urban public schools. The disparities in the present segregated school structure remain an especially formidable barrier to the educational outcomes of migrant students. In order to better support social integration for migrant children, this paper suggests that the amelioration of the growing problem of inequity and the



improvement of migrant student's academic achievement levels, particularly in mathematics, could be brought to fruition simply by enlarging the opportunities for migrants to study in urban public schools, rather than merely implementing segregation policy to sequester them in migrant schools. However, the deeper point made by our paper is that the educational quality of segregated schools should be improved to better balance the distribution of educational resources amongst urban schools equally, be they migrant or public.

Meanwhile, it is important to recognize certain limitations of this study. It should be noted that our data are restricted to Shanghai City, though it does represent one of the largest primary migration destination cities in China, affecting a huge population of migrant children. Despite the fact that the situation in Shanghai exhibits a considerable array of similarities to other large Chinese cities with a high concentration of migrants, the generalizability of certain aspects of our results could arguably be regarded as problematic. This being so, we suggest that our conclusions can reliably be restricted to the context of the Shanghai analysis provided, and given its massive migrant population, the conclusions we draw should nevertheless be regarded as significant. Although the sampling procedure yields a probability sample up to the class level, it does not provide a strict probability sample for all children. Nonetheless, this study has explicitly been designed to address the equity achievement issue by reference to mathematics performance, and has for this reason, not ventured to comment on other important subjects in primary schools such as science, and Chinese reading/literacy. We do not reckon that this is a flaw in our analysis, but only a necessary limitation we have ourselves imposed to keep the paper and its argument within manageable bounds. A venture of the envisaged magnitude described here would obviously require a comprehensive investigation of monumental resources time, and space, so must thus remain a research task for yet another occasion.

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THE APPLICATION OF PEDAGOGICAL STYLISTICS IN ELT LITERATURE AND LANGUAGE TEACHING COURSES¹

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ABSTRACT

This paper explores the effectiveness of pedagogical stylistics in ELT Literature and Language Teaching courses. Stylisticians maintain that integrating literature in language teaching process will improve learner's language abilities and enhance their understanding into the use of language and also improve their cultural awareness. In order to effectively integrate literature in EFL context, the application of pedagogical stylistics will empower ELT teachers to improve student teachers' language, literary, and cultural awareness. Therefore, using a pedagogical stylistic analysis will help to increase student teachers' motivation because of the satisfaction that they can gain from analyzing literary texts once they become informed of how language and culture is used in them. This paper aims to explore whether it is possible to generate stylistic-based activities from literary texts and will also provide ELT teachers with some stylistic-based activities as examples that they can use in their literature and language teaching courses.

Key Words: Pedagogical Stylistics, English Language, Language and Cultural Awareness

Introduction

This study focuses on how stylistics techniques can enrich and enhance the literature and language teaching courses. Pedagogical stylistics analysis examines the language of literature in both sentence level and the whole texts to encourage students develop their awareness of the connection between language and literature. In addition to elaborate the theoretical background about stylistics and stylistic techniques, the study will also present sample stylistic-based activities which English language teachers can use and pursue in their language and literature courses. The prepared materials in this study will be on *Ta-Na-E-Ka* a short story written by Mary Whitebird.

Stylistics analysis will help students in comprehending how words and grammar function in literary texts. The knowledge of vocabulary, grammar, and rhetorical concepts of a text enables students to develop their communicative competence and cultural awareness. Stylistics-based analysis of literary or non-literary texts in language and literature classes empowers students to perform better, with increased confidence and motivation. Suhair Al-Alami summarizes the pedagogical approaches to the literary texts as:

