Measurement of Multimodal Literacy of EFL Iraqi Students

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Abstract
Language is not only verbal, but multimodal of discourse analysis also play vital role in understanding the text. The term multimodal literacy has been created in 2003 by Jewett & Chris, behind the term is the premise that the idea of literacy must be reconceived in order to encapsulate the variety of meaning-making modes that play a special role in electronic or print multimodal. Technological advances have necessitated the development of reading and writing skills that go beyond what is known in dealing with traditional multimodal, in teaching language and exams, and in receiving the arts.
Keywords: Social semiotics, multimodal literacy, visual grammar.

Introduction

Language and literacy practices have always been multimodal, because communication requires attention to different kinds of meanings, whether they are spoken or written words, visual images, gestures, posture, movement, sound, or silence. However, it cannot be denied that people-driven digital media and text production have led to an exponential increase in the circulation of multimodal texts in networked digital environments. Multimodal text production has become an essential part of everyday life for many people over the course of their lives, across cultures and societies. This is because it is so easy to produce and share digital photos, music, video games, applications and other digital media via the Internet and mobile technologies. But before I get into the ways and benefits of multimodal literacy is, I would like to clarify what is meant by multimodal, it is the study of how meanings, in specific contexts, are made by different means of expression whether they are expressed by the body (speech, movements, facial expressions, gestures, etc.) or with the help of tools and materials (writing, drawing, making music, etc.).

In its broadest sense, visual literacy skills are viewed as a set of abilities in reading, writing, and visual thinking. specifically in regard to higher education, the Association of College and Research Libraries (ACRL), a division of the American Libraries Association, defines visual literacy in

their 2011 publication ACRL Higher Education's Visual Literacy Competency Standards as:

"a set of abilities that enables an individual to effectively find, interpret, evaluate, use, and create images and visual media. Visual literacy skills equip a learner to understand and analyze the contextual, cultural, ethical, aesthetic, intellectual, and technical components involved in the production and use of visual materials". (ACRL, 2011:2)

At the most fundamental level, this concept implies that effective visual literacy abilities give students the ability to easily understand images. Reading images is a method for improving one's visual perception and, hence, image comprehension. A short glance or quick scan, however, is insufficient to comprehend visuals that call for deeper comprehension. Instead of relying on the kind of surface-level comprehension that permeates our daily use of the internet and social media, kids must learn how to critically interpret these kinds of images in order to become visually literate. These and other social media platforms frequently use graphs, photos, videos, and charts to engage people with their content. Those media outlets that weren't initially primarily visual are shifting their emphasis to emphasize the importance and significance of visual content to become more visually appealing. (Kane & Pear, 2016)

Writing may convey one set of meanings, and pictures convey other meanings. This is well illustrated in conditions of imposing types of censorship. Kress&Leeuwen also note a move toward less reliance on language and more codification and control of the visual in different types of text-books, films, and other forms of public language. Interestingly, this shift has also been recognized in other fields of research, such as cultural studies, where the focus on analyzing 'what the text says is replaced by a focus on how different audiences read the same text', from here it seems clear that the world being represented visually in the media, it's a different world, it produces different citizens, and it's also different from the world that was only represented in language.

According to Kress&Leeuwen (2006) this approach starts from the social aspect. Its structure is not a simple reproduction of the structure of reality, but instead, producing a reality picture bonded to the interests of the social community that produces an image, circulate, and read it, so it becomes ideological. Meaning are what printmakers, photographers, designers, painters, and sculptors express in their work first and foremost. To examine these implications, there are aspects and rules of visual grammar that must be analyzed: elements and structure, position of the participants, modality, and materiality.

1 Elements and Structure

Guba, et al. (2009) state that the conceptual representation structure is a relationship between participants in a particular class, statically, and

timeless. This structure can be understood as a process of classification or taxonomy, such as the sequence or chain related to participants to interact; at least one set of participants will act as a subordinate associated with at least one other participant as a superordinate.

