

# Mobile Phone – Offers Exchanged as Cultural Practice

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**Abstract.** Mobile technologies are already modifying well-established communication patterns, amplifying and substituting them. Participating in the mobile information society is not only a matter of getting a phone call or a phone, but how it is used in everyday life. The use of mobile phone is a question of culture since they allow new habits, postures, communication, and behaviors that contribute to society transformation. The paper focuses on a study about mobile phones' use among young people. Particularly, we were interested in the text messages, treated as offers, sent by mobile phones. The paper concludes by presenting the design of an engagement conceptual framework, which can be a reflection point to consider within the design process of future interfaces. Conversely, this framework can also be a learning tool either for understanding the usability principles of an interactive interface or as an instrument to teach and motivate students in a knowledge exchange situation of collaborative work.

**Keywords:** Mobile technologies · Gift giving · Offering · Engagement conceptual framework · Cultural practices · Learning tool

## 1 Introduction

In the new vision of computation technology there is a force that shapes our individual and social lives. We are facing a corporative context where the mobile technologies modify the established standards of communication, increasing and substituting them. We never imagine the things that technology allows us to do. The social dynamics resulting from the use of some communication tools created a changing paradigm in people relationships. Conversely, culture, constructed by human beings in interaction between each other, became significant for interface design, as well as, for the given interpretations of cultural practices of groups when they use a product or service. In recent years, human computer interaction (HCI) and related fields, for example computer supported collaborative work, interaction design, and participatory design have produced an increasing interest focusing on efficiency, functionality and usability, towards an increasing preoccupation in the aspects related to the users' experience of technology and digital artifacts [1]. A social obsession of being in contact with others is imperative. It is this interconnectivity that defines culture today. The fundamental issues of technology media development have extended from traditional usability problems to wider social aspects of interpersonal contact, information sharing, participation and culturally inherent needs [2–5]. Cultural preferences have become one of the most

significant subjects and focuses of technology development, as it slowly turns away from issues of usability to issues of fulfilling users' cultural and social needs [6, 7].

This paper focus on the technology that changed people lives in terms of communication and interaction – the mobile phone. We describe a study about mobile phones' use among young people (artifacts that contributed to frame culture). The activities mediated by telephone are an example of life routine, organization and structure around the mobile phone. In particular, in engagement practices, telephones as well as, some text messages sent by mobile phones are treated as offerings. Some aspects are seen, in more detail; such as, the meaning of these practices, the voluntary exchange, the acceptance/rejection, the pact and relationship that is established, the status and competition that is assumed, the pretending figure that can be implicit and the value of the exchanges.

## 2 Background and Related Work

Teenagers have provided a rich source of data about social practices in everyday life carried out through mobile technologies. Comparing with other nation, the number of mobile phone per head of population in Finland was the highest in the world [8]. Young people are considered to be a significant factor in the mobile phone business, because they have quickly learned how to operate them to an extreme. The popularity of mobile phones, in Korea, was most evident among young people and males [9].

A review of research literature related to gift-giving is widely accepted and documented. Of the little research on the design of gifting technologies that exists, among the most relevant is the work of Taylor and his colleagues [10–12] in which they concentrate on a model of gifting giving that emphasizes exchange and reciprocity in the context of teenagers “messaging” each other on their mobile phones. Through the data, they suggested that teenagers use their phones to participate in social practices that closely resemble forms of ritualized gift giving. Such practices shape the way teenagers understand and use their phones. They considered that this insight into everyday, phone-mediated activities has practical implications for mobile phone design. Using an example, they described how teenagers' gift giving practices could inform design, providing an initial means to conceptualize future emerging technologies. Traditional gifting is based on direct reciprocity within close-knit and relatively small “circles”, while online gifting has the potential of bonding unfamiliar people together on a much larger scale [13]. They considered the use of gift giving, as a theoretical and conceptual framework, for analyzing social behavior in online networks and communities. Chakrabarty and Berthon also presented the notion of gift giving by showing that much of the gifts exchanged in social media are driven by social emotions [14]. Other studies on this subject presented the Finish cultural discourses about mobile phone communications with a detailed presentation regarding the use of mobile phone in different countries and the symbolism of its use [15]. English children's use of mobile phones in managing and maintaining friendships and relationships in their everyday lives is also available [16]. Two-thirds of the teen texters said they were more likely to use their cell phones to text their friends than talk to them by cell phone [17]. Nearly one in four teenagers are almost constantly online as their lives are swallowed up every move by their mobile

phone [18]. More deeply related to our study, we highlight Sun who described the success of text messages compared with the usability weakness of mobile phones such as the small display, poor input methods, moving environments, and noisy surroundings [19]. In his opinion, the explanation is in socio-cultural contexts of use. All human activities are embedded in socio-cultural contexts, which are not only created by local cultural and historical practices, but also co-created by each participant's history and life experiences in the use of a technology.