- a) Literary texts should appeal to the students' interests, concerns and age;
- b) The teaching of literature in an EFL context should aim to elicit the students' responses to the text, and to guide them to a personal discovery;
- c) Literary texts should be approached as a resource and a fruitful opportunity for students' education and their personal growth;
- d) Literature in the language classroom should be explored in the light of a learner-centred pedagogy, and as such, teaching should focus on students' communicative needs;
- e) This global perspective of learner-centredness on language teaching is implemented through the learner-centred curriculum, which is expressed by the view that language education should aim to establish the conditions for autonomous learning;
- f) A new role and responsibilities for the teacher

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should be established. The teacher is not anymore the unquestionable authority in the language classroom; g) Regarding the implementation of this approach in the language classroom, this is attained through a language-based classroom practice where literary texts are explored as a resource for literary and linguistic development; h) The exploration of texts comes closer to the students' personal experiences and to what relates to their life through teaching techniques and practices, and is divided into pre-reading, while reading, and after-reading activities (Alami, 2012: 30).

How to Select the Appropriate Text

It is very important to select the right text in teaching English to ELT students. Literary texts must be carefully chosen, otherwise, the students will not respond to the text enthusiastically. Linguistically difficult literary texts eliminate the students' motivation and stop them to work on the text for a long time. The topics and the themes of the selected texts should be interesting and lead students to relate them to their own lives. Among literary texts, short stories, poetry, and short drama plays are more proper to novels because their language is more difficult and needs a long time to be analyzed. The language of the chosen texts should be appropriate to students' level. The languages of non-contemporary texts are rather difficult and have lots of archaic vocabulary. Thus, it is rational to choose the most contemporary texts which have enough day language expressions and idioms.

How to integrate Pedagogically-oriented Stylistic Activities in Language Classes

The main point here is the application of stylistics to the teaching of language and literature. There are many methods and techniques to develop pedagogically-oriented stylistic activities in order to teach them both the language of the literary texts and to enhance their awareness about it. According to Mick Short:

Over the last few years there has been a resurgence of interest in the use of literature in language teaching... Stylistic analysis has been of particular concern to the foreign-language learner as it has been seen as a device by which the understanding of relatively complex texts can be achieved. This, coupled with a general interest in English literature, has led to the stylistic approach becoming more and more popular in the EFL context. (Short, 1989: 6)

Thus, there is a tendency to use literature for language teaching among language teachers and learners. Pedagogically-oriented stylistics mainly focuses on the interpretive skills to such as doze procedure, paraphrasing, summarizing, and rewriting (Carter & Long, 1987). In fact, pedagogic stylistics tries to sensitize students to the use and analysis of the language in literature. It attempts to help students to be more familiar with different structures and uses of English. Utilizing pedagogically-oriented stylistic activities in language classes will help students to improve their aesthetic experience and the poetic significance.

Pedagogically-oriented Stylistic Activities on the Sample Short Story

The pedagogically-oriented stylistic activities are divided into three parts; before reading, during reading and after reading activities. Pre-reading activities focus on learners' prior and background knowledge on the themes in the short story. As a before reading activity, the first step in a pedagogical stylistic analysis is giving a very short summary of the short story.



Before Reading Activities:

In introducing the short story we can use a very short description of the story. The following brief summary is an example:

“Ta-Na-E-Ka” is about a Native American Kaw girl who goes through Ta-Na-E-Ka a ritual for boys and girls moving into adulthood. The girl follows her own instincts and her grandfather’s directions as she experiences this ritual. After students got some background information about the short story, we can ask some questions to awaken and sharpen their knowledge about the topic and to help them to make a connection with the main idea. For example, we can ask students to think about the similar traditions that exist in their culture, what do they think about these traditions? By activating students’ prior and background knowledge and forcing them to speech we can help them to improve their speaking skills. According to Aydinoglu “pre-reading activities aim to activate their prior knowledge, to help them make predictions, to arouse their curiosity, to enhance their motivation and introduce some lexical items and grammatical structures if necessary” (Aydinglu, 2012: 3).