2 Position of participants

The position of the participants in visual grammar has been described by (Hjorland & Nicolaisen;2007) as a combination of relationships among participants in the picture, also with interactive participants. Interactive participants are real people who produce and understand the images in social community context that regulates 'what the image could be expressing how it should be viewed, and what it might be saying, to some degrees and in different ways'.

3 Modality

Kress&Leeuwen (2006) describe the concept of modality as the equally essential in accounts of visual communication. Visuals can represent people, places and things as though they are real, as though they actually exist in this way, or as though they do not as though they are imaginings, fantasies, caricatures, etc. Also, modality judgements are social, dependent on what is considered real (or true, or sacred) in the social group for which the representation is primarily intended.

4 Materiality

Production refers to a variety of words associated with the physical components of visual grammar. Even though materiality is a given, it plays a crucial role in producing meaning. Any material that has meaning, including bronze or gold, an original oil painting or a copy, or both, includes social significance. In the significance system, each type of media specifies a certain ideational, interpersonal, and textual function. Materiality concentrates on an examination of color meanings in relation to Halliday's meta-function. Color may obviously be used to represent individuals, groups of individuals, locations, and things, as well as more generic concepts, such as the colors of the flag, corporate identification, safety regulations, sign systems, and maps. (Kress et al.;1988)

5 Discourse

According to Leeuwen (2005), is a social creation of knowledge about some parts of reality. By ensuring that the discourse is developed in a specific social context that is consistent with the interests of the executants; whether that context is large, like that of multinational corporations, or small, like that of a particular family. It can also be formal, like that of the press and schools, or informal, like that of a conversation in a restaurant.

6 Genre

As Leeuwen (2005), claims that the construct of a genre consists of three elements: qualities of content, characteristics of form, and characteristics of function. Instead of a discussion of the subject matter itself, which is the province of discourse, the term "content" refers to the similarities and qualities of the topic matter in the discourse. Similarities in the structure, order, and relationships between the content's pieces can be used to identify the form. The purpose is also apparent from the similarity of usability in related discourse. Sociolinguistics, pragmatism, ideology, feminism, and gender are among the genres covered by social semiotics.

These characteristics give the impression that there are many different genres of conversation. Any genre can be recognized by its characteristic equation, which takes into account the genre's content, form, and function. The function of genre is then that of categorized semiotic resources or that of a model for communicative engagement.

 7 Style

Style is a certain way or technique by which anything is done, made, or performed, according to Merriam-Webster Dictionary. Individual style, social style, and lifestyle are the three categories into which Leeuwen divides the term "style." The concept of individual style, he argues, emphasizes individual characteristics. There are places for unique particularities even though everyone normally behaves in accordance with social norms. And the concept of social style refers to not only a person's personality and attitudes but also to their social status, or "who we are" in a stable category like economic class, age, gender, social relationships, and "what we do" in terms of a person's participation in socially regulated activities and the role he or she played within them.

Leeuwen (2005) claims that a person's lifestyle seems to be more socially than individually oriented. He contends that shared consumer behaviors, rather than fixed individual positions, describe the social or communal style that has spread throughout the world's cities. Additionally, lifestyle is social in that it is represented by a variety of outward manifestations, including almost every "distinctive way of life" that can be reflected in gastronomic preferences, fashion and accessory trends, types of communication devices, types of vehicles, types of sporting activities, and so forth. When traditional social indicators like class, gender, age, and education were replaced by the "lifestyle market segmentation" technique, which categorizes consumers through a combination of consumption, lifestyle became another social factor.

Analyzing Principles

According to Guba&Yvonna (1997/2006), the ontological perspective of critical theory on reality is flexible and continually influenced by a variety

of social, political, cultural, economic, gender, and ethnic elements before crystallizing into a real structure.

Visual Grammar

Kress&Leeuwen (2006) build visual grammar on Halliday's theoretical idea of meta-functions (every semiotic serve two purposes: ideational function, which is the representation of the external and internal reality, and interpersonal function, which is the enactment of social relations through interpersonal interactions. The textual function, which Halliday defines as the universe in which all the text's pieces cohere both internally and with its context, is a world that all message entities texts seek to display).

