Content Analysis of Gender Representation in Jordanian English as a Foreign Language (EFL) Textbooks

Adnan Bataineh
Sohar University, Oman
adnanlinguistics@gmail.com
Mobile: 95848621

Abstract

This study performed a content analysis of gender representation in nine Jordanian English as a Foreign Language (EFL) textbooks. The purpose of this study was to examine whether or not these textbooks offered equitable gender representation of males and females. To examine gender representation, the study investigated the presence of women and girls and gendered occupational roles implied by images, photographs, illustrations, pictures, and texts found in Jordanian EFL textbooks. The results showed that Jordanian EFL textbooks contained significant and substantial gender inequities. Quantitative and qualitative data showed that females' presence is superficial in comparison with males' presence. In other words, the number of females in images, photographs, pictures, and illustrations was lower than the number of males. Moreover, the study showed that images and texts covertly and overtly portrayed males as superior and females as inferior. Finally, traditional, stereotypical, and biased images and perceptions of gender inequity still exist in these textbooks. In sum, the Jordanian EFL textbooks did not offer equitable representation of males and females.

Key words: gendered occupational roles, women's' presence, EFL textbooks, stereotyped roles

Introduction

Gender representation in textbooks and other curricular materials is a crucial issue in education. This is a study of gender representation in Jordanian English as a Foreign Language (EFL) textbooks. The focus is on overt and covert messages implied in male and female text and images in terms of gender. Many studies have identified significant gender inequity, that is, unfair and unequal treatment of males and females in textbooks in countries such as Japan (Nomoto et al., 2011; Sugino, 2002), China (Xiaoping, 2004); Jordan (Hamdan, 2008);, Iran (Gharbavi, 2012; Rahimi, 2010), Malaysia (Mukundan & Nimehchisalem, 2008), U.S.A (Beyer et al. 1996; Gooden & Gooden, 2002; Low & Sherrard, 1999), Hong Kong (2004), Karnataka (Rao, Shamala, & Raj, 2001), Korea and Mexico (Chung, 2000), Spain (Regueiro, 2000), Jordan (Al-Ribaa'i, 1994; Al-Sadah, 1993 as cited in Shteiwi, 1999), Russia (Rifkin, 1998), Singapore (Gupta & Yin, 1990), and Lebanon (Kallab, 1983 as cited in Shteiwi, 1999). This study is designed to explore how gender is represented and whether or not gender inequity exists in Jordanian EFL textbooks and curricular materials.

Statement of the Problem Situation

Many studies of different curricula, school textbooks, and magazines in countries such as Russia, Spain, and Singapore have found an inequitable and traditional image of women in comparison with men. Moreover, sexism, gender bias, and stereotypes seem to be prevalent in curricular materials (Gharbavi, 2012; Hamdan, 2008; Mukundan & Nimehchisalem, 2008; Rahimi, 2010; Regueiro, 2000; Rifkin, 1998). Gender bias refers to a process of discriminating between males and females in textbooks and classroom practices, whereas stereotypes refer to a shared set of beliefs about purported qualities of females and males (Prager, 2002). The existence of gender bias, sexism, and gender equity can be demotivating and hindering to learners (Ellison, 2000).

Research Questions

The main research question guiding this study asks: "Is there equitable gender representation in Jordanian EFL textbooks?" Equitable gender representation refers to the number, type, content, and context of male and female images and text. Subquestions related to the main research question include the following:

1- Are women and girls present in Jordanian textbooks? And if so, what is the nature of their presence?

2- What is the nature of gendered occupational roles implied by images, photographs, pictures, and illustrations?

Rationale

Recent studies around the world have suggested that gender bias and stereotypes exist in school textbooks (Gharbavi, 2012; Gooden & Gooden, 2002; Mukundan & Nimehchisalem, 2008; Nomoto et al., 2011; Rahimi, 2010; Rifkin, 1998; Shteiwi, 1999). There have been few educational and linguistic studies on Jordanian textbooks other than studies by Shteiwi. Gender stereotypes may play a significant role in stereotyping female as well as male learners. This study attempts to identify whether gender equity or inequity exists in Jordanian EFL curricula and textbooks. Researchers such as Shteiwi found that Jordanian Arabic textbooks are full of gender inequity. If Jordanian EFL textbooks turn out to contain gender inequity, an effort should be exerted to sole or at least ameliorate this problem.