During Reading Activities:

In during reading part, the class altogether reads the short story for more understanding and interpretation. The teacher in this part asks students many question to check whether they have understood the text or not. Aydinoglu States that “while-reading activities aim to help students comprehend the {text}, get the meaning and practice the lexical items in the {text}, and study the literary features of the {text}” (Aydinglu, 2012: 3).

In this part, we ask students to read paragraphs one and paraphrase it or if the paragraph is too long we ask them to summarize it. This activity will help them to activate their passive vocabulary develop their spoken language. The teacher in this part may also ask many challenging questions to check whether the students understood the text or not.

After reading activities:

After reading activities are mainly related to the writing, speaking and language awareness skills. After reading part is also a “production stage as it asks learners to produce by using the language items practiced in the previous stage” (Aydinglu, 2012: 3). The followings are some the most important kinds of pedagogically-oriented stylistic activities.

After students finish reading the text, we give them a few cloze tests from the linguistically rich paragraphs. Cloze tests as a language teaching tool help students to check their abilities about vocabulary items. Paul Simpson maintains that cloze tests,

attempt to impart knowledge about which lexical items are appropriate to which grammatical context, this, of all its applications, is the one that comes closest to getting students to fill in the ‘right’ term for the structural slot. To this extent, cloze test is able to shed a great deal of light on the concept of the *lexical set*. A lexical set is a bundle of semantically compatible items which are closely linked to a specific topic or register. Although synonyms (and near synonyms) are obvious candidates for inclusion in lexical sets, the concept extends much more widely to encompass clusters of key words which correlate generally with a particular field of discourse. (Simpson, 2003: 85)



Conducting a cloze procedure in a language class will help students to predict lexical collocations which will help them to gain important information about the grammar and vocabulary of a language. When students spot which item collocates with which, they develop their language awareness about vocabulary items. According to Simpson,

Most importantly for our present purposes, there is the stylistic application of cloze procedure. In this context, cloze is a productive way of exploring the territory between what we expect to see in a text and what a writer does in a text. It also creates a new focus for interpretation, because it commits students to providing a partial analysis of the text *in advance* of actually seeing the complete version. In stylistic applications, cloze is most certainly not used as a test of language skills. On the contrary, it simply asks informants for their intuitions about a text—intuitions which can't realistically be considered 'right' or 'wrong'. (Simpson, 2003: 86)

The following cloze test activity is a linguistically rich part of the short story which can be used to sharpen students' grammar knowledge.

- Read the following cloze test carefully and fill in the blanks with the appropriate words from the box below.

reservation, handmade beaded, had, braids, spoke, younger, give up, his

As my birthday drew closer, I awful nightmares about it. I was reaching the age at which all Kaw Indians had to participate in Ta-Na-E-Ka. Well, not all Kaws. Many of the families on the were beginning to the old customs. But my grandfather, Amos Deer Leg, was devoted to tradition. He still wore moccasins instead of shoes, and kept his iron gray hair in tight He could speak English, but he it only with white men. With family he used a Sioux dialect.

The second language teaching tool is multiple choices activates which focuses on important features of an idea. Simpson highlights that:

Multiple choice text is of particular benefit when there is an abundance of available paradigmatic entries for a given slot. It closes down the range of interpretative possibilities, allowing attention to be centered on the specific aspects of the lexicon which are the focus of study. Like cloze test, multiple choice text can be used to investigate virtually all of the topics in lexical semantics introduced in the course. Not only is it a handy tool for investigating synonymy, collocation and lexical specificity, it is also a useful apparatus for exploring the relationship between lexis and register. In this latter application, groups of semantically related terms can be drawn up for each structural slot along the chain. (Simpson, 2003: 93)

When students think about the relationship between the item and choices, they try to find the most compatible answer. This activity enhances their lexical and grammatical abilities. Multiple choice questions help students to think about the writers' choice of words. The following is an example of a well-formulated multiple choice question.