Types of Multimodal Texts

1- Multimodal texts can be paper-based, live, or digital, and multimodality does not always imply the use of technology.

2- Textbooks, comics, graphic novels, picture books, and posters are examples of multimodal texts that are printed on paper.

3- Live multimodal texts, like dance, performance, and oral storytelling, make use of a variety of modalities, including gestural, spatial, audio, and oral language, to convey meaning.

4- Film, animation, slide shows, e-posters, digital stories, podcasts, and web pages with linkages to external pronunciation aids or translations are all examples of digital multimodal texts. (Durrant & Simpson:2015).

Teaching Multimodal Literacy

Effective modern communication requires that young people be able to read multimodal texts in a variety of formats, respond to them, and compose meaning from them. To achieve this, it is necessary to clearly teach students how each mode uses distinct semiotic resources in order to convey meaning (Kress, 2010). In contrast to written language, which would convey this meaning through sentences using noun groups and adjectives written or typed on paper or on a screen, visual texts, for example, can represent people, objects, and places using choices of visual semiotic resources such as line, shape, size, line, and symbols (Callow, 2013).

Population and Sample of the Study

Best & Khan (2006:16), define population as any group of individuals that has one or more characteristics in common. A sample is often defined as a small proportion of the population that is selected randomly for observation and analysis. A number of male and female students are randomly chosen in order to represent the population.

The sample has been chosen randomly and it consists of thirty (30) students out of the entire population which is (65) in the English

Department /Open Educational Collage / Kirkuk during the academic year (2022-2023). The number of the pilot study is (10) students (5 male, 5 female) as shown in Table (3.1)

Table (3.1) The sample of EFL Students according to Gender Factor

	Total population	Gender		No. of the pilot study	No. of study sample
		Male	Female		
1st stage	30	11	19	4	12
2nd stage	18	7	11	3	8
3rd stage	11	5	6	2	6
4th stage	6	---	6	1	4
Total	65	23	42	10	30

The T-test of the sample according to gender has been computed and it is (0.78) for male and (0.32) for female according to the T-tabulated value as (2.04), at level (0.05). This indicates that there is statistically significant difference according to gender. As shown in Table (3.2)

Table (3.2) The Mean, Standard Deviation and T-Value of the Test Scores according to Gender

Gender	No. of the study sample	Mean	Std. Deviation	Calculated T	Tabulated T	D.F.
Male	15	27.07	9.63	0.78	2.04	28
Female	15	30.53	8.63	0.32		

The t-test for two independent samples formula has been used to determine whether there is a statistically significant difference in the level of performance for students' scores with regard to recognition and production Level. It has been found that the calculated t-value for male students' difference in mean is 18.47 at the recognition level while the mean at the production level 8.67 whereas the calculated t-value for female 17.73 in mean at the recognition level while the mean at the production level is 12.80 at degree of freedom 28 and 0.05 level of significance. The total result is that there is a significant difference between recognition and production level on behalf of production level as in table (3.3).

Table (3.3) Comparison of Students' total Scores at Recognition and Production Level

Items	Gender	No. of students	Mean	Std. Deviation	Calculated T.	Tabulated T.	D.F.
Rec.	Male	15	18.47	5.73	1.14	2.04	28
	Female	15	31.33	1.96	6.79		
Pro.	Male	15	8.67	4.91	0.52		
	Female	15	30.47	4.27	6.18		
Total	Male	15	27.07	9.63	0.78		
	Female	15	61.80	4.49	7.41		

Conclusion

The conclusion of this study which can be summarized as follow:

1-There is a significant difference between EFL male and female students' mean scores in the test on behalf of female students.

2-When comparing the performance results of recognition and production EFL students' mean scores which show that the production level is better than recognition level.

In simple words multimodal literacy is a flexible and sustainable process of a set of abilities used to understand multimodal texts. So multimodal literacy requires, textual and contextual knowledge, i.e., understanding visual rules, in addition to understanding the rules or norms that govern their use in specific contexts. Finally, it includes a critical technology dimension, relating to the way in which contemporary digital technology favors, or even dictates, modes of communication.

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