Scope of the Study

The study examines some and not all Jordanian EFL textbooks. It examines the following: Students' Book: Grade 8, Grade 9, Grade 10, and Workbooks: Grade 7, Grade 8, and Grade 9, and Reader Books: Grade 7, Grade 8, and Grade 10.

Literature Review

Presence of Women and Girls

Different studies have revealed that quantitative and qualitative presence of women and girls is significant. Quantitative presence refers to the number of images of women and girls compared to the number of images of men and boys, whereas qualitative presence refers to the content and meaning of such images. Xiaoping's (2004) study of three English reading textbooks revealed that women and girls are greatly underrepresented in school textbooks.

Women's representation in textbooks in terms of numbers is not positive. According to the 2010 census in U.S.A., females constitute 50.8 of the general population. Mukundan & Nimehchisalem's (2008) study of gender representation in four Forms and four English textbooks in Malaysian

secondary schools revealed that men's representation in these textbooks was much higher than women's. Gooden & Gooden (2001) emphasized that females are represented less frequently in children's literature than their portion of the population. Gooden & Gooden study of 83 children's books revealed that female illustrations constituted 19%, whereas male illustrations constituted 23% of total illustrations. Mousavi (2012) pointed out that there is a significant difference between the frequencies of male and females for different categories of his study on investigating gender bias in Iranian high school textbooks. Bahman & Al Rahimi (2010) revealed that the manifestation of women and men in Iranian high school textbooks was unfair. I other words, the presence of men was more emphasized in terms of names, nouns, pronouns, and adjectives. Moreover, Mukundan's & Nimehchisalem's (2008) study of gender representation in Malaysia secondary school English Language textbooks indicated that there is an absolute gender bias with males outnumbering females.

The invisibility of women in textbooks causes concern to many researchers. Barnovi's (1990) study of 12 Croatian textbooks indicated that women are less visible than men. Sugino's study (2002) indicated that male main character representation was 64%. These facts are strong indication of males' powerful presence and females' secondary presence in school textbooks. Moreover, Gharbavi & Mousavi's (2012) study showed that Iranian high school textbooks showed that men's presence in school textbooks is more visible than women's. In other words, the number of men far exceeded the number of women in these textbooks.

Moreover, the inequitable numeric representation of females compared o males seems to persist in Arabic textbooks. EFL Hamdan's (2008) PhD dissertation study of nine Jordanian textbooks indicated that men outnumbered women in these textbooks. In other words, women's presence was insignificant. Shteiwi (1999) stressed that the numeric presence of women in textbooks is inferior to males. Shteiwi's study of Jordanian school textbooks indicated that females appeared in one fifth of illustrations and images, while males appeared in two thirds of images and illustrations. In conclusion, women and girls are less frequently represented in textbooks than men and boys.

Occupational Roles

The study of occupational roles can help researchers identify gender inequity in textbooks. Xiaoping's (2004) study of three English reading textbooks revealed that women and girls are greatly underrepresented in terms of occupational roles. He indicated that "the percentages of male characters appearing in the texts with occupations range from 75% to 88%, while the percentages of females go from 12% to 25%, with the averages being 73% for males and 27% for males." school textbooks. Sugino (2002) conducted a study on gender stereotypes in 70 contemporary children's books in Japan. She found that the female characters occupied stereotypical gender roles. Women, for example, appeared in stereotypical and traditional contexts such as preparing meals, doing laundry, making apple pies, or working part-time jobs. Men's roles, on the other hand, were not very evident in the sense that their words and behaviors to their children had to be explained by their mothers. In other words, women's roles were focal but stereotypical. Sugino attributes these traditional gendered roles to the reality of Japanese society, where fathers play minor roles in family affairs.

The content of other similar textbooks offers stereotypical occupational roles. Gooden and Gooden (2011) studied 83 notable children's picture books from Ohio, U.S.A.: 1995-1999. They analyzed main characters, illustrations, and titles. They concluded that despite great improvements in female representation, gender stereotypes were still prevalent in children's literature. They found that although most women's roles were traditional ones (mother, grandmother), women were occasionally seen as doctors, chefs, an even milk vendors. On the other hand, men were seldom seen caring for children or grocery shopping. This study suggested that there is a decrease in gender stereotyping despite the prevalence of stereotyped images of women. Gooden and Gooden called for increased awareness of stereotyped images in children's textbooks.

