A Different Vision in eLearning: Metaphors

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Abstract: Metaphors are figures of speech in which a word or phrase that denotes a certain object or idea is applied to another word or phrase to imply some similarity between them. Due to their ability to make speaking and writing more lively and interesting, metaphors have always been popular among students. While metaphors provide significant enhancement of contexts and build upon the sense of community, they can limit the boundaries of the communication between students and teachers. In order to carry out student oriented courses, teachers ought to consider the metaphors students use. In an effort to understand and fill in this communication gap, the authors of this paper have initiated a study that aimed to drive out the e-education students' metaphors in order to suggest a vision for future e-courses. The authors have designed the "E-Education Metaphor Analysis Survey" that comprised 35 items and captured data about e-education students' metaphors. The questionnaire was posted on Surveymonkey.com and was distributed to e-education students in two countries: Turkey and Cyprus. 352 students filled the questionnaire. The answers revealed that the metaphors students use are influenced by their way of life, their personal characteristics, their educational background and their feelings. Internet was the most common metaphor used for e-education. A very interesting fact was that 47% of the students considered E-Student to be equivalent to "rich students' education" and that the term recalled them the metaphor "richness". Although there were many research studies on common metaphors and their impact on e-education, there were no studies in the literature about eLearning metaphors. This paper presents an innovative approach that focuses on 7 key research questions and represents a first step of a more detailed future project undertaken by the authors.

Keywords: eLearning; metaphors; students; SurveyMonkey

1. Introduction

Students learn in different ways, they develop their own understanding patterns, and they build new communities and new language items that grow more and more complex and that can prove really challenging for teachers. To reach a common ground, teachers need to constantly consider new perspectives that could lead to the enhancement of the communication with their students, and consequently of the learning process. A very practical approach is to take note of the metaphors that students use in their daily life.

Metaphors sustain a better understanding of an object or of an idea to which the metaphor is being applied and they can communicate a more accurate meaning with just a word or a phrase. More, they create a sense of belonging and acceptance in certain communities, strengthening group communication. Learners are most satisfied with courses in which the instructors facilitate frequent contact between themselves and learners, where they use active learning techniques, convey high expectations, emphasize the time spent on specific tasks, and provide prompt feedback (Polloff and Pratt, 2001). Under these premises, metaphors present a great potential for the highly complex learning process and their usage can impact positively upon the students' results.

1.1 The term eLearning and eLearners

Although numerous definitions of *eLearning* are found in the professional literature, this term often refers to instruction or training delivered using media, computers, and technologies such as the WWW and Intranets. The content delivered via *eLearning* is related to (a) instructional goals, (b) specific instructional methods, (c) selected media, and (d) knowledge and skills for achieving individual or organizational goals (Uzunboylu, 2007; Muthukumar, 2004; Clark and Mayer, 2003).

There is a growing body of literature on eLearning technologies (see for instance Gayeski, 1993; Gibbons & Fairweather,1998;Kearsley, 2005; Khan, 1997);

Learners have different ways of learning and their issues such as instructional support, faculty motivation and enthusiasm, and technology problems have been raised as problems in developing

online instruction in many institutions for a long time (Barr and Tag, 1995). There may be several issues effecting learners' perceptions about online learning: Instructor, Website, Computer Skills, Pedagogical Issues and English Language. If learners are not satisfied with the design of the course website, they may have negative perceptions of the effectiveness their online courses (Brush, 2001). Technological problems and pedagogical issues make learners get frustrated with the online courses (Hara and Kling, 2003).

1.2 The impact of metaphors in eLearning

Metaphors have proven to be a highly useful tool in the development of theories in the social sciences (Hartzell, 2004; Kendall & Kendall, 1993; Levassuer, 2004; Wang, 2004). They provide a convenient means by which to create a taxonomy; the first step towards description, then prediction and finally to understanding (Kerssens-van-Drongelen, 2001; Lewis &Grimes, 1999; Lynham, 2000). Also, metaphors become essential elements that comprise the everyday language among specialists (Cook-Sather, 2003) and they are used to communicate meanings without describing them directly but using some element that could help others understand the concept individuals want to communicate.

