Spatial Positioning of Gender in Two Award-winning Software Programs for Learning English: A Visual Content Analysis

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Abstract: This research was conducted to identify and interpret how spaces were differentiated by gender in visual images included in two award-winning English-learning software applications (Tell Me More and English at Home). The visual content analysis was based on examining the following values: home, workplace, street and neighborhood environment, leisure areas, and shop. Findings showed that females appeared as subordinate, financially dependent, and powerless; males as dominant, sporty, breadwinners, and powerful. Material writers, software developers, and instructors should be sensitized to such unfair positioning of gender and encouraged to promote alternative spatial discursive practices. Additionally, learners need to be well-informed and visually literate. It is argued that by discovering how females and males are positioned in contemporary interactive texts, consciously structured pictorial descriptions of gender can be articulated and contested in technology-based educational media to reflect gender equality.

Key words: Gender, Space, Image, ESL/EFL Software, Visual Content Analysis

Introduction

People of all origins enjoy spending time working with some type of software and browsing the internet. Self-study educational software programs, especially language-learning software programs, are available 24 hours a day. They have become more affordable and ubiquitous than before. The potential audience of such programs is very large and unpredictable. Hence, the explicit and implicit ideologies expressed by them are of great significance. As Graddol (2006, p. 20) observes, “English is in the thick of all of this. An ‘English factor’ is found in virtually every macro trend: the development of new communications technology such as the internet, the reform of education in universities and schools, and the changing nature and control of media”. Media, clearly, is at the center of people’s lives in this age of technology. Cook (2003, p. 26) points out, “Films, songs, television programs, and advertisements in English are heard and seen in many countries where it is not the first or even a second language, both feeding and reflecting this growth”. Media, especially technology-based media, is the learning environment of many people. English is the language of most electronically stored information. Many educational resources are in English as well. Therefore, it is incumbent upon many to become competent in this international language.
Learning English can be intensive, expensive, and time-consuming. The opportunity to access formal education for learning English may be denied to some learners. Thus, technology can be of great help. Millions of language learners around the globe are absorbed in innovative learning methodologies with the advent of educational technology-based resources (CD-ROMs, the internet, web pages, etc.). Cummins (1998) as a second language acquisition theorist believes that formal second language teaching is almost ineffective for a significant number of learners, mainly as a consequence of impoverished input in the target language, both with regard to quality and quantity. Educational technology-based resources, then, are here to stay.

Considering multimedia foreign language programs, Cummins (1998) suggests that current CD-ROM technology can provide the necessary scaffolds to make target language text quite intelligible to users and increase their language awareness, thereby strengthening the process of language learning. The use of language-learning multimedia technologies, therefore, must be encouraged because they are necessary for keeping English learning relevant to the information age. However, integrating language-learning applications into people's lives is not enough. Such applications must be examined from social, commercial, and aesthetic points of view.

Many media sources, while carrying messages on gender stereotyping, address individuals of all ages, majors, and tastes. Media portrayals of women and men are one of the fundamental sources of gender identity and gender inequality. Educational media, particularly technology-based media, is no exception. Sexism appears in both its blatant and pernicious forms in educational materials. As Seng (2003) claims, the number of teaching tools that promote gender equality is few. In ESL/EFL materials there is a noticeable shift of focus from textual content to visual content. In the 1970s the texts went Technicolor, says Prodromou (1988). Visual images (illustrations, photographs, pictures) play an increasing role in ESL/EFL software programs and may intentionally or unintentionally convey gender-stereotyped messages and show an unfair portrayal of women and men. These images have the power to instill pictorial gender stereotypes that are hard to shake. “Because pictures affect a viewer emotionally more than words alone do, pictorial stereotypes often become misinformed perceptions that have the weight of established facts. These pictures can remain in a person’s mind throughout a lifetime”, according to Lester (2000, p. 78).

Such gender-biased materials continue to exacerbate the positioning of females as second-class citizens and foster gender inequality in society. This continued and
ingrained inequality is simply because stereotypes are deeply rooted in cultures. Stereotypes tend to be directed at subordinate groups (e. g. ethnic minorities, women) and they play a huge role in hegemonic struggles (Talbot, 2003). Those who are privileged by gender inequality hold the power; it is not shared or relinquished easily.

Inequality is the deep-seated effect of power everywhere, as power differentiates and selects, includes and excludes. An analysis of such effects is an analysis of the conditions for power as well (Blommaert, 2005). van Dijk (1998) highlights that dominant groups cannot exercise power if it is in the form of an obvious act. Rather, they integrate it in the many taken-for-granted actions of everyday life. These dominant groups who control most influential discourse also have more opportunity to control the minds and actions of others.