A person's *heritage* is

- a. the way a person looks and where he or she lives.
- b. a trial or test someone undergoes at a certain age.
- c. family history passed down through generations.
- d. family culture.

Think about the main character in the story and imagine that you are Mary. Write a letter to the grandfather telling him about your struggling life during the ritual. Use a lot of adjectives to describe the ritual and the difficulties you have encountered during the ritual. Then, read your letter to the class.

Think about the differences and similarities between your own cultures and the Indian American culture. Transform your ideas into a theatre drama play and then act it out in front of the class.

Conclusion

The above mentioned pedagogically-oriented stylistic activities provide the necessary tools for an investigation of the authors' styles strategies in producing and fabricating a literary text. Literary awareness promotes sensitization of the reader to the effect of linguistic patterns and their contextualization, and creative writing empowers students by helping them manipulate and master the language. These activities develop students' literary awareness and awaken their personal responses to the story. As Zyngier maintains "literary awareness aims at sensitizing students to stylistic devices in a literary text so as to enable them to build justifiable and more objective textual interpretations" (Zyngier, 1994: 298). Students examine the language of the text by retrospective reading which helps them to interpret it more deeply.

The last step in which students play with language to produce their own literary pieces will empower them to improve their writing skills. Therefore, using a pedagogical stylistic analysis will help to increase student teachers' motivation because of the satisfaction that they can gain from analyzing literary texts once they become informed of how language and culture is used in them. It is possible to generate pedagogically-oriented stylistic activities from literary texts and will also provide ELT teachers with some stylistic-based activities as examples that they can use in their literature and language teaching courses

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INVESTIGATING FOURTH GRADE PRIMARY SCHOOL STUDENTS' PERCEPTIONS ABOUT ACTIVE CITIZENSHIP THROUGH THEIR DRAWINGS¹

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ABSTRACT

There are some citizenship knowledge, skills and values that need to be hold by primary school 4th grade students. There are many methods or techniques for revealing active citizenship perception of students studying in this class. In this study, student drawings and explanation they have made regarding these drawings have been considered. The aim of this study is to determine the perceptions of 4th grade primary students about active citizenship through their drawings. This study was conducted in the spring semester of the 2012-2013 academic year. A total of 48 4th grade students attending primary school at Bayburt city in Turkey were observed. The interpretive content analysis method was used in the study and the study data were collected by means of draw-and-explain task. During data collection, the students drew pictures of active citizenship and explained their drawings. As a result of this study, the primary students' pictures mostly included humans, buildings like houses and schools, and nature items such as trees. In addition, it was observed that their drawings were grouped around environmental awareness, helpfulness, responsibility and patriotism. Pictures drawn by students showed that they were aware of examples of active citizenship behaviors in their environment. Research data were treated according to three themes determined in the content analysis: Environmental sensibility, cooperation and social responsibility. Although the students had studied different subjects related to active citizenship in the primary school curriculums, the pictures drawn by the students were limited to only one or two concepts. Primary school curriculums should include social skill education, character education and learning activities in order for students at younger ages to gain more active citizenship awareness. In future researches, how the gender, class level, parent education level, social and cultural differences affect the senses of the students regarding active citizenship can be investigated. Repeat of similar studies with different samplings and comparison of the results have been suggested.

Keywords: The 4th grade of primary student, active citizenship perception.

INTRODUCTION

Citizen, as its dictionary meaning, is used as a sense of “each one of them whose country or country feelings is one”, and citizenship, on the other hand, is used as “being a citizen, state of growing up or living in the same country (TDK, 1998: 1647). Citizenship information is defined as a discipline branch, arranging mutual relationship of citizens in an organized society and containing citizenship rights and assignments and assignments and responsibilities of people for each other and the society (Duman, Yavuz and Karakaya, 2010: 13; Nomer, 1983: 3; Ciftci, 2008: 107). Humans, as a social being, have to answer requirements and expectation of the society they live in. Knowledge of social relationship in a minimum level, whose framework has been drawn with social organization and rules, will be an indication of a healthy individual and healthy society. In this context, citizenship includes the entirety of relationship between individuals, state and humans, and on the other hand, we can say that citizenship education is an education showing how and in what way these relationships need to be realized (Elkatmış, 2012).