There are many metaphors that surround the concept of eLearning. Each of them provides some insight and represents a different understanding, but taken together they reveal what a complex concept eLearning really is. Each metaphor offers unique perspectives for the group that is using it and, at the same time, limits understanding in various ways both for the group that has generated and is using the metaphor and also for people residing outside of the group. This fact constitutes premises for broadening the gap between teachers and students and disagreements may be just a result of each group talking past each other while using different metaphors.

Metaphors embody and define the intangible and abstract, but this process inevitably constrains perceptions and actions to those which make sense within the logic of the metaphor. Metaphors are therefore both descriptive and prescriptive. It is important that both students and teachers become aware of their own metaphors for eLearning, so they can recognize how these limit or liberate them. Working together with other learners increases involvement in learning and deepens understanding (Chickering & Ehrmann, 1996). These differences in students' perceptions and understanding result in them developing and using different metaphors, for every metaphor highlights one aspect of the concept, just as it hides another; Lakoff and Johnson (1980) call this ''metaphorical systematicity''. In his analysis of McLuhan's impact, Levinson (2001) reflects his regrets that McLuhan's statements have fueled ''the fire of worry that bad things are happening that we can't know or understand''. And while McLuhan proposed that the ''medium has an impact above and beyond what we do with it'' (Levinson 2001), there is no firm evidence as yet that the worriers are correct (Meyer 2002). Tuncay&Özçınar (2009) have carried out a research study on 106 university students and reached the conclusion that for E-class the Paris metaphor was chosen by 22.2%; for Distant Student, "computer heroes" metaphor was the most commonly chosen; for Blended education, the metaphor "Girls and Boys together" was the most commonly chosen (22.2%); for Synchronous Education, "Morning Education" was most commonly chosen (33.3%); for Asynchronous education, computer metaphor was the most commonly chosen. Students' metaphors have great impact in their life (Tuncay&Uzunboylu, 2009) and teachers must be aware of the metaphors their students use, in order to carry out their courses as student oriented.

1.3 Purpose of the study

Most of the research studies in the literature were related to common metaphors and their impact on distance education (Meyer, 2005) and none of them approached e-education metaphors. The main purpose of this study is to drive out the university students' metaphors, build upon a better communication among students and teachers, and suggest a vision for future e-courses.

2. Method used

2.1 Population

Over 600 questionnaires were distributed exclusively online via email, in Turkey and in Cyprus. When the submission was closed, after 1 month, a total of 352 questionnaires were collected. The

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distribution of the questionnaire to the target group has proved a real challenge, and generally each student was questioned two times.

2.2 Instrument

To capture data about university students training needs, the authors have created the "E-Education Metaphor Analysis Survey" questionnaire, consisting of 35 items, and they have distributed it online. The online questionnaire was designed (see Figure 1) and posted (see Figure 2) on Surveymonkey.com and it has been emailed to university students that have previously been taken e-courses. In the first phase, the questionnaire has been distributed in two countries (Turkey and Cyprus), in Turkish. In order to evaluate the items in the questionnaire, expert evaluation (n = 13) was required. Experts group from education technologist evaluated the data gathering scale both individually and collaboratively, and sustained the maintenance of the content's validity. All the experts' evaluations and suggestions were taken over in the draft form of the questionnaire and afterwards the necessary corrections were made; some of the questionnaire questions included: *what comes to your mind when one mentions E-education? What comes to your mind when one mentions E-course? What comes to your mind when one mentions E-counselor? What are 10 most favorite metaphors that you come across in your e-courses?*

2.3 Data analysis

The responses were downloaded from the surveymonkey.com . The authors considered descriptive statistics as a means to present quantitative descriptions in a manageable form and reduce lots of data into a simpler, yet more powerful summary that enables comparisons across people or other units. Descriptive statistics frequencies and percentages were used to analyze and to report the data gained from the questionnaire SurveyMonkey, as frequency and percentage statistics are considered more relevant in the representation of personal information variables. Frequency represents the number of participants who indicated that category (aka "Male"), while percentage was calculated by taking the frequency in the category divided by the total number of participants and multiplying by 100%. The study reports descriptive statistics such as gender, age and country.