In addition to stereotypical gendered roles, some studies showed that women's occupational roles are still marginal. Chung (2000) conducted a study on gender bias and stereotypes in Korean and Mexican textbooks. Chung examined language arts, social studies, and science textbooks. His analysis revealed that women occupied traditional roles such as homemakers and mothers. Chung noticed that women still figure significantly less prominently than men as characters in lessons,

illustrations, and texts. In other words, women's roles seem to marginal and traditional.

Finally, some Arabic studies identified stereotypical gendered themes similar to those in western contexts. EFL Hamdan's (2008) PhD dissertation study of nine Jordanian textbooks indicated that "they showed some gender stereotyping especially in the aspects of occupations, personal traits and activity types." Shteiwi's (1999) study of 96 Jordanian school textbooks showed those women's roles are related to family, while men's roles are mainly related to public life. Women's roles included teaching, unskilled labor, and office jobs. Women's presence in politics, tourism, religion, and national affairs was seldom presented. Women's private roles were limited to wife, mother, and daughter. Men, on the other hand, dominated public life roles such as politics, skilled jobs, religion, and tourism. Al-Sadah's (1993) and Kallab's (1983) studies on gender roles in Arabic textbooks showed women in similar roles such as daughter, housewife, mother, and grandmother. In sum, many western and Arabic studies on gender roles revealed that traditional gender roles still dominate textbooks. Moreover, photographs of women with traditional messages still outnumber photographs of women with feminist messages (as cited in Shteiwi, 1999).

Method

I conducted content analysis of nine Jordanian EFL school textbooks. Babbie (1998) explained content analysis is a coding operation where any type of communication can be coded or classified according to some conceptual framework. He added that content analysis could be applied to almost all forms of communication. It can be applied to books, magazines, songs, paintings, speeches, and letters.

Content analysis draws on quantitative and qualitative data to offer comprehensive and accurate data analysis. Creswell (2002) recommended a mixed method research approach since it provides the researcher with a more complete picture of a research problem than qualitative or quantitative data alone. It is also important to use qualitative and quantitative methods to provide a balanced analysis of the texts.

Measures

In order to analyze the nine textbooks in my sample, I will use categories of analysis that I have drawn from previous research studies.

Moreover I devised some categories to investigate gender equity in Jordanian EFL school textbooks.

Presence of Women and Girls in Jordanian EFL Textbooks

I conducted quantitative and qualitative analysis of male and female images, illustrations, photographs, and pictures found in Jordanian EFL textbooks. As for the quantitative analysis, I investigated the total number of male and female images, photographs, pictures, and illustrations. Moreover, I investigated the number of male and female images, photos, pictures, and illustrations in each textbook to identify where major discrepancies between textbooks occur. Finally, I closely examined the contents of these images to identify major themes pertaining to males and females.

Occupational Roles

I conducted quantitative and qualitative analysis of female occupational roles. I also analyzed male and female occupational roles to identify certain themes pertaining to both sexes (e.g., creativity, adventure). In terms of quantitative analysis, the total number of male and female occupational roles was examined, along with specific numeric data related to each and every textbook to identify the frequency of certain occupational roles associated with males and females. A revised version of Pierce's (1990) categories was used to analyze illustrations devoted to traditional or feminist women. Some adjectives and words were eliminated because they are offensive to Muslims and they could not exist in the textbooks, such as "prostituting" or "lesbianism "The categories are described in Table 1. The first three categories reflect an image of traditional women while the other three reflect an image of feminist women (Pierce, 1990 as cited in Low & Sherrard, 1999). As for qualitative analysis, I closely identify emerging themes from quantitative data. In pother words, what is the common them(s) among male or female images (e.g., creativity, stereotypes)? Moreover, I try to identify any unusual themes related to females in a Jordanian setting (e.g., female protestors).

Table 1.
Pierce's Categories of Traditional and Feminist Messages in Female Images

Appearance	Images of women buying clothes, at a hair salon, or putting on makeup or clothes.
Male-female relations	Images dealing with any relationships or dealing with a man.
Home and mother	Images depicting women cooking, cleaning, feeding, children, bathing children, playing with children.
Self-development	Images of women taking care of themselves; their relationships with friends (excluding males).
Career development	Images of women going to college; spotlight on famous women and their careers; women working in a certain career area.
Political and world issues	Images of women in the feminist movement (e.g., participating in abortion or AIDS marches).

