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SEEING GOOGLE THROUGH THE EYES OF TURKISH ACADEMICIANS

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ABSTRACT

With its new variety of IT products and services created in the last decade for students, teachers and schools, Google has changed the face of education. Google technologies that can be used completely free of charge via a single account in any device offer innovative alternatives to meet the needs of education. These technologies also help continuously improve digital competencies of students and teachers. On the other hand, criticisms against the monopolization of the company as well as its privacy and transparency policies have been increasing. In the light of these developments, the current study aims to examine academicians' metaphorical perceptions related to Google. The study was designed based on metaphorical analysis as a method of qualitative research. The study group was comprised of academicians working at education faculties of four state universities located in the middle west of Turkey. The data were collected through a closed web-based questionnaire consisting of open-ended questions. Results revealed that large majority of the academicians have a positive perception of Google. A group of participants also views it as a threat. Results offer important insights about the academicians' perceptions of Google and how and why they make use of Google products.

Keywords: **Google, Google services, academician, metaphor.**

INTRODUCTION

"Ask Google!", "Google knows!". Internet users increasingly utter such sentences day by day. However, Google Web Search, the most widely used research engine in the world with its sophisticated research options and simple structure (Webcertain, 2014), is just one of the services offered to the users by the company established in 1998. One of the biggest players of the Internet market, Google has a large population of users for the products it developed in many fields of life, particularly shopping, mapping, game, finance, health, tourism, video, and so on. New applications and services of the company developed based on the cloud technology are most rapidly changing user routines. In addition, free large storage capacity offered to users makes important contribution to increase the number of the users of its services. With a single user account and password, users can obtain free access to more than 20 products including those developed for communication, storage and collaboration. Because of the wide scope of its products and free access to them, Google has turned to an indispensable as well as an effective innovative educational tool for students, teachers and schools. Recent research has revealed that increasing number of young people prefer information and communication technologies (ICTs) as an educational tool helping them for their out-of-school learning (Greenhow & Robelia, 2009). This tendency is supported by the increasing value attached to informal learning within the context of life-long learning offering more freedom and flexibility (Eraut, 2004; Cross, 2003; Livingstone, 2002) and by students' changing new social learning patterns. For instance, Michigan University selected Google as the supplier of main on-line

collaborative learning tool to enhance course management processes and the interaction between the personnel and students in Ann Arbor Campus in 2011 (Hershock & LaVaque-Manty, 2012). In a similar manner, more than 60 American universities including Yale, Rochester Institute of Technology, Texas A&M, UCLA, California State, and Boston University selected integrated communication and collaboration tools offered by Google and made them available for their personnel, students and alumni. Today, not only universities, but also countries are in an effort to integrate their schools into Google cloud technology to reform its educational systems. For example, in 2012, Philippines Department of Education (DepEd) moved its systems into the Google cloud with "Google Apps for Education" to solve the problems of national education. Similarly, in 2013, Malaysia government adopted Google Apps for 10 million students, teachers and parents in the primary and secondary schools nationwide (Koetsier, 2013).

THEORETICAL BACKGROUND

Social Learning

Pioneered by John Dewey and pursued by Vygotsky, Rotter, Lave and Wenger, the view of learning as a social process argues that learning with others and learning from others not only improve interpersonal interaction but also lead to more innovative and stronger ideas and make learning more permanent. However, development of new communication technologies, which are supportive to individuals' learning experiences and increasing user interaction on the basis of Web 2.0, has unprecedentedly affected individuals' learning experiences and added a new dimension to 'social learning'. This has given rise to a need for individuals to develop their skills required to collaboratively work in small and large groups in the world reshaped on the basis of information economy and within the context of the new learning paradigm in which knowledge is constructed, transformed and dispersed with the active participation of the individual (Johnson, Johnson & Holubec, 2008). In the broadest terms, Dillenbourg (1999) defined collaborative learning as a state of two or more individuals' learning something together and explained the components of the definition as follows:

- "Two or more" can be interpreted as a couple, a small group (3-5 participants), a class (20-30 participants), a community (several thousand people), a society (millions of people)... and all the other intermediate levels.
- "Learning something" can be interpreted as studying a textbook, studying a course, conducting a learning activity like solving a problem ...
- "...together ..." can be interpreted as different ways of interaction. For instance, face to face, computer assisted, synchronized/asynchronized etc.