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Active citizenship, one of the targets of European Union policies, has been defined as social participation and participation in relational living by tolerance, non violence, according legal rules and human rights (De Weerd et.al, 2005).

According to Hoskins (2006), active citizenship is “being a citizenship candidate characterized as nonviolence in the framework of mutual respect, democracy and human rights accordance in civil society, community and/or political living”. Active citizenship approves dependency of having general accuracy in the formation and rearrangement of democratic society in all individuals or groups in a democratic society. It is to have a tendency to own democratic applications within a society and the entirety of organizations; responsibility to reveal that it does not stay out of this group or individuality out of these applications and institutions; to have a broad politic development containing all structures and relationships in social arrangements.

There is no class called active citizenship education in 4th grades in the primary school. Human rights and citizenship is gained to students as an inner discipline in especially social studies class content. Raising of a human, as comfortable, peaceful and being aware of their rights and responsibilities in the society they live in as a social entity are listed among the purposes of citizenship education (Joslin, Pope and Lim, 2007; Piper & Garratt, 2004).

Although each step of education is vital, primary school has a distinct significance in terms of the populace it addresses. Primary school process, when the basic character and personality of the person’s is formed, is a critical time period to have value, attitude and behavior gained to the individual (Bacanli, 2002; Oktay, 2007). Foundation stones of citizenship education are laid in primary school as well therefore primary school is regarded as an important fracture point in terms of citizenship education (Ersoy, 2007).

There are some citizenship knowledge, skills and values that need to be hold by primary school 4th grade students. There are many methods or techniques for revealing active citizenship perception of students studying in this class. In this study, student drawings and explanation they have made regarding these drawings have been considered. It is clear that children’s drawings were used in Turkish literature in matters such as the image of scientists (Buldu, 2006; Oğuz, 2007; Turkmen, 2008), European Union perception (Belet and Turkkan, 2007), family perception (Turkkan, 2004), internet perception (Ersoy and Turkkan, 2009), environmental education (Barraza, 1999; Alerby, 2000; Fleer, 2002; Sadik et.al, 2011; Yardımcı and Kılıç, 2010; Ozsoy, 2012), violence perception manners (Yurtul and Artut, 2008), and it was observed that there is no study applying the analysis of children’s drawings regarding citizenship education in the literature. Conducted studies show that there is need for studies intended the way the active citizenship is perceived and understood by children in this country. Therefore, this study was conducted to investigate the active citizenship perceptions of primary school students by means of their drawings. The results obtained from the study are valuable since they will contribute to fund of knowledge about the citizenship education and at the same time they will form an example for determining their thoughts on active citizenship.



METHOD

The qualitative research approach was used in this study. The perceptions and cases in qualitative researches were provided as realistic and holistic in the habitat (Yıldırım & Şimşek, 2005). Interpretive content analysis method was used out of qualitative research methods in the collection, solution and interpretation of data.

Study Group

48 primary school 4th grade students studying in primary schools located in Bayburt city center during 2012-2013 school year that was chosen by purposeful sampling and on a willing basis make up the study group of this research. The reason for including a limited number of students in the study is for the research of the matter thoroughly. Such an approach was adopted since qualitative researches do not have a generalization concern and allow in depth research. Easy access situation sampling was utilized in the research (Yıldırım and Şimşek, 2005: 112). The research is limited by data obtained from the study group. Distribution of the primary school students, who have participated in the study, according to their gender and the level of education of their parents is given in Table 1.