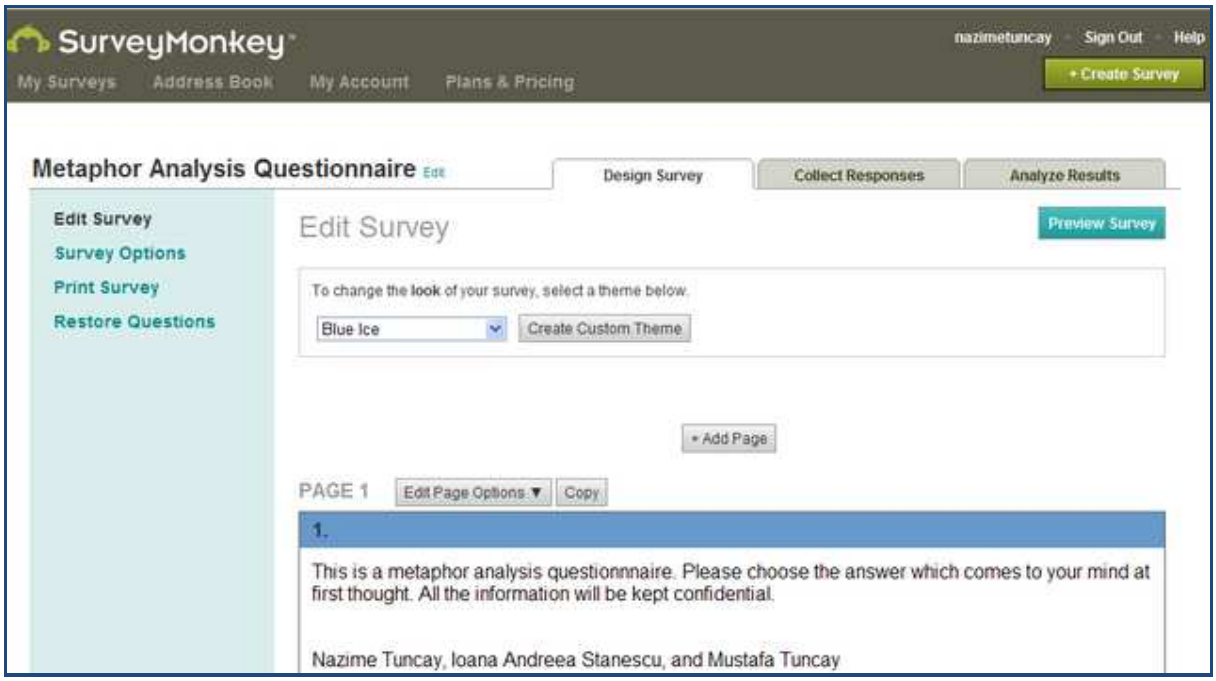

Figure 1: Designing questionnaire on SurveyMonkey

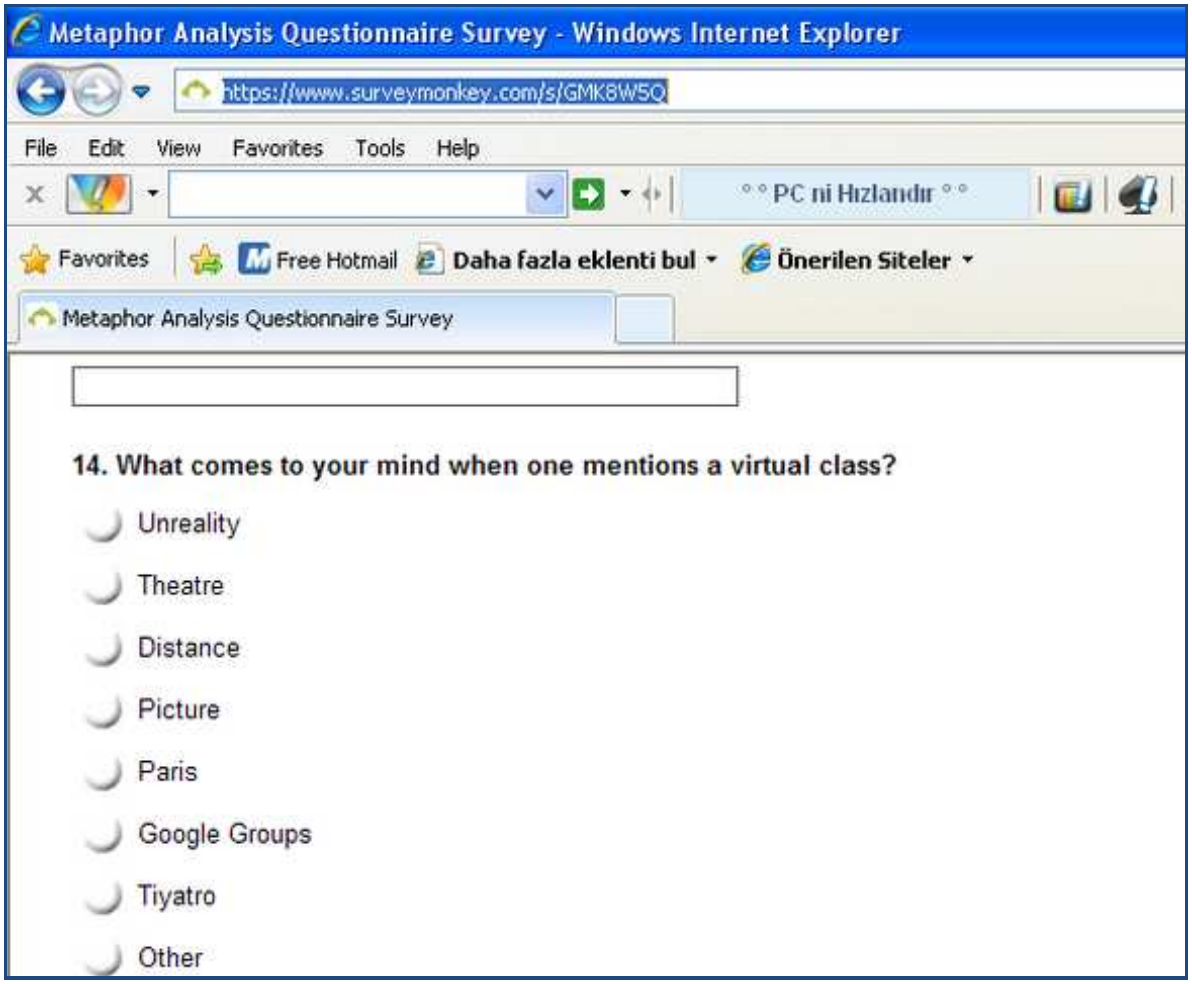

Figure 2: Questionnaire on SurveyMonkey

3. Results and discussion

In this section, the authors present in detail the survey results by item, respectively: eLearning metaphors, country, gender, percentages of e-metaphors, and common metaphors, identified as relevant in this effort to fill in the gap and build the grounds for common understanding between teachers and students.

3.1 eLearning metaphors

The metaphors derived by students and their percentages are (see Figure 2):

- TV Channel (0.3%),
- Human Brain (0.6%),
- Java Games (1.7%),
- Other (4.9%),
- Magazine (11.5%),
- Classroom (17.5%),
- Digital Story (18.9%) and
- Internet (44.7%)

The spectrum of options reflects the evolution of education from traditional to technology-based approaches, allowing respondents to situate themselves in a non-ambiguous perception zone.