ICTs developed based on cloud technology enable teachers and students to construct links with higher interactivity levels to each other by reconstructing collaborative learning environments. When compared to individual learning processes, collaborative learning has been reported to have positive effects on students' academic achievement and behaviors in many different fields by a large amount of research (i.e., Capar & Tarim, 2015; Johnson, Johnson & Smith, 1998; Kyndt et al., 2013).

One account is Enough for Everything!

In general, the company has two partner programs: Google for Work and Education. These programs are designed for specific customer needs and consist of a set of cloud-based tools. Whereas, the company is already in an attempt to update and combine these two partner programs into one in order to meet the customers' needs. Today, searching the net has become a daily activity for every internet user and forms the interface between users and computers in their social and business lives. Flagship of Google, web-searching service is one of the most preferred products for information searching processes. Chrome web application packages that are developed for organizational educational institutions (Khan Academy, Glogster, 3DT etc.) are bringing a new inspiration to the web searching. However, Google offers many apps and services (see Table 1) to be used inside and outside the school freely to enhance the basic components, as identified by Dillenbourg (1999), involved in collaborative learning processes. If individuals have a personal Google account, they may use these apps and services freely with limited features and functionality, and if individuals have a professional Google account, for example for an entire school, they might use these apps and services with additional features and functionality. However, individual use of these apps and services isolated from each other restricts their educational usages. When these products are

considered to be the parts of a whole and used in unity, they can turn to be powerful and innovative learning tools. The use of these services requires the users the acceptance of some service conditions and privacy policies of Google.

Table 1. Features and Educational Use of Google Apps and Services*

Google Apps	Features	Educational Use
Gmail	• more than just an e-mail service (combine other Google Apps)	• organize other e-mail accounts in a one-hand • enhance your interaction with students and colleagues • organize your classroom communication • decrease the amount of paper used in the class
Hangouts	• connect with anyone remotely in real-time (text, voice and video chat) • instant videoconferencing with multiple users	• online office hours of instructors • remote collaboration by student teams • interaction with guest lecturers/panelists • work shopping student writing
Calendar	• keep track of events • organize time	• schedule events • send invitations, deadlines • share responsibility with others
Google+	• social network	• improve student collaboration and student-instructor relationship through circles • share private posts with students • convenience of blended learning with Google Hangouts
Groups	• create email-based groups	• create a group for your entire class • distribute materials and resources • share updates and news
Drive	• file storage • synchronization	• share your docs with others • collaborate with others in real time
Google Docs, Sheets, Slides	• create online text documents, spreadsheets and presentations • share created documents	• collaborative authoring by students/instructors • interactive feedback on student work via comments • collaborative concept mapping or image annotation • collaborative collection and analysis of lab data
Forms	• create a survey or form	• give an assessment test to your students • create quizzes with Forms • gather immediate feedback for real-time assessment (track how many minutes students finished the test)
Blogger	• build interactive blogs	• create a blog for your class in a minute • engage with the subject matter • post opinions and questions
YouTube	• create and share video	• engage students through multimedia • create and share online lectures/tutorials • create subject specified playlists

***We benefited from the study of Paliktzoglou, Stylianou & Suhonen (2015) and official website of Google for Education. Furthermore, some educational uses of Google apps mentioned in this table include activities that are performed by the authors to improve learning both inside and outside the classroom.**

Concerns about Google

Google collects two types of user information. These are information given by users and gathered from the services utilized by users (device information, log information, location information, unique application numbers, local storage, cookies and similar technologies). The company states that it uses this information to provide, maintain, protect and improve its services for its users, to develop new services and protect both itself and its users. However, in March 2012, about 70 privacy agreements of the company were subsumed under a single privacy agreement (Pfanner & O'Brien, 2012) and this means that information gathered from the use of one product can be used for other products. This has resulted in increasing criticism towards Google's privacy and transparency policies as well as pressure put by countries to persuade the company to change its privacy policies (Temperton, 2015). Cardozo, Opsahl and Reitman (2015) prepared a report looking into privacy and transparency policies of 24 big technology companies including Adobe, Apple, CREDO, Dropbox, WhatsApp, and Yahoo. They raised some criticisms against the privacy and transparency policies of Google. In this report, evaluating company applications and policies over five stars, three stars were given to Google. The criticisms leveled against the company primarily focus on the company's not taking a stronger position in informing its users following the request for user information due to legal reasons and lack of transparency in data storage policies.