### 3 Mobile Technologies – Cultural Approach

The innovative technology, mobile communications play a role in most people's daily lives, being applied in diverse directions. As a result, social activities and cultural values have been manifestly influenced. The mobile mobility is more a cultural than a technological question. Mobile phone migrated from its initial function of a communication device and became a symbol of style and taste of the user. However, there are some nuances in its use, for example: there are people that use it more than a personal computer to send emails: there are countries where it can only be used in specific locations. It has become an icon or symbol of status. It does not represent only communication but also a question of social acceptance and popularity. There are those who create affection towards it and do not seek anything else, those who identify themselves in a personal way, and there in increasing of intimacy with the others created through the use of this piece of technology. The mobile phone became the cultural icon of the digital generation.

The goals of designing interactive product are concerned primarily with user's experience, which means creating systems that are: satisfying, enjoyable, helpful, motivating, emotionally fulfilling and fun. This involves understanding the nature of the user's experience as well as the user or people's expectations facing a product; in which means, after, during and before the 'spectacle'. However, understanding a user's actions is very difficult for the reasons of people being of different sexes, genders, sexual orientations, ethnicities, nationalities, religions, social classes and educational, technical, occupational and experiential backgrounds and have or not have disabilities. Meaning that, there is a diversity of cultural levels that must be considered within interaction design in which it is not easy due to culture also being dynamic. Conversely, the cultural component of designing user interfaces is very important as well as user's physical capabilities and cognitive functions, but also, the cultural background and social situation of the user at the time of using the product or service. Cultural preferences have become one of the most significant subjects and focuses of technology development. As it slowly turns away from issues of usability to issues of fulfilling users' cultural and social needs [20–22].

Applications of mobile technologies serve groups of people in shared activities, in particular geographically dispersed groups who are collaborating on some task in a shared context [23]. An important characteristic of those social applications is the continuous interaction between people and technology to achieve a common purpose. Interaction is a general model of socio-cultural phenomena. It needs the signification and meaning interchanged that occurs in a space dimension of norms, values, and

meaning. New technologies are offering enormous opportunities for supporting people in their everyday lives; in which has brought a wider set of concerns and focuses on improving efficiency and productivity at work.

In this paper we follow Jenkins et al. cultural approach: participatory culture. Participatory culture viewpoints suggest a culture in which artistic expression and civic engagement are valued; private individuals do not act as consumers only, but also as contributors or producers, that enables people to work collaboratively; spaces or processes give people the means to take part and contribute; the challenger is on the consumer culture, wherein individuals do not act merely consumer but also participate in cultural commodities as contributors [24]. For Jenkins participatory culture has the following characteristics: low barriers for engagement, strong social connections among members, a belief in collective effort, and informal mentoring among members [25].

The approach was born to focus on culture and social media, however we are more concerned with participatory culture and technology. Technology enables different forms of communication and collaboration and it also allows a user centered design perspective on designing new products or services. With this study we wanted to understand how teenagers, using a mobile phone specially during text messaging, could contribute with their cultural expressions to the design of new technologies.

There are several definitions of culture. In general, we are talking about behaviors found in groups of people, the artifacts use in which cultural achievements are embodied. The culture texts, values the way that every act they due affects culture cultural roles (active or passive users).

### 3.1 Gift-Giving/Offers

People are accustomed to think in terms of what they can benefit from a given situation. Within gift giving paradigm, the gift permits to approach each person with another attitude, “What can I create? What can I give?” making part of the gift environment. Gift giving literature presents several models of gift explanation [26–29].