Biologists, psychologists, sociologists, and anthropologists suggest reasons explaining why the status and power of males are universally higher than those of females, notes Spain (1993). She further adds that “spatial gender segregation of females and males also contributes to gender stratification by reducing women's access to socially valued knowledge” (Spain, 1993, p. 137). Edward T. Hall addresses space as “the silent language” (1959) and “the hidden dimension” (1966) forming people's action. Discovering how human beings structure their everyday spaces is generally related to how they think about and relate to each other in terms of gender (Domosh & Seager, 2001). Spatial arrangements are not usually studied seriously and are neglected. Therein lies their power. For this reason, making the spatial barriers visible is a necessity in gender studies (Weisman 1992).

The materials that propagate gender inequality and gendered places need to be contested and subverted; otherwise, women will continue to be suppressed and victimized. English-learning software packages are likely to appeal to many people across the world. For this reason, exposing the spatial positioning of gender in such packages to achieve gender parity is important.

The perpetuation of gender bias in media has been constantly proven by many researchers in different fields. Researchers demonstrate that gender stereotyping and unequal treatment of both sexes are present in various forms of educational media, especially textbooks, since they are being used consistently (Koza, 1992; Hayibor & Peterat, 1995; Low & Sherrard, 1999). In spite of the use of technologies both at home and in school, research has been surprisingly weak on gender positioning in educational technology-based media, particularly the visual component.
The purpose of this research, therefore, was to look into the spatial positioning of gender in two sets of English-learning software by relying on visual content analysis as a systematic method for answering research questions on the ways in which educational media represent females and males. From the perspective of gender, language-learning software can provide significant data as it presents characters in multimodal combinations of texts, visuals, and videos.

In fact, most prior studies on gender positioning and sexism have been carried out on foreign language textbooks, chiefly taking into account oral or written language. This research focused just on photographs and illustrations to reveal gender positioning and stereotyping particularly reinforced by images. And for this reason it would be a significant endeavor in bringing to light the importance of studying images as an integral component of the presentation of language in addition to culture.

1. Review of Related Literature on Textbooks

The textbook can be defined as a subset of a broader and increasingly more commonly used term, teaching media (Johnsen, 1993). One undeniable characteristic of modern textbooks is multimodality. Visual data along with linguistic data as visible parts of current textbooks are organized to a significant extent to help learners learn through various means. Piironen (2004) believes that textbooks have been described as one of the most powerful ways of transmitting standards, values, and ideologies. Revealing gender bias in textbooks is one way to eliminate it.

A number of researchers have directed their attention to gender portrayal and gender bias in language-learning textbooks in recent decades. The same types of negative representation of gender have been noted by many of these researchers: females were usually depicted as passive, dependent, and objects of the gaze; males as active, independent, and competent (Hartman & Judd, 1978; Giaschi, 2000). Meanwhile, males were represented as enjoying a wider range of occupational and social roles, with females mostly restricted to domestic and nurturing domains (Gupta & Lee, 1989; Filak, 2002; Ansary & Babaii, 2003; Otlowski, 2003; Piironen, 2004; Arikan, 2005; Lee & Collins, 2008). On more negative notes, some studies reveal even more inexcusable pictures of females. For example, Hjorth (1997) examined a textbook series for EFL students titled Passwords, finding that in some recurrent cases, female characters were presented in comical or ridiculous situations as a source
of amusement. Piironen's (2004) study disclosed that males ruled the spheres of history, science, and technology in *The News Headlines Courses*.

Low positioning of gender was evident in the images of sports as well. Textbooks considered sports as a basically masculine activity (Ansary & Babii, 2003; Piironen, 2004). When females were shown doing sports, they were widely pictured engaged in aesthetically graceful activities (Arikan, 2005).

The general tendencies appear to be almost the same, although the results of research on gender in language-learning textbooks vary according to culture, country, and time. Research concerning gender stereotyping in computer-based foreign language resources is lacking, despite the increased use of such resources both at home and in school. As long as there is a misrepresentation and negative positioning of females and males in media, especially educational media, more research is needed.

2. Research Questions

The questions were approached using quantifying procedures coupled with a qualitative methodology, making the research an exploratory procedure. Gender studies set up in this way will come very close to hermeneutic methods (Gildemeister, 2004).

1. What does spatial positioning mean for males and females in the programs' visual images?
2. How can the differential behavior of males and females be described in terms of activity?