Use of Metaphors to Explore the Perceptions

There has been a growing research attention to the metaphorical analysis in recent years. Previous studies have focused on the metaphors of the concepts related to technology, collecting data from secondary school students (Eren, Celik & Akturk, 2014), college students (Koc, 2015), university students (Coklar & Bagci, 2010; Coklar, Vural & Yuksel, 2010; Gok & Erdogan, 2010; Koc, 2013; Kurt & Ozer, 2013; Saban, 2010), and from in-service teachers (Karadeniz, 2012).

Eren and his colleagues (2014) investigated the perceptions of secondary school students about Facebook. They identified the following five conceptual categories; *a useful device*, *a device that should be used carefully, a piece of the real life, the source of an addiction and a source of harm*. Koc (2015) used metaphors to explore how regular and problematic internet users conceive the Internet. He determined eight conceptual categories: *information source, immensity, basic need, addictive substance, double-edged sword, transporter, mood regulator, and supporter.* Koc argued that normal users are more likely to verbalize the Internet as a supportive entity. Saban (2010) also examined pre-service teachers' conceptions of Internet and found seven conceptual categories: *as a system, as a vehicle, as an addictive entity, as a useful and harmful entity, as an indispensible part of daily life, as an attractive location and as an uncertain entity*. She stated, "Metaphors are powerful cognitive tools to transform one's conceptions of unfamiliar phenomena". Gok and Erdogan (2010) conducted a study to elicit pre-service teachers' perceptions of technology and found them to be mostly positive. When gender, grade, the frequency of technology and background information are compared to technology use, there is no significant difference between pre-service teachers. Similarly, in another recent study examining the pre-service teachers' perceptions of technology, Koc (2013) found five emerged themes: *development, facilitation, vital necessity, power* and *threat.* He also revealed that gender and major have no significant effect on pre-service teachers' conceptions. Karadeniz (2012), in her study investigating the perceptions of school administrations, ICT coordinators and in-service teachers towards technology, grouped metaphors into five categories: *as a changing and developing entity, as a facilitator, as a needed entity, as a useful and harmful entity* and *as a diffusional entity.* Similar to previous studies, it was found that the majority of the educators have positive perceptions. Moreover, the perceptions of educators do not differ according to the gender and age.

With the growing interest and use of qualitative methods, metaphorical analysis was applied to elicit personal theories of participants as a methodological tool in many of these studies. Since metaphors are largely unconsciously generated (Pitcher; 2013;

Schmitt, 2005), it is very useful to investigate people's emotions, attitudes and conceptions (Cameron & Maslen, 2010). Moreover, some researchers mention that metaphors can affect our actions performed in the real life by shaping our perceptions, thoughts and viewpoints (Bailey, 2000; Collins & Green, 1990). It also reflects the person's true underlying feelings and understanding (Pitcher; 2013). In addition, there is some research reporting that metaphoric connotations directly or indirectly affect educators' performances during teaching processes (Marshall, 1990; McGrath, 2006).

Purpose of the Study

Although existing studies on metaphor span multiple disciplines, to our knowledge, there is no study to date that investigates the opinions of the faculty members working at education faculties responsible for the training of pre-service teachers. Previous studies have mostly focused on the perceptions of students and in-service teachers about concepts related with technology, such as internet, social media, and technology itself. While there is limited research on "Google for Education", there is a sizable body of research using Google apps and services from various academic disciplines such as geography, medicine, nursing and education. Universities have a central role to integrate innovative tools into teaching and learning to enhance students' learning experiences. Both inside and outside the school, Google provides innovative solutions that both completely change users' habits and meets the new learning needs of teachers and students. Thus, the purpose of the current study is to elicit the faculty members' metaphoric perceptions (mental images) of Google. The findings of the study conducted with this purpose in mind are believed to contribute to better understanding of why and how the faculty members utilize the products of the company. The present study is also believed to provide an opportunity for the faculty members to discuss the extent to which they think that the company is committed to its informal slogan "Don't be evil".