Table 1. Distribution of students, who have participated in the study, according to their gender and education level of their parents

Demographic characteristics		f	%
Gender	Girl	22	45.8
	Boy	26	54.2
Mother's education level	Primary school	2	4.2
	Middle school	24	50.0
	High school	12	25.0
	University	10	20.8
	Graduate school	-	-
Father's education level	Primary school	1	2.1
	Middle school	16	33.3
	High school	15	31.3
	University	10	20.8
	Graduate school	6	12.5

Data Collection Means and Process

The study was conducted in spring term of 2012-2013 school year. After receiving the permits necessary for the study, the researcher visited the primary schools which are to participate in the study and gathered information about the teachers and administrative. After this process, an application plan was made by school administrative and class teachers and the time and manner of the measurement tool was determined. The students were asked to draw pictures to describe active citizenship. The students who have participated in the study explained their drawings. The application was carried out during the period of one class (40 minutes).



Data Analysis

Visual and written elements, making up the active citizenship drawings of the students, form the data of the study. Obtained data were analyzed by interpretive content analysis method out of qualitative analysis methods (Ball and Smith, 1992; Banks, 2001). Interpretive content analysis contains the determination and definition of themes, subjects and events in visual and written elements obtained from the study (Giarelli and Tulman, 2003). Excess of the data obtained from the study have led the researcher to computer supported programs in order to ease the stages of data arrangement and interpretation. A qualitative data analysis statistics program allowed the storage of data, gathering of codes under themes, comparison of many data, repeat or correction of conducted processes when necessary and access to the obtained results when desired by the researcher. All drawings were studied by the researcher in order to form a general opinion and determine meaningful data units prior to coding. All elements included in the drawings were determined as codes of the study following this examination. The code list was updated by adding each new code emerging during analysis. Following the determination of codes, themes were determined and the codes were gathered under these themes. Codes and themes obtained for the validity and reliability of data, obtained from the study were reviewed by the researcher and in addition they were analyzed by another researcher who is an expert in social sciences education. Research reliability was estimated by using Miles and Huberman (1994) formula ($\text{Reliability} = \text{Consensus} + \text{Divergence} \times 100$). Consistency between coding carried out by two different experts was determined as a total of 85%. Data obtained in the study were tabulated by frequency analysis.

FINDINGS

As a result of the analysis of the data obtained in the study, it was seen that primary school students included humans and structures such as houses and schools, and natural elements such as trees in their drawings. The mostly used one among these elements is humans (35 students). Garbage can (28 students), garbage (28 students), sun (15 students) and clouds (15 students) were the mostly included other elements. When the data obtained in the study were evaluated, a model was established for a better understanding by making the data visual of the results occurring, in terms of example events supplied by behaviors, which need to be owned by students as active citizens, and also in terms of elements included in the drawings. As it is clear in the model (Figure 1), active citizen perceptions of the primary school students can be gathered under three fundamental titles; sensibility to the environment, cooperation and social responsibility.

Majority of students who have participated in the study tried to reflect situations who are not sensible to the environment and who are sensible to the environment. Some of them emphasized more than one theme by dividing the page they draw into two or even four parts. When gender was concerned, it was observed that 68% of the female students and 77% of the male students drew persons who are throwing garbage to the floor.