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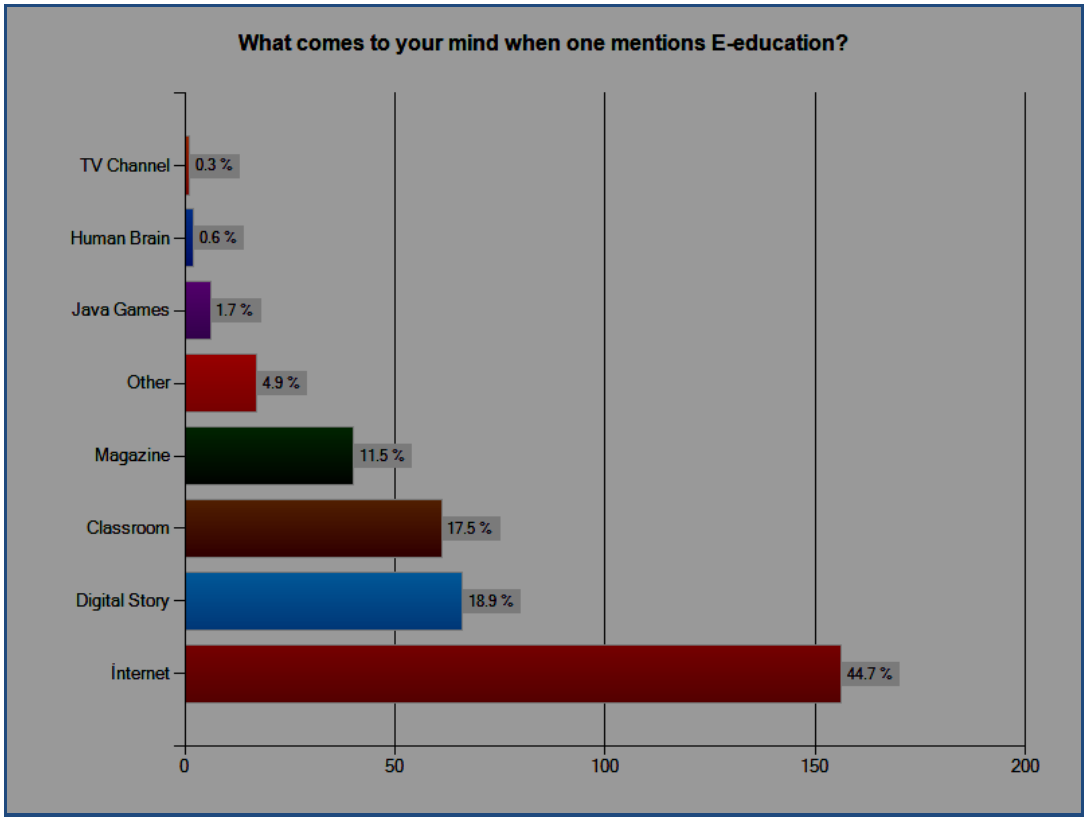

Figure 2: eLearning metaphors

3.2 Responses according to country

The survey was distributed in Turkey and in Cyprus. Since the two cultures share common backgrounds, no significant differences were seen in the answers to the question "*What comes to your mind when one mentions about asynchronous education?*" (See Figure 3).