METHODOLOGY

Metaphor Analysis as a Research Tool

In order to determine the faculty members' metaphoric perceptions about Google, we used metaphor analysis as a method of qualitative research. Pitcher (2013) states that "Metaphor analysis is a systematic method of analyzing the metaphors that people use to express themselves". Schmitt (2005) also points out that in converting complex information obtained in qualitative research into clear and comprehensible patterns, metaphors are very useful. Primarily based on Lakoff and Johnson's (1980) cognitive linguistic theory, Schmitt (2005) provides some guidelines for qualitative inquiry based on metaphors. On the other hand, Moser (2000) posits that metaphor analysis is "a multifaceted research perspective". She states that metaphors generated by participants are placed in their correct context by using qualitative analysis. Furthermore, Martin and Lueckenhausen (2005) state that a number of different metaphors might be generated by individuals to express their ideas and feelings; therefore, it is vital that the researcher should be open to the opinions and thoughts of others.

Participants

The study group of the current research consists of faculty members working at the education faculties of four state universities located in the middle west of Turkey. The reason for the selection of education faculties for the current study is that Google supports education in many fields and provides free educational services to teachers and students to increase technology use in education. In the selection of the participants, convenience sampling which is one of the purposeful sampling methods was employed. A total of 66 academicians (Prof., Assoc. Prof., Ass. Prof., research assistant, instructor, specialist) participated in the study. Majority of the participants are research assistants (45.5%) and assistant professors (31.8%). Of the participants, 30.3% are in the age group of 30 or younger, 51% are in the age group of 31-40 and 13% are in the age group of 41-50. There are only two participants over 51 years old. When the participants' length of service is examined, it is seen that 31.8% have been working less than 5 years, 27.3%

have been working for 6-10 years, 27.2% for 11-15 years and 19.7% for 16 years or longer. Of the participants, 37.9% use internet more than 37 hours a week, 31.8% 13-36 hours, 27.3% 4-12 hours and 3.0% less than 3 hours. We believe that the diversity in the professional experiences of the participants and their different patterns of use of ICTs have increased the participant diversity and richness of the data in the current study.

Data Collection

The data of the current study were collected by using a web-based questionnaire only available to the participants. The questionnaire consists of two sections. In the first section, there are four questions aiming to elicit demographic information about the participants. In the second section, we asked participants to write a text by completing the prompt "Google is ……because ……". They were asked to generate a metaphor about Google and explain their reason for the generation of this metaphor. Totally 268 faculty members whose contact information could be reached were invited to participate in the study. In order to increase the return rate of the questionnaire, six reminders were sent to them by one-week interval. The management process of the on-line questionnaire lasted for about two months. Totally 66 faculty members returned the questionnaire; the return rate being 24%.

Data Analysis

During the qualitative process, the analysis and interpretation of the metaphors generated by the participants via the inductive method were carried out at four stages. These were the stages of naming, elimination and refining, constructing conceptual categories and reliability and validity studies. For this purpose, metaphors generated by the participants were listed first and then the recordings not including any source of metaphors or not presenting any reasonable evidence related to a metaphor were excluded from the analysis. Following the sentence-based revision of the participants' reasons for the generation of the metaphors, these reasons were reorganized under shared concepts based on the relationships between the metaphors and thus, main and subordinate conceptual categories were formed. During the sentence-based analysis of the data, it was observed that the participants sometimes assigned different meanings to the same metaphor or they offered more than one reason for a metaphor. In such cases, the related metaphor was coded with the same name under different themes (Fig. 1). Finally, descriptive statistics regarding the generated metaphors and conceptual categories were presented.