Gift giving, traditionally, refers to an object given from one person to another; with regards to increasing the amount of happiness in their life, or just decreasing the amount of sadness. This includes special days and occasions, and when somebody might need a lift. Gift giving is one of the symbolic forms of exchange between groups either physically distributed or approached. These practices have roots in old practices where they were executed ceremoniously, to establish alliances and rivalries. The giving is among other purposes, confined to help, council, share, or anything else that provides value to the recipient. The gifts are exchanged as a social practice show, and teenagers in activities mediated by telephone keep a kind of ritual of ‘gift-giving’, and their participation in these activities has a significant impact in the form they see and understand the use of mobile phones. The gift exchange has nothing to do with goods exchange, but with mutual recognition. In the mindset of gift-giving, first, there are the thoughts and feelings of the gift giver and then there are the thoughts and feelings of the gift receiver, and then what the giver thinks the receiver is thinking, and then when the receiver opens the gift, it’s what that person thinks the giver what thinking...it’s all very complicated.

We prefer to consider, instead of gift, offer. Offer is voluntary but conditional submitted by someone to another for acceptance, and which becomes rightfully imposed if accepted by the offeree. An offer is a clear indication of the offeror's motivation to enter into an agreement under specified terms, and is made in a manner that a reasonable person would understand its acceptance.

Offers normally include a departing date, and they are an act of devotion or loyalty. They can have several interpretations like: presented for acceptance or rejection; to put forward for consideration; propose; presented in order to meet a need or satisfy a requirement as an act of respect. If we consider, superficially, one of the differences between gift and offer, one can say that if we put something in someone's hand expecting them to take it, and they do take it, we don't say that an offer was made to them. We say that someone gave it to them.

Another reason for the use of offer is based on the context we are studying, which is 'technology offer' in this domain, clients, customers, users, business, are strategies considered. Customers engage, choose and stay loyal to something as a service.

## 4 The Study, Methods and Methodology

The aim of this research was to understand how teenagers behaved using mobile phones during messages exchange. The study included 24 people with ages from 13 to 17 years old. The simple random sampling technique was used to select the teenagers. We observed them during the act of sending and receiving messages over a period of two months when they were at public places. The research methods were a combination of observations, questionnaires and interviews. Interviews were conducted face to face and by email. The interview questions were about strategies and corresponding features they used when sending and receiving a message.

Questions were for example, about teenagers awareness about text messaging; The frequency of sending and receiving; What did they think about text messages and the way it affects people relationships; What kind of habits and behaviors teen experienced; How often did they communicate with friends; Does it affects over the language spelling; Were they addicted to their mobiles; and finally, we posed questions concerning mobile usability (Mobile phones have different features. Can you use your phone easily?).

The data gathered and analysis was made using Grounded Theory Methodology. Grounded Theory Methodology (GTM) is a general method to use on any kind or combination of data, and it is particularly useful with qualitative data [30]. GTM is only one of several different qualitative research methods available to those conducting exploratory research [31]. It offers a comprehensive and systematic framework for inductively building theory. In order to generate GTM, the researcher engaged in a rigorous and iterative process of data collection and constant comparative analysis. Essentially, each line, sentence, paragraph etc. was read in search of the answer to the repeated question "What is this about? What is being referenced here?" GTM specify analytic strategies [32].

The responses, discussions, and archive materials were coded and analyzed with respect to gifting motivations, features, and usage.

## 5 Discussion and Results

The activities mediated by telephone are an example of life routine, organization and structure around the mobile phone. In particular, in engagement practices, telephones as well as, some text messages sent by mobile phones are treated as offerings. This section presents the main results we got from the data analysis on the study. The responses given by teenagers are considered the correct way to perceive, feel, think and act and these are passed on the whole partners. Culture determines what is acceptable or unacceptable, important or unimportant, right or wrong.

60% of the interviewed teenagers think that they are not ‘cool’ if they don’t have the latest technology in mobile phones. Keeping up with the latest technology has become a very important status symbol to many teenagers. It makes part of the emancipation process. They keep all the savings to purchase the new mobile version, since it is fashionable (the old phone will be used by other family members, younger or older), this group of teenagers said that it was important to impress others, reason why they enjoyed showing their mobiles off (it made them feel important and trendy) when walking, in a bus station, leaving it on the table when they eat, etc. They were used to use accessories as an attempt to personalize their devices and be different.

We did not explore the content of text messages, but ways text message habits have changed over the last decade as it has become more popular. Finally, we offer design suggestions for future mobile communication tools.