3. Corpus

The current study involved an analysis of two sets of English-learning software designed for self-study:

The *Tell Me More* software program is the most award-winning solution on the market. It is “TopTenREVIEWS Gold Award” ESL software. Furthermore, it is the winner of the Gold Mom’s Choice Award in Educational Software for its three specific programs: English, Spanish, and French Homeschool Editions. The package contains five DVD-ROMs that address five levels of English learning. The Business
English DVD-ROM was excluded from the corpus due to the study’s area of focus, general English. There are three learning modes available in the program: The Free-to-Roam mode allows the learner to select the activities of her/his choice; the Guided mode proposes learning paths according to the learner's learning objectives; and the Dynamic mode evaluates the learner's progress.

*English at Home* contains two CD-ROMs developed by Susan Marandi and Sepideh Marandi. This software application won silver at the first Roshd Multimedia Software Festival in Iran. *English at Home* has been designed just for Iranian language learners who want to master American English. Commissioned illustrations are used for teaching conversation. Two Iranian graphic artists have illustrated the pictures.

4. The Analytical Path

Johnsen (1993) argues that there is no general consensus about the criteria for evaluating teaching materials. The methods of evaluation can be quantitative, qualitative or both. Researchers can take into consideration only texts, only images, or both, and analyze one material or one hundred. As a result, researchers may tailor the methods and approaches to meet their purpose, Johnsen (1993) further adds.

“Content analysis is a research technique for making replicable and valid inferences from data to their context”, according to Krippendorf (1980, p. 21). Content analysis is explicit when it comes to methodology. It is based on a number of rules and procedures that must be thoroughly followed for the interpretation of images or texts to be reliable (Rose, 2001). Visual content analysis has its origin in content analysis that was developed to interpret verbal texts. “It allows the researchers to make quantitative generalizations about visual and other forms of representation, on the basis of reliable classification and observation”, asserts Bell (2001, p. 34). To conduct a visual content analysis is to count the frequency of certain image features in a well-defined sample of images, and then analyze those frequencies.

In this study, visual content analysis was conducted to interrogate visual images. The prevalence of the images in multimodal sources shows that they need to be studied seriously and systematically for the sake of creating a new understanding of people and reforming the society. For achieving these aims, visual content analysis can be a resourceful research armory for researchers.
4.1 Procedure

Each software pack was analyzed for spatial positioning of gender while exclusively focusing on 201 visual images from Tell Me More and 75 visual images from English at Home.

The first research question performed a specific function in the analysis by covering a clearly defined variable and six values. The semantically significant category or variable and the respective values that were observed are as follows: The values set for the Space were home, workplace, street and neighborhood environment, leisure areas, and shop.

4.2 Findings

Space constitutes the core aspect of Goffman’s (1979) approach to gender positioning. It also forms the basis of his social interaction theory. Spain (1993) insists that the more noticeable the degree of spatial gender separation, the lower is women's status relative to men's. Studying space thereby gains significance in research on gender positioning by revealing how imperceptible spatial arrangements between men and women undermine women's power.

In Tell Me More, there was an obvious difference in the frequency with which women and men were pictured in their homes. Kitchens were marked as females’ domain, based on the interpretation of the images (Appendix, Image 1). Besides, 32% of women were portrayed in the work environment, contrasted with 50% of men (Images 2 & 3). Men therefore appeared to be associated with wider, more public spaces that are related to social power.

In English at Home, 34% of females were represented at home or in the kitchen, whereas 17% of males appeared in home settings. Several of the males represented at home, however, were teenagers, not adults (Image 4). It was also seen that a large percentage of male participants were depicted in the workplace, seriously talking business. Where women were in the workplace, they had the role of secretaries or employees or were talking non-business issues with friends (Image 5). In this software program, females had a strong presence in home and neighborhood images while their lack of presence in images related to work was strongly evident (Image 6).

It is true that gendered spaces in homes, schools, and workplaces strengthen prevailing status distinctions that have not been questioned (Spain, 1993). The frequency of the presence of women and men in the workplace and home already
presented clues of their status and power. The visual data that showed women in the house and neighborhood environment gave the impression that the represented participants were housewives. A woman’s place is not only in the home, according to software producers and material writers; it is in the kitchen. Traditionally, men’s space tends to be public, in the workplace, and women’s space to be private, the home. The implicit assumption in these images is that while men should assume the role of breadwinner, women should be in charge of the family and be bread-takers (Lee & Collins, 2008). Domosh and Seager (2001) argue that the maintenance of these outdated traditional ideas caters to the needs of those who have the power to make the farthest-reaching decisions in our society, neglectful of the truth that “the confinement of women in households dominated by men, removed from wage-earning possibilities, has social, cultural, financial, and emotional limits for both men and women” (Domosh & Seager, 2001, p. 39).