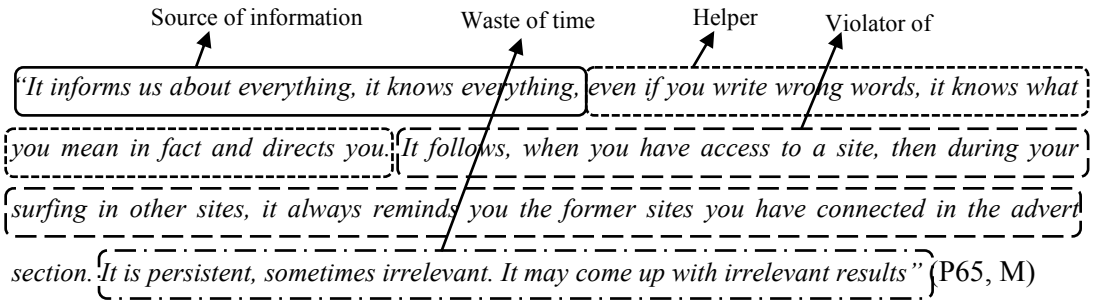

Figure 1. Sample coding statements

Trustworthiness

A series of strategies were used to increase the trustworthiness of the research findings. First, the data of the current study were collected by using a closed web-based questionnaire, which is only available to the participants. All potential participants were provided with information about the study prior to their participation to the study. Physical distance between the researchers and the participants allowed participants to respond on a voluntary basis and in a large period without being under any pressure. The

generated metaphors and their reasons reflect the participants' own thoughts and reasons. Second, we expanded our data sources (i.e., Prof., research assistant, instructor and specialist). The sampling of a range of participants with different length of service and titles contributed to the enhancement and interpretation of the data in a wider framework. Third, all data were analyzed simultaneously and separately by the researchers. Then the researchers came together and reached an agreement on the themes and codes. Two independent coders experienced in qualitative text analysis reviewed the statements and decided on a coding scheme. Moreover, for the confirmation of the results, apart from the authors, three researchers holding a PhD degree analyzed the categories once more. In determining the intercoder reliability, Fleiss' kappa was calculated and found as 0.97.

FINDINGS

According to the cognitive approach, metaphors are far from just being simple poetic statements. Lakoff and Johnson (1980, 3) state, "metaphor is pervasive in everyday life, not just in language but in thought and action." In our analysis, we used cognitive linguistic theory of Lakoff and Johnson (1980) to uncover patterns of thinking. We first began by examining participants' conceptions about Google through metaphorical analysis. We then specifically focused on the participants' reasons. The findings of the current study revealed that 66 participants generated a total of 51 valid metaphors about Google. When the participants' reasons for the generation of their metaphors were examined, it was found that they could be subsumed under three main themes: *information provider*, *life facilitator,* and *threat*. The distribution of the categories created based on the reasons stated and the metaphors generated are presented in Table 2.

Google as an Information Provider

Under the main theme of Google as an information provider formed in line with the metaphors generated by the faculty members and the reasons they proposed, two subthemes were constructed. First, one of these themes representing the participants' positive perceptions of Google is *"Google as a source of information"* and the other is *"Google as a tool to reach information".*

Google as a Source of Information

When Table 2 is examined, it is seen that under the theme of Google as information provider, 28 (35%) participants stated that they see Google as a source of information. Under this theme, there are totally 22 different metaphors generated by 28 participants mostly related to wisdom and greatness. The metaphors coming to the fore under this theme are ocean, grandfather and sea. On the other hand, some participants think that it is a source of harmful information as well as useful information and they may sometimes be confronted with bad surprises. One participant expressed his/her opinion as follows:

> ***"We can find whatever we are looking for inside of it. There is an answer to any question! This might be useful, harmful, dangerous, and correct or false information. There is always an answer"* (P34, F).**