Our results suggest that students communicate with a large number of contacts for extended periods of time, they engage in simultaneous conversations, and often use text messaging as a method to switch between a variety of communication mediums.

According our study, texting is the most common use of the mobile phone among teenagers (91%). The main reason to text is social reason: they talk with friends, and they talk about anything: sentiments, school, family.

The data show that 85% teenagers who text, are texting with their friends more than twice a day. Those who have a boyfriend or girlfriend send or receive texts everyday, several times a day. 48% of teenagers text with their parents at least once a day. The data did not helped to understand the frequency with which teens text. Girls are more likely than boys to use both text messaging and voice calling and they do it more frequently. We noticed that teens attain the limits of text messaging plans.

Although voice interaction provides them with access to friends and parents, they prefer, however, texting since they feel that they have more freedom, they can pretend easily, and they do not have to show their mood (girls are prone to use emotions in their message). For teenagers, mobile phone gives them a new degree of freedom. More freedom because they can stay in touch with parents no matter where they are. They feel also safer because they can always use the mobile phone to get help.

Text is used in situations when it is discourteous or prohibited, to talk on the mobile phone, when teens are at the movies, school and when they do not want to show the surroundings.

Messages are to exchange information. Short messages are to report where they are, to check in on where someone else is. Long messages are exchanged to discuss important personal matters. Videos and pictures are exchanged less often due to technological

limitations. Texting is also a method for managing schoolwork and to make appointments. Although forbidden, 15% of teenagers reported that they use mobile phone at school and they text in class without being caught (under desktops, inside bags, behind stacks of books).

The mobile phone and the act of sending messages have positive aspects in teenagers' opinion: make easier to change plans quickly; helps them to entertain themselves when they are bored; is important to exchange and to comment a joke; keep them busy, which is sometimes nice when for example, mom ask for help on cleaning situations.

Conversely, mobile phones and the constant connectivity bring some conflicting situations and emotions. For example, teenagers are convinced of: a text message interrupts what they are doing; Sometimes it is difficult to establish shared meaning through texting, especially with the tone of a message, i.e., some arguments create types of misunderstanding emerging from single punctuation use or the lack of it. Sending a text to the wrong person is a common problem that can lead to regret. This can happen as a result of confusion from trying to maintain multiple threads of text based conversation with multiple partners at once. Teenagers reported regret over text messages they have sent.

Concerning Language usage: for quick messaging short word, misspellings are used. There is the fear that this "new language" may replace standard language and young people will become unable to use language properly. According 12% of the interviewees, texting makes teen lazy because it does not force them to use proper grammar and spellings. Sometimes, teenagers write the way they text as it becomes permanently stored in their brain.

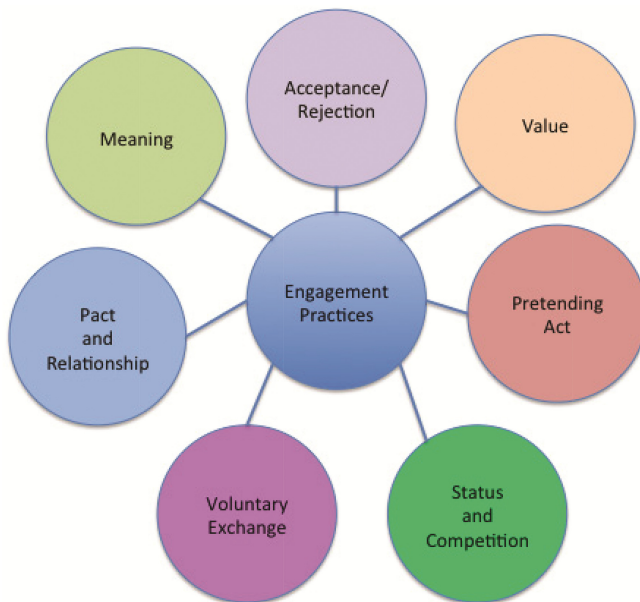
We have found that there are, actually, positive effects of texting for teens, from improved language skills to emotional relief, and even added benefits for the especially introverted teen. They can interact with others and understand their views and their knowledge. Conversely, the use of abbreviations in the professional writing the individuals may be the creative, and texting and 'textisms' may actually serve as a way to increase reading skills, literacy, and spelling fluency. Textese is an abbreviated vocabulary that includes letter/number, contractions or shortenings of words, emoticons (symbols for representing emotions such as ☹ for sad), and vowels, punctuation, and capitalization.