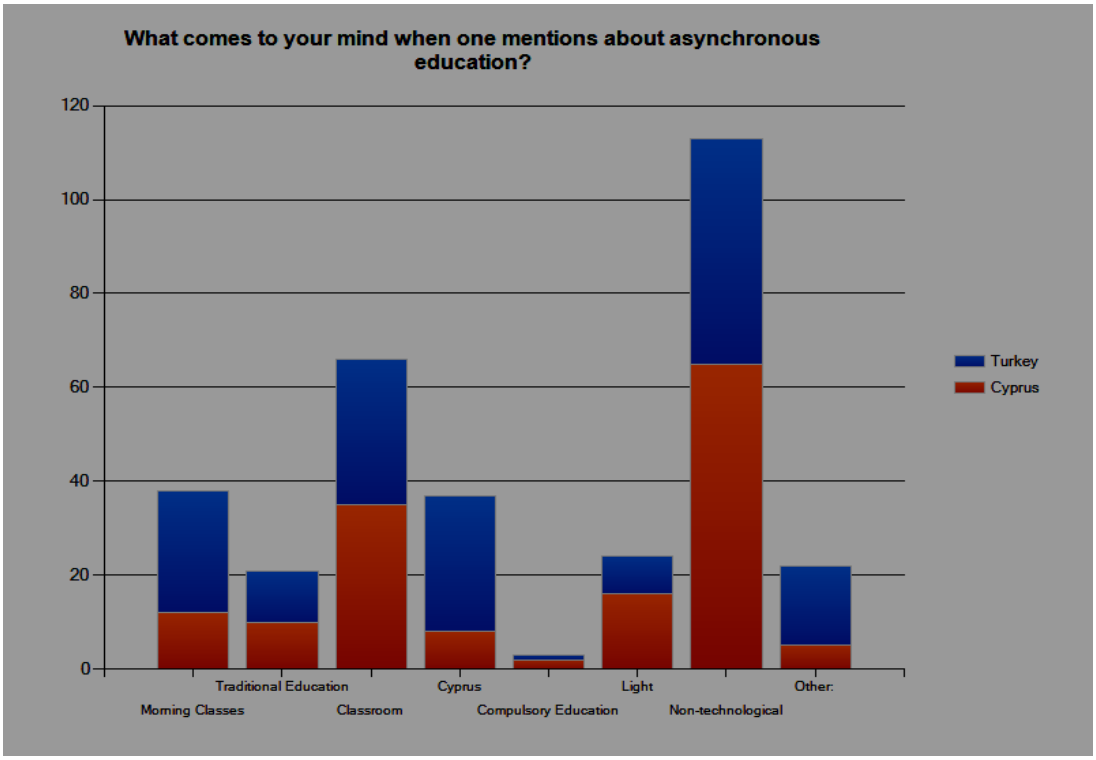

Figure 3: Synchronous education metaphors according to country

3.3 Responses according to gender

60 of the students have not specified their gender. Overall, 136 men and 140 women have participated in this study. An independent sample t-test found no significant difference between groups ($p>0.05$) which have specified their gender.

For asynchronous education, the students from Turkey have chosen the "morning classes" metaphor in a greater percentage than the students from Cyprus, while the students from Cyprus have selected the "Classroom", "Light" and "Non-technological" metaphors at a greater percentage than the students in Turkey.

3.4 Percentages of "E-" Metaphors

Table 1 lists the e-education metaphors, which have the highest ranks, based on the questionnaire results. According to these, the E-school students said that "I feel like I am wondering in space". The E-student should go after information as an e-detective. The E-teacher is the one who has the last word. 47% of the students answered that the E-Student is equivalent to "rich students' education" and that the term recalled them the metaphor "richness". Their reasoning was: "You need to be rich to have education via mobile phone". 48.3% of the students paired E-Project to "Imaginary World" and their reasoning was that *objects* generally are never written on paper, it is like in an imaginary world".

Table 1: E-metaphors

Keyword	Metaphors	Reasoning	Percentage of the Answer
E-Class	E-Group	There are lots of e-groups that use Skype, Wikipedia and so on to share information with classmates	85.7%
E-Teacher	Judge	They judge our work and take decisions	71.4%
E-Quiz	Hot-potatoes	We come across lots of quizzes created by hot-potatoes	68.9%
E-Counselor	Distant Relative	They are like distant relatives they say what to do without exactly being in the same conditions, even in the same country, more like distant relatives	60.0%
E-School	Space	We can not physically be in it	58.3%
E-Help	MSN	We generally get e-help through MSN	56.0%
E-Student	Detective	They should do lots of researches and search for clues of success like detectives	51.4%
E-Project	Imaginary World	Projects generally are never written on paper, it is like in an imaginary world	48.3%

3.5 Common metaphors

"*What are 10 most favorite metaphors that you come across in your e-courses?*" was one of the questions in the questionnaire. The students' answers and reasoning were consistently different (listed in Table 2). The words which have highest metaphor rank (85.7%) are: Athlete (metaphor: Greyhound); Guitar (metaphor: Antonio Banderas); Mother (metaphor: Water); Sea (metaphor: Bed cover); University (metaphor: Money), The other words which have highest metaphor rank are: Cloud (metaphor: Cotton); Red (metaphor: Blood); Clock (metaphor: Water); Poplar Tree (metaphor:Tall); Comb(Hairdresser); Ring(metaphor: Marriage). There are other metaphors that have been used, reflecting the diversity of approached that students have been taken and also they vivid imagination that triggers a constantly open challenge for their teachers.

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Table 2: Commonly used metaphors