Table 2. Distribution of metaphors used by academician

Conceptual categories		*f*(%)	Metaphor (*f*)	Sample statements...
Google as an information provider	Source of information	28 (35)	ocean (4), grandfather (3), sea (2), ying yang (1), computer on the way to space (1), space (1), supermarket (1), dictionary (1), magical hat of a magician (1), a plate in the kitchen (1),baby food (1), spring water (1), black hole (1), universe (1), hızır (an immortal person believed to come in time of need; in Turkish culture/godsend) (1), guru (1), world (1), crazy horse (1), smart cube (1), father (1), uncle (1), agent (1)	• "Because it involves endless information ...we cannot make certain definition of the limits, content and qualifications of the information it includes." (P62, F) • "Information inside it is like creatures in the sea because it is endless" (P18, F)
	Tool to reach information	14 (18)	ocean (2), hypotenuse (1), navigation tool (1), key (1), servant (1), mother nature (1), finding the needle in the hayloft (1), gossiper of the neighborhood (1), library (1), memory (1), crazy horse (1), treasure of information sharing and generating (1), smart book (1)	• "Through Google, it is possible to take the shortest way to the information you are looking for." (P63, M) • "Just as the correct key is needed to open the door, Google is needed to find the correct information through the correct words."(P57, M)
Google as a life facilitator	Helper	5 (6)	friend (1), twin (1), organ (1), agent (1), life-long learning (1)	• "Even if you write something wrong, it understands what you mean and directs you..." (P65, M)
	Problem solver	3 (4)	hizir (1), mother (1), gossiper (1)	• "When a baby cries, the person who caters its needs is the mother and when academicians encounter a problem, the first tool they resort to is Google." (P28, F)
	Pervasive technology company	2 (3)	creeper (1), octopus (1)	• "In the digital world, it has a product in every field ..." (P14, M)
	Motivator to learn	2 (3)	discovery of a new planet (1), ocean (1)	• "It continuously directs people to search. Thus, people can enter into a process of continuous quest." (P55, M)
	Charity	2 (3)	mother (1), benefactor (1)	• "Because its services are free to use." (P26, M)
Google as a threat	Supplier of disinformation	9 (11)	ocean (2), a plate in the kitchen (1), oracle (1), pool (1), supermarket (1), mirrors in a circus (1), magical hat of a magician (1), ying yang (1)	• "...It may offer a lot of irrelevant information..." (P58, F)
	Violator of privacy	6 (8)	agent (2), black hole (1), two-sided glass (1), crazy horse (1), grandfather (1)	• "It can watch every step and every breath of humans." (P19, F)
	Waste of time	6 (8)	ocean (1), metropolis (1), matryoshka(1), sea (1), crazy horse (1), agent (1)	• "When you look into details, you can encounter unwanted things. If you ask something, you are swayed from here to there." (P1, F)
	Technology leading to laziness	2 (3)	Mirrors in a circus (1), negative addiction (1)	• "It presents itself as if it was hardworking but at the same time it makes the user lazy." (P6, F)

Google as a Tool to Reach Information

When the metaphors generated under the main theme of Google as information provider are examined, it is seen that 14 (18%) different participants viewed Google as a tool to reach information. Under this theme, there are totally 13 metaphors generated in relation to finding and reaching information and "ocean" is the most frequently used one in this group. The common reason proposed by the participants for generating this metaphor is that they see Google as a search engine and they utilize this tool to have access to the information sought among a mass of information.

This is expressed by a participant as follows:

> ***…you need to reach your destination in an ocean. In a similar manner, Google helps you to reach your destination in an ocean just by writing the correct words in the search engine so that you do not waste time.*** **(P58, F).**

The other metaphors generated for the same reason described it as a key, *"Just like a correct key to open the door, with the correct word in Google, you can find the results you want."* (P57, M), as a navigation tool, *"Wherever you want to go, it takes you there through the shortest way"* (P46, F), and as a hypotenuse, *"Through Google, it is possible to take the shortest way to the information you are looking for."* (P63, M).

Google as a Life Facilitator

Under the theme of Google as a life facilitator constructed in line with the metaphors generated and reasons offered for the generation of these metaphors by the participants, five sub-themes were formed. They are helper, problem solver, innovator, motivator to learn and charity. All of these themes reflect participants' positive perceptions of Google.

Google as a Helper

When Table 2 is examined, it is seen that five (6%) of the participants view Google as an important helper under the theme of Google as a life facilitator. The reason presented by the participants for the generation of five different metaphors in this sub-theme is that they intensely utilize Google in their information seeking processes (e.g. finding answers to their questions). One of the participants viewing Google as a friend expressed his/her opinion as follows: *"It is like a friend I can trust whenever I need it and it can answer every question I ask."* (P26, M); another participant regarded it as his/her twin*: "Because it complements the word I am attempting to write."* (P46, M).