Table 1 summarizes the main results we obtain from data analysis.

Data gathered and analysis permitted to build several categories, within GTM, which contributed to the design of the framework presented in Fig. 1 whose content is adapted from Taylor [11]. Some aspects are seen, in more detail; such as, the meaning of these practices, the acceptance/rejection, the voluntary exchange, the pact and relationships that is established, the status and competition that is assumed, the pretending figure that can be expected and the value of the exchanges.

**Table 1.** Cultural practices

Frequency of text messages	Limits of text messaging plans
What about text messages	More freedom Safe When it is discourteous or forbidden
Behaviors & Relationships	Pretending Hide mood Emotions exchange Entertainment Jokes exchange Keep busy
How often they communicate	More than twice a day – friends Extended periods – boyfriends/girlfriends Once a day - parents
Language spelling	Short word Misspelling Abbreviation
Addition to mobiles	Be cool Emancipation Fashion Personalization Social reason
Mobile usability	Easy to use Experience Need more ‘intelligence’



**Fig. 1.** Engagement practices



*Offering sustains meaning* – The act of offering converts something within people and with their relationships with who receives the offer. The offer helps to organize people's memories into things that can be reached and kept. Offering allows something to continue available for a period of time. It is through the offer that the offer acquires its meaning. The meaning is expressed not only in the offer but also through its giver and receiver, and in the occasional ceremony in which the exchange took place.

*Acceptance/Rejection* – in reply to offer, the receiver is obliged to accept it, i.e. to answer. The reception of the offer demands the acknowledgment and the participation of the giver in the occasion. However, when an offer (message) is made, the receiver can choose to accept or reject it. The acceptance of the offer is necessary to start the relationship. The acceptance is communicated through an answer (another offer). The receiver can terminate an offer on the grounds of rejection if he does not accept the offer, i.e. if he/she does not answer the message in a short period of time. The social expectations that are created by constant connectivity are evident: teens narrated about friends and acquaintances that get insulted, angry or upset if a text message is not responded. That is why they felt obliged to return texts. We are facing an act of devotion and loyalty.

*Voluntary exchange* – voluntary but conditional for acceptance. It will be enforceable if accepted by the offeree (sender). Voluntary exchange contrasts with an exchange that is mandated, for example, a parent message. Voluntary exchanges are the basis of a free communication.

*Pact and relationship* – this mechanism allows sharing emotional experiences and interchanging objects with personal meaning. The telephones can circulate and be changed without argument or negotiation (to see, to copy files, to change numbers...). The exchange implicitly demonstrates the privacy between one and the others.

*Status and competition* – the offer is exchanged through the reciprocity principle, in which the link among people is established through an apparent contradiction. The receiver is obliged to interchange the offer as a form of gratitude placing itself in inferiority position. The telephone and its content as other exchanged objects are mechanisms through which one can make these fights of power and competition. The proper situation of having a mobile phone, as a belonging, makes teenagers feel older and independent. Having a mobile phone means had no excuses for not telling teenagers 's parents where they are and that it provides their parents easy way to monitor on their teens.

*Pretending act* – during messages exchanges, both the giver and receiver can have diverse roles: they can pretend or act as different actors. The scenario may never be identified. In this situation a fallacy world will be created propitiating several pretending stories.

*Value* – the offer exchange objects by telephone confer value. The text messages, for example, can be seen as greater or lesser value if they are written in some way (capital letters, without punctuation...). For the offers as the text messages, the value is associated with who gave the offer and with the context in which it was sent and received. These considerations were only based on examples of text messages shown by teenagers within their mobile phones. We could also verify what happens in relation to other object exchanges such as: touches, images, music, videos, etc., but it was out of the scope of this study.

Teenagers consider the mobile phone as an adequate tool to share information. The usability aspects are not important. The focus is on the service. They considered that experience is the main point to get used and friendly with the mobile phone. Questions such as small display, poor input methods, moving environments and noisy surroundings do not interfere when using a mobile phone.

The results can take us to design a learning tool to use within the community of students and teachers to engage them within collaboration

From our perspective a framework does several things. The main one is to provide a set of activities to analyse information definitions for the information required in the design process phases. A list of framework requirements followed by a set of specific classifications that define the framework;

- It ties together the components of the offering technologies into learning components, making both processes more useful.
- It forces a design team to consider the presented categories in a way that promotes learning and more understandable interfaces.
- It may contribute to improve design practices taking into consideration that people will value design outputs.