Tables 1 & 2  Relationship between space and gender of the represented participants (%)

<table>
<thead>
<tr>
<th>Space (Tell Me More)</th>
<th>Total</th>
<th>Shop</th>
<th>Leisure areas</th>
<th>Street/Neighborhood</th>
<th>Workplace</th>
<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>150 (100)</td>
<td>1 (0.6)</td>
<td>45 (30.0)</td>
<td>14 (9.4)</td>
<td>76 (50.6)</td>
<td>14 (9.4)</td>
<td>Male</td>
</tr>
<tr>
<td>131 (100)</td>
<td>7 (5.4)</td>
<td>37 (28.2)</td>
<td>11 (8.4)</td>
<td>43 (32.8)</td>
<td>33 (25.2)</td>
<td>Female</td>
</tr>
<tr>
<td>281 (100)</td>
<td>8 (2.9)</td>
<td>82 (29.2)</td>
<td>25 (8.9)</td>
<td>119 (42.3)</td>
<td>47 (16.7)</td>
<td>Total</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Space (English at Home)</th>
<th>Total</th>
<th>Shop</th>
<th>Leisure areas</th>
<th>Street/Neighborhood</th>
<th>Workplace</th>
<th>Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>79 (100)</td>
<td>2 (2.5)</td>
<td>23 (29.1)</td>
<td>10 (12.7)</td>
<td>30 (38.0)</td>
<td>14 (17.7)</td>
<td>Male</td>
</tr>
<tr>
<td>73 (100)</td>
<td>3 (4.10)</td>
<td>8 (10.9)</td>
<td>20 (27.4)</td>
<td>17 (23.3)</td>
<td>25 (34.3)</td>
<td>Female</td>
</tr>
<tr>
<td>152 (100)</td>
<td>5 (3.3)</td>
<td>31 (20.4)</td>
<td>30 (19.7)</td>
<td>47 (30.9)</td>
<td>39 (25.7)</td>
<td>Total</td>
</tr>
</tbody>
</table>

Photographs of behavioral practices are routinely associated with special social meanings (Goffman, 1979). In social routines of women and men, the space is usually interrelated with general portrayal of gender and physical activity. Females and males were shown almost equally in number and frequency in leisure areas, relaxing and having fun in the images of Tell Me More (Image 7). The other package, however, was
very strict about illustrating females in leisure areas. But male participants were shown more than females as involved in outdoor and recreation activities (Image 8).

Both software packs seemed to consider sports as a basically masculine activity. Males were depicted as interested in sports much more often than females were.

*Tell Me More* portrayed both males and females in sporting roles, but it also reinforced gender stereotypes, as males dominated the field of sports, and some sports were depicted as exclusively masculine. Based on the analysis, males were portrayed as having a fascination for tennis, soccer, dumbbell, karate, fishing, jogging, swimming, skiing, cycling, bungee jumping, and water surfing. Females were portrayed as swimming, fishing, jogging, hiking, dumbbelling, and bench pressing.

*English at Home* paid little attention to sports but when it did, females were silenced. Only one female was interested in tennis in *English at Home*, enrolling at a local recreation centre. Males, on the other hand, were depicted as interested in tennis, football, and swimming.

Wilde (2007, p. 6) observes, “Sex-typing of sports is still alive”. Females are commonly pictured engaged in individual, aesthetically pleasing and graceful activities. Due to their increased involvement in traditional male sports, they should be depicted in competitive strenuous activities as well. Wilde (2007) concludes that although societies are becoming more aware of gender stereotyping in the sports world and physical activities, traditional gender stereotypes still exist. The subordinate position of females in sports can be paralleled to the patriarchal nature of society.

As Goffman (1979) cogently argues, it is commonly believed that women spend much of their time in shopping for clothes, and that they set enormous store on the appreciative or attractive response they construct thereby. Women were shown shopping for groceries and food (a household task), or clothing (a concern for appearance) in *Tell Me More. English at Home* represented both men and women shopping. The contexts and aims of shopping differed, however. Women were concerned with food shopping, exchanging and buying clothes. One man was shown as the purchaser of a tape recorder; another man, who was said to be a well-known politician, was depicted buying clothes for himself. Shopping has been primarily regarded a feminine activity because of its association with domestic spheres (Images 9 & 10). Stereotypically, to be a woman means to consume. “Men have become aligned with the world of production, and with the values of hard work and utility;
women with the world of consumption, and the qualities it required: leisure, playfulness, fantasy” (Domosh & Seager, 2001, p. 88).