Google as a Problem Solver

Few participants (4%) stated that they see Google as a problem solver. The reason presented for the generation of Hızır, mother and grandfather metaphors in this sub-theme by the participants is that whenever they encounter a problem, Google helps them to solve this problem. One participant expressed his/her opinions as follows:

> ***"When a baby cries, the person who caters its needs is the mother and when academicians encounter a problem, the first tool they resort to is Google. Just as all the needs of a baby are met by its mother, Google meets all needs of academicians; g-mail for sending and receiving e-mails and Google academic for finding articles*** **"(P28, F).**

Google as a Pervasive Technology Company

Very few participants (3%) defined Google as one of the most pervasive technology companies of today's world giving direction to innovations. One participant expressed his/her opinions as follows: *"It is everywhere…"* (P56, F); another one: *"In the digital world, it has a product in every field…"* (P14, M). Under this sub-theme, the participants generated the metaphors of creeper and octopus.

Google as a Motivator to Learn

When Table 2 is examined, it is seen that two of the participants (3%) stated that they see Google as a tool motivating learning. A participant using the metaphor of discovering

a new planet explained the reason as follows: *"It continuously directs people to search. Thus, people can enter into a process of continuous quest."* (P55, M).

Google as a Charity

Very few participants (3%) generated the metaphors of mother and benefactor by emphasizing the free services of Google. One participant explained it as follows: *"It always gives."* (P12, F). Another participant also stated that *"because it does not want money for its services."* (P26, M).

Google as a Threat

In line with the metaphors generated and reasons presented for their generation by the participants, the theme of Google as a threat was formed. Under this theme reflecting the participants' negative perceptions of Google, there are four sub-themes that are supplier of disinformation, violator of privacy, waste of time and technology leading to laziness.

Google as a Supplier of Disinformation

Nine participants (11%) stated that Google supplies disinformation. Some of the eight metaphors generated under this sub-theme can also be found in the sub-theme of Google as a source of information. Most of the participants stated that though they see Google as a source of information, they still think that it also supplies disinformation. One participant expressed his/her opinion as follows*: "Because what it says is not always correct..."* (P23, F).

Google as a Violator of Privacy

The reasons presented for the generation of the metaphors in this sub-theme revealed that six participants (8%) think that Google violates privacy. In this sub-theme, there are five metaphors and the most outstanding one is the agent metaphor. One participant generating the grandfather metaphor explained his/her reason as follows: *"...it records your personal information and stores it in its sea to be able to use when needed. Therefore, be cautious about the grandfather and yourself!"* (P61, F), another participant generated the black hole metaphor: *"...and the most important thing is that while you think that you are learning a lot from it, you cannot guess what it is learning from you."* (P62, F).

Google as a Waste of Time

Six participants (8%) stated that Google leads to waste of time. In this theme, there are six different metaphors generated by the participants. Some participants pointed out that while Google is a quite useful tool to reach facts, if it is not used properly, it may lead the user to irrelevant and unrelated places. One participant explained this as follows: *"If you do not know what you are looking for, it is very difficult to find it."* (P9, F).

Google as a Technology Leading to Laziness

Very few participants (3%) generating two different metaphors in this sub-theme stated that Google exercises a negative influence on human behaviors; therefore, it is different from how it looks and makes user lazy. One participant expressed his/her opinions as follows: *"People prefer to reach a site or information they have already known by writing the related words in Google. Having access to known information by asking questions can make the brain lazy and promotes it to think less."* (P53, M).

DISCUSSION

The data collected in the current study show that the metaphors generated and reasons proposed for the generation of these metaphors can be subsumed under three main themes, two of which are positive and the other one is negative. Large majority of the participants stated that they view Google as a source of information and identified it as a useful tool to reach information. The participants' positive perceptions of Google are mostly subsumed in these two-subthemes gathered under the theme of Google as an information provider. However, it should be noted that these themes are directly related

to its web searching service, only one of its many services. Google's CEO, Larry Page, announced that Google is a part of a new structure called Alphabet in his blog message. In this new restructuring, as stated by Larry Page, the aim is to create more effective and efficient management of the companies. Additionally, we also believe that it aims to change the dominant belief among people that Google is only a search engine. Under the other positive theme of Google as a life facilitator, it is seen that a great emphasis is put on Google's being an important helper in information seeking processes and free access to its other products. Another remarkable finding related to this theme is that there are very few participants seeing Google as a pervasive technology company giving direction to innovations. However, the diversity of the services offered by the company can concert Google into an effective education tool for educators (see Table 1). This finding may indicate that the faculty members' information about and awareness of the educational use of Google services is quite low or they do not utilize these services for educational purposes.