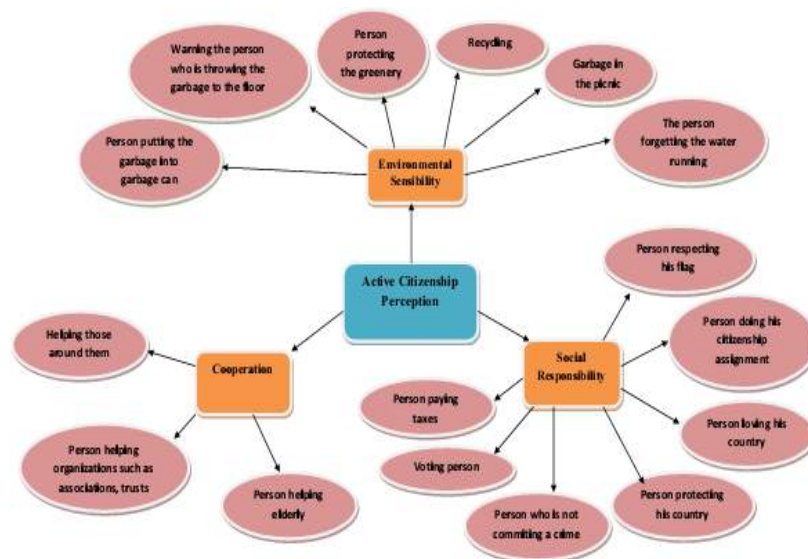


Figure 1. Model formed by the findings obtained in the study

Research data were treated according to three themes determined in the content analysis: 1) Environmental sensibility 2) Cooperation 3) Social responsibility

1) Environmental Sensibility Perception: When example events that need to be owned by citizen who are active in terms of sensibility to the environment and handled in the drawings, it was determined that “person putting the garbage into garbage can” was drawn the most in comparison to other behaviors (35 themes, 35/110). In addition, it was seen that behavior of “warning the person who throws garbage to the floor” followed up (19 themes, 19/110). When other behavior examples directed for the environmental sensibility are studied; it was seen that there were 10 drawings depicting the person who waters plants, protects trees, planting trees, expressing that you shouldn’t step on grass, protecting greenery, there were 4 drawings depicting “the person who throws garbage to the recycling cans”, 1 picture depicting “the person who is careful about the garbage in the picnic” and 1 picture depicting the “student who forgets the water running”.

The examples of the environmental sensibility sub title, from the explanations of the students regarding their drawings, are as follows:

*“The dialog where the student warns his friend who does not put the garbage into the garbage can: **A:** Mert, why don’t you throw your garbage into the garbage can? **B:** Who is going to go to the garbage can once again?”- Student K.C.*

*“A student standing next to the recycling can is calling out to one of his friends: **A:** Ahmet, don’t throw garbage to the floor. **B:** But throwing garbage to the floor is so much fun, says, active citizen shouldn’t say so” – Student E.C.*

*“The student standing next to the recycling can warns one of his friends who is throwing garbage to the floor: **A:** Mehmet, why are you throwing garbage there? There is a garbage can right here! **B:** Thank you for telling me, I will go and put this garbage to the garbage can.” Student I.U.*

“Let’s throw all waste garbage according to the line, let’s throw the garbage in separate cans for this” – Student R.T.



Picture1. *The person, warning the individual who is throwing garbage to the floor*

2) Collaboration Perception: When sample cases to be possessed by active citizens in terms of collaboration that was tackled in the drawings are studied, it was determined that “the individual who helps persons in their surroundings” was drawn more in comparison to other behaviors (12 themes, 12/110). In addition, it was seen that “person helping organizations such as associations and trusts” came after this (5 themes, 5/110).

When other behavior examples in terms of collaboration were examined, 2 drawings were made depicting the “person who helps elderly”.

Examples regarding the collaboration perception sub title depending on the explanations about the drawings of the students are as follows:

“I help my sisters and brothers, my mother and father”- Student B.Y.

“A student’s finger is bleeding after having felled in the back yard. We should help him in this case, I drew that: A: Are you OK? B: Yes, I am fine. My finger is bleeding a little bit.” –Student Y.D.

“I make contributions to LOSEV for children with leukemia” – Student A.E.

“I go and help an association” – A.T.

“When I travel in Bayburt Tour, I would give my seat to an elderly if he gets on the bus.” – Student V.Y.

“If an elderly is having a hard time walking, I would help him to walk and hold his hand” – Student A.H.

“We can get stuff for needy kids in the school. We can help them to come to school more comfortably.” – Student H.K.