(Adapted from Low & Sherrard, 1999, p. 313)

Findings

Content analysis was used to answer the three research questions to understand gender representation in Jordanian EFL textbooks.

Presence of Women and Girls

Qualitative and quantitative data analysis of female and male images (pictures, illustrations, and photographs) showed that female presence is inferior to male presence in Jordanian EFL textbooks. I these texts, I counted a total number of 820 images of male persons, whereas there were 444 images of female persons. Quantitative also indicate that major discrepancies between males and females occurred in Readers books. Reader books clearly indicate a preference for male images. For example, Reader 6 for Tenth Grade contained 36 male images and only 4 female images. Moreover, Reader 4 for Eight Grade contained 31 male images and only 1 female image. In other words, stories in these Reader books are mainly about males (scientists, religious and traditional heroes, famous travelers, poets and scholars) except for one image of a heroic female army leader and images of female students. It is also worth noting that Students' Book 6 contained 129 male images and 121 female images. Quantitative data revealing inequitable male and female presence as provided in Table 2.

Table 2.

Quantitative data about numbers of males and female
images in textbooks

Textbook	Male	Female
Reader 3	54	12
Reader 4	31	1
Reader 6	36	4
Workbook 3	116	98
Workbook 4	86	63
Workbook 5	45	22
Students' Book 4	161	47
Students' Book 5	162	76
Students' Book 6	129	121
Total	820	444

A qualitative study of male and female images revealed that women's presence is also superficial. Males were portrayed in a wide range of positions and situations. Males were portrayed as inventors, scientists, writers, athletes, doctors, poets, heroes, artists, astronauts, sailors, investigators, and students. Females, on the other hand, were portrayed mainly as reporters, students, mothers, nurses, volunteers, musicians, dancers, and policewomen. In addition, only women were portrayed as actors, glassmakers, rescuers, divers, sailors, pilots, tourist guides, soldiers, and climbers. Only women were portrayed as volunteers, dancers, and secretaries. In other words, male images were images of achievement, success, and dominance, whereas female images showed a restricted range of achievement, success, and intellectual ability. In sum, female presence is implicitly and explicitly conveyed as superficial and inferior to males in these textbooks.

Occupational Roles

Content analysis of gendered occupational roles revealed a distorted image of female roles in society in comparison with male roles. In general, the number of occupational roles designated to men far exceeds those for women. Table 3 presents an overview of some major occupational roles for men and women, in addition to their frequency. In addition, Table 4 provides the total number of male and female occupational roles, along with their frequency. There were 60 male occupational roles, whereas there were only 32 female occupational roles.

The general theme among male and female occupational roles indicated that males are best at science, achievement, adventure, creativity, and sports, whereas females are best at social and interactive, or family roles. Moreover, females were, in some cases, portrayed as scientists, inventors, and artists. In other words, there was evidence of a small effort on the part of the authors to portray some females as innovative and creative. Yet the majority of these images is stereotypical and offer biased gendered occupational roles for males and females.

Table 3.
Male and Female Major Occupational Roles

Category	Male	Female
Science	Student (41), scientist (14), doctor (7), computer user (7), paramedic (4).	Student (76), scientist (3), doctor (5), computer user (3), nurse (6).
Achievement	Pilot (8), astronaut (9), investigator (7), rescuer (4), professor (4), hero (3).	Policewoman (8), astronaut (1), professor (3), heroine (1).
Creativity	Writer and author (10), musician (8).	Dancer (8), musician (7), artist (3).
Sports	Soccer player (31), athlete (8).	Volleyball player (10), athlete (1).
Adventure	Frogman (diver) (10), sailor (7).	
Family	Father (16)	Mother (26)
Social and interactive	Tourist (17), reporter (10), protester (5), tourist guide (4).	Reporter (18), protester (7), bandleader (6), volunteer (3), hostess (3), singer (3).