Another important finding of the current study is that some participants view Google as a threat and thus, should be used cautiously. Among the negative perceptions subsumed under the theme of Google as a threat are supplying disinformation, wasting time, violating privacy and leading to laziness. Disinformation and waste of time make up two related themes. Moreover, as stated before, it is remarkable that these themes are related to web searching service, only one of the services offered by Google to its users. This finding once more proves that web searching service is more intensely used by the participants than the other services.

Other negative perceptions of the participants collected under the theme of Google as a threat are related to the violation of privacy. In an environment where many negative criticisms are leveled against the privacy and transparency policies of the company, few of the faculty members have negative perceptions of the privacy policies of the company. There can be two reasons for this. First, it might be lack of information about the privacy policies of the company. Second, it might be the company's indifference to the existing situation. However, these criticisms should be taken seriously considering the 150-page report prepared by the company to answer to the claims raised by EU commission (BBC, 2015). Acceptance of conditions of contract without reading is a popular on-line user habit. In general, users are prone to not reading licensing agreements of software programs or web sites. This was clearly revealed by an empirical study conducted by PC Pitstop Company. Quite a while ago, a company called PC Pitstop added a term to its licensing agreement stating that the users who read the agreement and return to them will be awarded with 1000 dollars. For this, it will be enough for the reader to send an e-mail to the e-mail address given in EULA address. Though the software program was downloaded 3000 times, not a single person sent an e-mail to the given address. Four months after the introduction of the software program, one user noticed this term. That person sent an e-mail and thus won 1000 dollars (PC Pitstop, 2012). Hence, it can be argued that the faculty members are not aware of the privacy and transparency policies of the company, as they do not read its terms of agreement. The most important reason for reading the terms of agreement is to see whether you allow them to use your personal information. Despite serious criticisms leveled against the privacy and transparency policies of the company, negative perception of these policies is not very strong at personal level and this might be the result of personal trust in Google.

When a general evaluation of the findings of the current study is conducted, two important results are found. The first one is that the faculty members make limited use of web-based services offered by Google for educational purposes. Google is offering new technologies or services to its users. Determination of which of these technologies are used and why they are utilized by the instructors in teaching and learning processes is of great importance for the improvement of these processes.

Davis (1989) states that there are two important factors predicting the acceptance of a new technology by individuals and these are perceived ease of use and perceived

usefulness. Many other research findings also indicate that perceived usefulness is the most important factor influencing the faculty members' behavioral intentions (Armenteros, Liaw, Fernandez, Diaz & Sanchez, 2013; Cigdem &Topcu, 2015; Gibson, Harris & Colaric, 2008; Mejia & Phelan, 2013). Rogers (1995), in his theory of diffusion of innovation, maintains that the factors affecting the acceptance of innovation are relative usefulness, convenience, complexity, trialability and observability. With increasing level of perceived usefulness by the user, the rate of convenience is also increasing. Thus, in-service training programs should be organized in faculties to raise the faculty members' awareness and information thus perceived usefulness related to new technologies. Another important finding of the present study is related to the slogan of the Google: "Don't be evil". Large majority of the faculty members were found to have a strong trust in Google. Future research looking at the causes leading the formation of this trust would offer valuable insights into how people can be encouraged to share information and how the amount and frequency of this information sharing can be increased in online communities.

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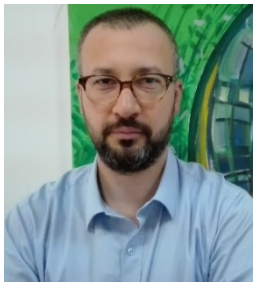

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