Noun	Metaphor	Common Reasoning	Frequency
Athlete	Greyhound	Both are agile and quick	85.7%
Guitar	Antonio Banderas	Antonio Banderas plays guitar in films	85.7%
Mother	Water	She is pure and beautiful as water and we need her to be with us as we need water	85.7%
Sea	Bed cover	They both makes you rest	85.7%
University	Money	You have to have money to go to university	85.7%
Cloud	Cotton	Same visuals	84.6%
Red	Blood	It's the first thing which comes to our mind.	84.6%
Clock	Water	Clock goes fast and it does not come back. Similarly when water falls down it does not come back into its container.	76.9%
Poplar Tree	Tall	Poplar Tree is tall	76.9%
Comb	Hairdresser	Hairdressers use comb too often	75.7%
Ring	Marriage	Ring is a symbol of marriage	75.7%
America	Freedom	America is a place of freedom	71.4%
Gamble	Cyprus	People come to Cyprus to gamble	71.4%
Noun	Metaphor	Common Reasoning	Frequency
Leg	Column	Both are straight and long	71.4%
Scissors	Tailor	Tailors use scissors too often	71.4%
Turkish people	Wolf	Wolf is a symbol for Turkish people	71.4%
Eyelash	Türkan Şoray	Türkan Şoray has long and beautiful eyelashes	68.9%
Ice	Glass	You can see through them both	68.9%
Summer	Sea	We swim in the summers	68.9%
Distance Education	Mars	It makes us believe that we can have courses even in the Mars.	60.0%
Horse	England	In films English people ride horses	60.0%
Moustache	Kadir İnanır	Kadir İnanır is a famous artist with moustache	60.0%
Spain	Bull	Spain is famous with bull fights	60.0%
Woman	Flower	They love flower	60.0%
Holiday	Antalya	It's a favorite Turkish holiday place	58.3%
Mushroom	Umbrella	Very similar	58.3%
Snow	Erzurum	Erzurum has too much snow	58.3%
Walnuts	Brain	They resemble in shape	58.3%
Chicken	Döner	Chicken meal	56.0%
Dog	Smell	Dogs are sensitive to smells	56.0%
Human Being	Monkey	Dawin's theory, we, human beings developed from Monkey.	56.0%
Needle	Hay	They resemble	56.0%
Pizza	Italy	Italy is famous with its pizza	56.0%
Student	Slave	Must do whatever exercises the teacher gives	56.0%
Blue	Sky	The blue is the color of the sky	52.9%
Phone	Mobile Phone	When somebody says phone we understand mobile phone	52.9%
Airplane	Bird	Both are in the sky	51.4%
Fork	Rake	They resemble in shape	51.4%
Lahmacun	Gaziantep	Lahmacun is famous food in Gaziantep	51.4%
School	Home	School is warm as a home	51.4%
Tea	Rize	Rize has a different taste of tea	51.4%
Father	Mountain	Is powerful. No danger comes to you as far as your father is near you.	48.3%
Kebab	Adana	Adana is famous with its Kebab	48.3%
Scarf	Funeral	Woman use scarf in funerals	48.3%
Sun	Orange	Both are yellow	48.3%
Cigarette	Liver	Cigarette is harmful to liver	40.0%
Poem	Orhan Veli	Famous person who writes poems	40.0%
Desert	Camel	Camels live in deserts	35.1%
Rose	Teacher	We give roses to our teachers every teacher's days.	35.1%
Beef	Chop	We eat chops of beef	33.1%
Numbers	Mathematics	We use lots numbers in mathematics	33.1%
Ball	Wheel	They are very alike.	32.6%
New Year	Santa Claus	Santa Claus and presents comes to our mind	32.6%

4. Conclusion and recommendation

This paper approached the way students use and interact with different metaphors for e-education keywords. First, this research has involved naturalistic processes that are embedded in the same milieu: Cyberspace, the digital world, and the human mind. Secondly, metaphors were considered as expressions or manifestations of the same philosophical foundations.

This paper underlines the importance of metaphors in the process of information communication in eLearning environments. The authors' recommendations, concluded based on the results of this research, are that the potential of metaphors in e-education should be explored more extensively and more thoroughly in order to support better interconnections among eLearning actors. The use of metaphors creates the setting for a closer and more open communication and increases the sense of social presence in virtual learning spaces, increasing the educational outcomes. Metaphors stand out as a key element that streamlines communication, attracts e-students and increases their involvement in e-experiences. Metaphors build on the sense of community and should be developed to further levels that enhance e-students' experience and e-teachers' abilities to communicate the course objectives.

The exploration should focus upon open source as a metaphor for instructional practices – design and delivery, instructional platforms - technologies, and instructional philosophy of e-education. The key questions that deserve attention in the area of instructional practices - design and delivery are:

- Is e-essentially a heuristic experience within the context of a shared repertoire of communal resources (routines, sensibilities, artifacts, vocabulary, styles, etc.) that members have developed over time?
- What does this suggest in regard to the design of e-education?
- What does this suggest in regard to the provision or the delivery of e-education?

Future research shall extend the distribution of the questionnaire in other countries. The authors shall consider both countries whose culture is similar to Turkish and Cypriot culture, and also countries that present a different cultural background.

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