The proposed framework (Fig. 2) consists of several inter-related strands, which can be synthesized, in – communication, collaboration, creativity and culture (Four Cs) [33]. Each strand is seen of equal importance and is composed by actions and/or situations to provide guidance for a design process interface.

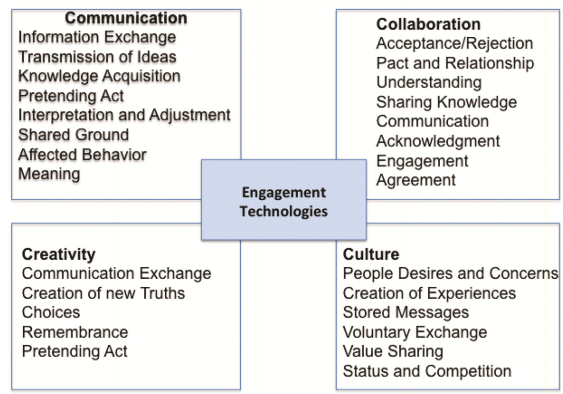


Fig. 2. Engagement conceptual framework for learning

*Communication and Culture* – communication is used to give and exchange information. The practice of communication is akin to engagement technologies as well, to learning in the way that both are skills or abilities, which are acquired and developed. Information is exchanged between individuals through a common system of symbols, signs, opinions or behaviors. From the transmission of messages, one person affects behavior to another. Communication is a cultural practice. Culture and cultural values play influential roles in almost all aspects of human life and technologies are not exempt

from these cultural effects. People own cultural values, concerns and preferences influence interface design qualities and approaches. People create culture, as they create experiences and meaning for themselves and others.

*Collaboration* gives us a better understanding of how people work, use technologies, share knowledge, and communicate. The level of engagement denotes the alliance and obligation to react to communication. Cooperation can be associated with the cooperative principle, which regulates the exchange of information between individuals involved in interaction [6].

*Creativity* was used as a process with one of its ingredient - communication. Each idea was visible, communicable and understandable. Each feature which surround the engagement technologies' action and their circumstances give meaning to the learning event. It contains the main objectives of mobile offer technology, which are the same of an intended learning platform. For the interface technology design, situations like (within communication) degrees of privacy, flexibility and security, and a more functional environment for collaborative learning should be considered.

Each feature surrounding the offering action and their circumstances give meaning to the learning event. Each feature contains the main objectives of mobile offering technology and is the same of an intended learning platform. For the interface technology design, situations like considering (within communication) degrees of privacy, flexibility and security, and a more functional environment for collaborative learning should be considered.

The framework provides a comprehensive approach to consider in the design of new socio interfaces for learning.

## 6 Conclusion

The engagement practices are longstanding, however, they still frame the way people use technology in social interaction. Mobile phones have been appropriated for use within intimate relationships, to mediate close personal relationships, for family and friends separated by distance to maintain contact, they are popular for online dating, and for friend's finder, among other purposes. Offers either visual or text message are linked to objects related with the individual or group life galleries, with remembrances albums, with packages of experiences, and with unintended culture sharing.

The presented study shows how teenagers behave using their mobile phone when sending text messages. Teenagers share (offer) information with meaning and accept or reject the offers they receive. The offer is voluntary but conditional for acceptance. The established pact dictates the future of the relationship. They feel free and safe when they own the offer technology. Their emotions are shared and exchanged and better, they can pretend and have different roles and positions. Partners, friends and family have the position in their lives that they attribute them, according time schedules imposed. Experiences are exchanged. Teenagers learn what they want as they want with others from different communities and cultures, and they converse by being or pretending to be someone else. A series of exchanged situations can occur whether they are speaking of an engagement through offers, remembrances, and generate obligations.

Usability questions are never thought: since they start using the mobile phone is just a question of time to be a user expert. The concern is with Internet, limits of text messaging plans and speed.

The analyzed data permitted us to think about a learning tool either to adapt for teaching classes or to take into account when designing new technologies.

After all this paper does not contribute to new knowledge in the domain of interactive design. However it stressed important cultural information and social issues in the world of engagement technologies according our case study.

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