These results, on the whole, reflect the fact that English-learning materials covered only particular domains of human activity in addition to space. There was no trace of religious or morally engaging matters in the visual data. Religious gatherings and religious places received no attention in the two sets of software under the image interrogation. Leisure areas (in *English at Home*) and workplaces were male-dominated spheres. What is more, females were pictured in domestic environments and as interested in and responsible for private spheres more often than males. Within the pictures of home settings, women were often pictured doing the chores around the house (Images 11 & 12). When men appeared at home, they were mostly gathering with the family, chatting with friends, or doing their work at home on the computer, for instance (Images 13 & 14). They were not pictured doing tasks around the house. It must be noted, however, that when the woman was executing a feminine task in a feminine sphere like the kitchen, the man accompanying her had no contributing role at all (Image 15), “in this way avoiding either subordination or contamination with a feminine task” (Goffman, 1979, p. 36).

Meurer (2004, p. 93) acknowledges, “Without resources, there can be no action. As a consequence, resources are directly implicated in the generation and maintenance of power”. Resources are divided into two types by Giddens (1984): Allocative resources refer to the domination of human being over the natural world; authoritative resources are the possibility of domination over the social world through the exercise of power. According to the findings, males tended to dominate workplaces and leisure areas (*English a Home*) and women domestic spaces. It is obvious that manipulation of resources differs with the type of setting. The workplace, for instance, requires resources for manipulating physical objects in addition to business and financial information. Home is full of tools of different kinds for cooking and cleaning. Danesi (2004) believes that objects are extensions of human beings. It is, therefore, very socially degrading to depict women in domestic environments while manipulating such tools. Home and in particular the kitchen was the only space that stressed tool manipulation by women rather than the workplace in the corpus. Besides, the range and kind of careers held by women and men exactly demonstrated that men were involved in the manipulation of the natural world more than women. Accordingly,
men were positioned as more powerful and dominant than women. The control of authoritative resources, certainly, stems from the control of allocative resources.

To carry out the analysis, the researcher classified images according to the defined values on the specific variable. Reliability was demonstrated by assessing the correlation between judgments of the same sample of relevant items made by the researcher and a trained coder. Phi coefficient of (phi=.997) showed a high agreement between the coders.

5. Discussion

Visual content analysis was carried out in two sets of award-winning English-learning software for determining the spatial positioning of gender. Findings showed that females appeared as subordinate, financially dependent, and powerless; males as dominant, sporty, breadwinners, and powerful. Berger (1972) states that traditionally, men and women have different types of social presence. Men are measured by the degree of power they offer. The power may be in several forms, including moral, physical, economic, and spatial. The spatial system that makes patriarchal capitalism possible enhances the power and status of men (Spain, 1993; Domosh & Seager, 2001).

High-pressing and especially high-paying jobs are still out of reach of single-minded women for “the emergence of industrial capitalism and the ideology of separate sphere assigned women to private home sphere and men to the public work sphere” (Domosh & Seager, 2001, p.38). Examining the reciprocity between space and status in addition to challenging the unfair positioning of both sexes are two ways to eliminate spatial barriers. The English language learning tools have significant power to reinforce traditional hierarchies. Most learners, nevertheless, consider them incontestable.

It needs to be borne in mind that this way of positioning people was not the only dogma that was communicated by these sets of software. In the packages under the image interrogation, especially Tell Me More, work and money were in the center of focus in defense of a materialistic set of values. The context and culture of the images rested upon depicting a world of production (workplace) followed by a world of consumption (leisure), the major features of generic images. Software developers, evidently, have bought the images from image banks and made use of commissioned
illustrations quickly and cheaply without being careful about their contents that promote visual clichés on gender, work, and leisure. Giaschi (2000) believes that the propagation of the countless human discourses left outside this closed male-dominated and capitalist circle has been the hidden agenda in the ESL industry from the very beginning.