Table 4.
Total Male and Female Occupational Rol

Male	Female
Student (41), soccer player (31), farmer (24), tourist (18), father (16), scientist (14), diver (10), reporter (10), writer and author (10), astronaut (9), warrior (9), musician (8), pilot (8), physician (8), athlete (8), computer user (7), cab driver (7), investigator (7), sailor (7), glassmaker (7), doctors (7), protester (5), climber (4), cook (4), hunter (4), king (4), paramedic (4), professor (4), program presenter (4), railway worker (4), rescuer (4), tourist guide (4), basketball player (3), hero (3), traveler (3), expert (3), actor (2), boxer (2), businessman (2), camper b(2), cameraman (2), airport employee (2), painter (2), policeman (2), shepherd man (2), soldier (2), teacher (2), weightlifter (1), bandleader (1), builder (1), carpenter (1), agent (1), volleyball player (1), poet (1), forester (1), journalist (1), magician (1), artist (1), principal (1).	Student (76), mother (26), reporter (18),farmer (12), volleyball player (10), dancer (8), policewoman (8), musician (7), nurse (70, protester (7), bandleader (6), doctor (5), cook (5), tourist (4), artist (3), computer user (3), employee (3), hostess (3), scientist (3), singer (3), volunteer (3), airport employee (2), professor (2), queen (2), physician (2), secretary (2), author (1), heroine (1), astronaut (1), painter (1), athlete (1), teacher (1).

The presence of policewomen (8), female reporters (18), and protestors (7) is an interesting emerging new female theme for Jordanians. Despite the presence of females as policewomen in Jordan, it is interesting to see the authoritative power images of policewomen topping male drivers and issuing them a ticket. These images are unfamiliar to the conservative and traditional Jordanian people. Moreover, a recurring and repetitive image of a female reporter is anew major theme to Jordanians. While an image of female reporter is acceptable to Jordanians, it is rather unfamiliar to them to see females as reporters outnumbering males. The other new theme of females as protestors against cruelty against animals is new to Jordanians. It corresponds to the latest trend in Jordanian society to include women as protestors against the Israeli occupation of Palestine.

Despite the fact that traditional images are dominant, textbook seem to offer many nontraditional images. Traditional female images can be abundantly found in Students' Book 4 on pages: 1, 2, 25, 62, and 79, whereas female images of Male-Female Relations (male-female

conversations, arguments, interviews) can be found in Students' Book 6 on pages: 18, 20,

33, 34, 83, and 90. Moreover, Self-Development images (images of women taking care of themselves; their relationships with friend (excluding males) can be found in Students' Book 6 on pages 29, 45, and 57, whereas Career Development images (images of women going to college; spotlight on famous women and their careers; women working in a certain career area) can be found in Students' Book 4 in pages 1, 2, 6, 51, 91, 95, and 97.

Limitations

The main limitation to this study was that it included a sample of only nine Jordanian EFL textbooks. In other words, this sample may or may not be representative of all Jordanian EFL textbooks. Future research would yield more conclusive results if a larger sample of Jordanian EFL textbooks were investigated.

Conclusion

Findings of this study confirmed previous studies on gender representation in textbooks and other curricular materials. These results show that significant gender inequities are still abundant and prevailing. Traditional, stereotypical, and biased images and perceptions of gender identity still exist in these textbooks. Females were underrepresented quantitatively and qualitatively in these texts. In other words, the number of females in images was lower than the number of males. Finally, the study showed that images and texts covertly and overtly portrayed males as superior and females as inferior.

Reference

1. Babbie, E. (1998). The practice of social research (8th ed.). California: Wadsworth.

2. Bahman, M. & Rahimi, A. (2010). Gender representation in EFL materials: an analysis of English textbooks of Iranian high schools. Retrieved November, 10, 2013, from
   http://www.sciencedirect.com/science/article/pii/S1877042810022548.

3. Basow, S.A. (1992). Gender stereotypes and roles (3rd ed.). California: Brooks/Cole.

4. Beyer, C. E., Ogletree, R. J., Ritzel, D. O., Drolet, J.C., Gilbert, S.L., & Brown, D. (1996).

5. Gender representation in illustrations, text, and topic areas in sexuality education curricula, <u>Journal of School Health, 66</u> (10), 361-364.