Picture2. *Person helping the elderly*

3) Social Responsibility Perception: When sample cases to be possessed by active citizens in terms of social responsibility which is depicted in the pictures are examined, it was determined that “the person who is respecting his flag” was drawn more in comparison to other behaviors (8 themes). In addition, it was determined that the behavior of “the person who is doing his citizenship duties” followed this behavior (7 themes).

When other behavior examples for social responsibility were examined; there were 4 pictures depicting “the person who loves his country”, 3 pictures depicting “the person protecting his country”, 3 pictures depicting the “person who is serving his State”, 1 picture depicting “the person who is not committing a crime”, 1 picture depicting “the voting person”, and there was 1 picture depicting “the person paying his taxes”.

Examples regarding the social responsibility perception sub title depending on the explanations about the drawings of the students are as follows:

“Active citizens respect their flag, protect and love their country, do their citizenship duties and serve their State” – Student B.A.

“Active citizens love and protect their country” – Student O.A.

“Active citizens do duties and assignments their teachers assign and go to school” – Student A.B.

“Active citizens help their State, do their teaching job if they are teachers, firefighters prevent fires...” – Student A.T.

“Active citizens vote in elections.” – Student R.T.

“Active citizens should pay their taxes” – Student D.A.



Picture 3. Person having social responsibility perception

CONCLUSION AND DISCUSSION

In this study, in order to reveal the active citizenship perceptions of children, the means of picture drawing and recitation of the drawn picture, which is not applied in the literature previously, were followed for enabling them to express their opinions about this matter. With this method based on interpretation, students were enabled to draw example cases and observations they experience in their surroundings and they were enabled to express them more easily. This method such as applied previous studies on different subjects with picture and cartoon drawing and mind map was liked by the students (Ayva, 2010).

They expressed in writing the cases that they have thought of but could not draw as they explained their drawings. When the students were asked to draw pictures with the active citizenship subject, it was determined that they pictured the citizens who are sensitive to the environment the most. Citizens who have the collaboration consciousness and citizens who have social responsibility followed up this case respectively.

The students focused on the necessity that persons who are sensitive to the environment should not throw garbage to the floor (Yılmaz *et al.*, 2002), they should warn the ones who throw garbage to the floor, they should protect and care for greenery always, they should throw garbage by degrading first (Alerby, 2000), and they should be careful about garbage in picnic areas. The students complained about the negligence of the persons around them as they depicted these example behaviors. This situation can give an idea that people around the children are not proper models even though they are grown ups and have sufficient education. The students expressed that they are uncomfortable with garbage spilled around. The students indicated that they have witnessed all of the wrong behavior examples but they were afraid and hesitant to warn persons who are older than themselves, other than their own peers. It is obvious that the students along with their families need to be aware of the environment and its problems especially. Hence, conducted studies, trips and observations and activities carried out in nature have helped the students to understand the relationships between living and nonliving elements (Ballantyne and Packer, 2002; Manzanal, Barreiro and Jimenez, 1999) and that they have affected the development of the students positively in every aspect (Kimber, Smith, 1999; Tai and others, 2006).



In the student drawings, it was observed that the necessity that citizens with collaboration sensibility need to help their surroundings willingly was elaborated. They gave examples from their own close surroundings first. For instance, a child helping his father and a child helping his brother to cross the bridge. In addition, the children giving examples about the contributions made to civil society organizations such as associations and foundations, and example cases for the protection of elderly stand out regarding this matter.

In the student drawings, the necessity that citizens with social responsibility consciousness should respect their flag first of all and that they should do their citizenship duties was elaborated. This result from the study was correspond to studies which applied on national value (Deveci and Ay, 2009; Ercan, 2001). This case is an indicator that human rights and citizenship consciousness start to develop in still the 4th grade in the primary school.

Furthermore, in future researches, how the gender, class level, parent education level, social and cultural differences affect the senses of the students regarding active citizenship can be investigated.

Repeat of similar studies with different samplings and comparison of the results have been suggested.

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