Visual discourse analysis is analyzing the ideology of those who create visual images, because “ideologies are typically, though not exclusively, expressed and reproduced in discourse and communication, including non-verbal semiotic messages, such as pictures, photographs and movies”, according to van Dijk (1995, p. 17). Kress (2003, p. 1) claims, “The world told is a different world to the world shown”. Reading and analyzing images, then, must be critical (Kress & van Leeuwen, 2006) because images position viewers in special ways, just as they position the depicted participants is special ways (Callow, 2005), and all images are “entirely in the realm of ideology”, where special discourses get attention, while others are treated as unimportant or even suppressed (Kress & van Leeuwen, 2006, p. 12). And a crucial element of establishing and maintaining power relations is ideology (Wodak, 2001). Fairclough (1995) stresses that if ideology is to be used it should be used critically, ideology that is linked to the process of maintaining power relations. He (1995, p. 82) goes on to argue that “discourse practices are ideologically invested, in so far as they contribute to sustaining or undermining power relations”.

Negative and unfair positioning of gender can have many undesirable outcomes. According to Macaulay and Brice (1997, p. 820), in their study of gender bias in example sentences in US syntax textbooks, “Seemingly trivial things like example sentences can contribute to a hostile environment [...] for women in the academic world”. On that account, the likelihood of a negative damaging impact on women’s learning when inferior positioning of women is used in visual images in language-learning materials cannot be devalued and downgraded because of the long-lasting impression of visual data. English learners as perceivers may simply ignore information that challenges accepted stereotypes and is difficult to process due to motivational and efficiency related concerns. In addition, stereotyped information is easy to comprehend and so can be encoded into memory successfully and effortlessly. The encoded stereotypes as simplifying devices are then used for filtering, organizing, and remembering of what individuals perceive (Sherman & Frost, 2000).
Davies (2004) emphasizes that discursive practices are responsible for reconstituting the current understanding of gender. They contradict the goals of equity by structuring dualistic maleness and femaleness. Subsequently, undermining gendered discursive practices is a must for they function at a stereotypical level to determine the type of discourse which is created (Mills, 1995). Apple (1985, cited in Low & Sherrard, 1999) asserts that material writers and editors often end up walking a fine gray line: they will not tolerate sexism but they will be careful not to incur the wrath of conservative groups who may oppose changes to a traditional patriarchal society. The picture built up by the visual data mirrors and strengthens gender stereotypes in modern societies. Women are usually positioned as the other, whereas men are accorded more status and power. Essentially, the practice and circulation of alternative discursive practices that situate females and males positively within the visual discourse are two working solutions.

6. Implications and Applications

According to cue summation theory, learning will be more complete as the numbers and types of cues in a learning situation increase (Croft & Burton, 1994). Cue summation theory is an information-processing theory that deals with learning and retention in a multimedia environment such as an educational software program. Reasonably, English-learning software packages are highly effective tools for learning English. They cannot be discarded, even though they may contain far-from-innocuous messages. Awareness-raising is necessary. The students, made aware of sexist messages, will learn some other ways of being in and viewing the world (Filak, 2002). Above all, they can be armed with a tool for recreating discursive practices and power relations on a larger scale (Fairclough, 1995).

In 1994, a voluntary British group published guidelines for the representation of women and men in English language teaching materials, taking into account two big issues (Florent, Fuller, Pugsley, Walter, & Young, 1994). The first addressed issue was that the visual and verbal data used, and the extent to which learners can identify with them, have an important effect on how people learn. Material writers and software developers need to be aware of the negative effects of positioning one gender as inferior to the other. The practice of this awareness is strongly required for the equal treatment of females and males in pedagogical media.
Images are never innocent. They have the power to manipulate and position the viewers by conveying a particular vision of gender reality. Instructors can help students become visually literate. Felten (2004) proposes that the teaching and learning of visual literacy should not be separated from the teaching and learning of different academic disciplines. To Felten (2004), visual literacy consists of the ability to interpret and to produce culturally motivated images, objects, and visible actions. Visual literacy, thus, must become the new currency of learning.

7. Suggestions for Future Research

Future research can be carried out on a large variety of language-learning software programs rather than limiting the investigation to award-winning and English-learning ones.

Specifically, other factors that influence and reinforce inequalities between groups like age, class, race, and disability can be examined with regard to space.

The assumptions were being made that the images within the technology-based media help users to construct reality and learners are sensitive to the raised messages. Valuable future research can look at how users make meaning from the visuals.

Women are getting to know their potentials and beginning to ascend the corporate ladder nowadays. Business English software packages are in need of a similar image interpretation which can reveal how gender is positioned in different spatial experiences in the workplace.

Corpus

Marandi, S., & Marandi, S. English at home. 2 CD Pack, Computer World, Iran.

References


Appendix