6. Chung, H. S. (2000). Women's roles and gender issues in primary school textbooks: Korea and Mexico. Retrieved August, 5, 2012,
   from http://orpheus.ucsd.edu./las/studies/pdfs/Chung2.PDF

7. Couch R. a. (1994). Gender equity & visual literacy: Schools can help change perceptions.

8. Pennsylvania: UD Department of Education, Office of Educational Research and Improvement. (ERIC Document Reproduction service No. ED380070) Creswell, J. W. (2002). Educational research: Planning, conducting, and evaluating quantitative and qualitative research.
   New Jersey: Pearson Education.

9. Department of commerce. (2010). Age and sex composition: 2010 Retrieved sept3mber,10,2013,from
   http://www.census.gov/prod/cen2010/briefs/c2010br-03.pdf

10. Ellison, C.M. (2000). Gender based inequality in textbooks. Retrieved July 15, 2012, from http://freefour.dtdns.net/index.php?page=7

11. Evans, L. & Davies, K. (2000). No sissy boys here: A content analysis of the representation of masculinity in elementary school reading textbooks. Sex Roles, 42 (3/4), 255-270.

12. Gershaw, A. D. (1997). Our androcentric language. Retrieved August, 20, 2013, from: http://virgil.azwestern.edu/~dag/lol/Androcentric.htm

13. Gharbavi, A. (2012). A content analysis of textbooks: investigating gender bias a social prominence in Iranian textbooks. Retrieved September, 20, 20133,

From: http://www.sciedu.ca/journal/index.php/elr/article/view/1234

14. Gooden, A. M., & Gooden M. A. (2001). Gender representation in notable children's picture

15. books: 1995-1999. Sex Roles, 45 (1/2), 89-99.

16. Hamdan, S. M. T. (2008). Analyzing Aspects of Gender in English Language Jordanian Basic Stage Curriculum from A Socio-Cultural Perspective. Retrieved December, 05, 2013, from:
   http://asian-efl-journal.com/Thesis/Thesis-Hamdan.pdf

17. Hanmer, T. J. (1996). The gender gap in schools: Girls losing out. New Jersey: Enslow.

18. Low, J., & Sherrard, P. (1999). Portrayal of women in sexuality and marriage and family textbooks: A content analysis of photographs from the 1970s to the 1990s. Sex Roles, 40 (3/4), 309-317.

19. Mukundan, J. & Nimehchisalem, V. (2008). Gender representation in Malaysian secondary school English language textbooks. Indonesian Journal of English Language Teaching, 4 (2), 155- 173.

20. Pierce, K. (1990). A feminist theoretical perspective on the socialization of teenage girls through Seventen magazine. Sex Roles (23), 491-500.

21. Prager, K. J. (2002). Gender role stereotypes & the self. Retrieved September,25,2013,from:
   http://www.utdallas.edu/~kprager/stereoty.htm

22. Rao, S., Shamala, S. K., & Raj, M.S.A. (2001). Identification of gender bias in the textbooks of secondary schools in Karnataka. Retrieved October, 05, 2013, from:
   http://www.dli.gov.in/scripts/FullindexDefault.htm?path1=/data1/upload/0021/771&first=1&last =155&barcode=99999990167068

23. Regueiro, P. D. (2002). An analysis of gender in a Spanish music textbook. Music Education Research, 2 (1), 57-73.

24. Renner. C.E. (1997). Women are "busy, tall and beautiful:" looking at sexism in EFL materials.

25. Rome: National seminar "Mind the language." (ERIC Document Reproduction Service No. ED411670)

26. Rifkin, B. (1998). Gender representation in foreign language textbooks: A case study of textbooks of Russian. The Modern Language Journal, 82 (2), 219-236.

27. Shteiwi, M. M. (1999). *Gender roles in Jordanian basic cycle school textbooks*. Amman:Jordanian Social Research Center.

28. Sugino, T. (2002). *Gender stereotypes and children's literature*. Retrieved October, 8, 2013, from:

    http://jalt-publications.org/old_tlt/files/98/jun/sugino.html

29. Yasin, M. S. M, Abdul Hamid, B., Keong, Y. C., Othman, Z., & Jaludin, A. (2012).Retrieved October,03,2013,from:

    http://www.ukm.my/ppbl/Gema/GEMA%20vol%2012%20(1)%20Special%20section%202012/ pp_53_68.pdf.

30. Xiaoping, Y. (2004). *Gender representation in textbooks: a case study of three English reading textbooks*. Retrieved November, 10, 2013, from:

    http://www.seameojournal.com/journal/index.php/education/article/view/59/57