

## O USO DE FERRAMENTA SÍNCRONA NA COLETA DE DADOS NA PESQUISA EM EDUCAÇÃO ONLINE

### LA HERRAMIENTA SÍNCRONO PARA SU USO EN LA COLECCIÓN DE DATOS EN LÍNEA DE BÚSQUEDA DE EDUCACIÓN

### THE SYNCHRONOUS TOOL FOR USE IN DATA COLLECTION IN RESEARCH ON ONLINE EDUCATION

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**RESUMO:** O artigo descreve as características do MSN, apresenta o histórico de como foi desenvolvido e suas possibilidades de uso na educação online. Relata a experiência vivida através de uma entrevista realizada com uma professora pesquisadora em educação tecnológica fazendo uso do MSN. Apresenta as dificuldades nessa coleta. Traz considerações quanto à importância e limitações do MSN na coleta de dados da pesquisa online.

**PALAVRAS-CHAVE:** Pesquisa online. Coleta de dados online. Educação online.

**RESUMEN:** *El artículo describe las características de MSN, muestra la historia de cómo se desarrolló y sus posibilidades de uso en la educación en línea. Informes de la experiencia vivida a través de una entrevista con un profesor investigador en la tecnología de fabricación de la educación el uso de MSN. Presenta dificultades en esta colección. Trae consideraciones con respecto a la importancia y las limitaciones de la recolección de datos de MSN de búsqueda en línea.*

**PALABRAS CLAVE:** *Investigación en línea. La recolección de datos en línea. La educación en línea.*

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**ABSTRACT:** *The article describes the features of MSN, shows the history of how it was developed and its possibilities of use in online education. Reports the experience lived through an interview with a teacher researcher in technology education making use of MSN. It presents difficulties in this collection. Brings considerations regarding the importance and limitations of the MSN data collection of online search.*

**KEYWORDS:** *Online research. Online data collection. Online education.*

## Introduction

Communication and information technologies (ICT) have increasingly provided access to human x machine interaction. More recently, the communication process has been made possible by the synchronous and asynchronous tools such as: *Messenger*, blog, *twitter*, chat room, email, *skype*, among others. Among these, *Messenger* and e-mail are more frequently used by internauts. These, in turn, already use them for a simple online conversation, written or orally, without any scientific character.

However, there are those who use them to develop studies and research for the development of theses, the result of an academic activity, especially in post-graduation courses.

For this purpose, we had the opportunity to report our experience as students in the subject "Online Research Seminar II, of the Master in Brazilian Education of the Federal University of Alagoas, in the 1<sup>st</sup> semester of 2009, regarding the use of the *Messenger* tool in the collection of data. The main objective of the teachers responsible for this discipline was to make the students experience the possibilities of using existing online tools to collect data in order to identify the facilities and difficulties.

The group was informed of an article about "The Young Entrepreneurs Program", authored by a researcher of the Master in Education of the Federal University of Alagoas (UFAL), the result of his master's thesis. Based on this work, we should conduct an online interview through *Messenger*. In order to do so, 17 questions were elaborated and the best day for accomplishing the activity was scheduled.

The article describes the characteristics of *Messenger*, presents the history of how it was developed and its possibilities of use in online education. It relates the experience lived through an interview with a researcher teacher in technology education using *Messenger*. It presents the difficulties in this collection. It brings considerations regarding the importance and limitations of *Messenger* in collecting online survey data.

## MSN Tool Features and Possibilities of use

The MSN was developed by *Microsoft Corporation* to be an instant messaging program that allows the user connected to the internet to interact with others synchronously in real time. For this purpose, it's necessary that both participants are connected to the Internet. Several versions of the program have been developed to be lightweight and easy to access, such as *Windows Messenger* that originated *Windows Live Messenger* and *MSN Web Messenger* allowing faster and easier access to the resources available through a web browser on any computer and anywhere, without the need to install the software, because in the first versions it was necessary to install the software to be able to be used.

Instant messaging programs revolutionized the world of communications in 1996 when a group of young Israelis created and developed one of the first instant messaging programs on the Internet, ICQ bringing a new form of Web communication. The abbreviation is an acronym, which means in Portuguese I'm looking for you. At first it was a fever in which many young people communicated, but there were many limitations of the tool which was very static and did not have much interactivity. However, in recent years, MSN has been getting more followers in many countries and in Brazil. The success of MSN is given by having an interface that makes it possible to use within the *Windows* environment being an integrated service to *Hotmail* e-mail and much used by the young audience for internet chat.

To get access to MSN you must have a *login* that can be one of the emails that you have agreed to, so that you can enjoy all the benefits of the interface. The initial screen, as shown in figure 1, shows the place where we must enter the email address and password to be able to access it with a series of resources. The interface is very interactive because it provides a very good logic and usability. The user can classify their contacts as: colleagues, family, work, personal, among others. It's possible to edit the user name and user profile, and you can still maintain status *online* or *offline*. It's already possible to use text, audio, and video messages. There are some features available in newer versions of MSN such as: remote access, audio and video conferencing, which interconnected with other programs, you have the option to record audio and video conversations.

**Figure 1 - Access start windows and online conversation** **Figure 2 – MSN chat status**

Source: <http://download.live.com/messenger>

All MSN tools are accessed from the message box that can be accessed by clicking the name of one of the contacts that belongs to the user list. The figure 2 shows that there is a text box at the bottom where messages are typed and at the top we have some icons where to give access to invite a person or a group of people to participate in an audio and / or videoconference.

According to Leite and Migliora (2006), MSN is seen by most users as a form of leisure, a tool that sends and receives instant messages and that people can get to know and interact with. Authors such as Prado (2001), Mercado (2005) and Cruz (2006) defend the use of the chat tool as a possibility of teaching strategy to aid in student learning.

### Possibilities for using MSN in online education research

Chat enables the communication of people who are separated in space and time so that they can maintain a dialogue synchronously. The dynamics of the tool involves the sending and receiving of messages in a synchronous way, in which it can be discussed, commented or long conversations. In education we can use as part of the teaching-learning process, to capture knowledge and deepen content that has been worked in the classroom.

The chat can be used by the teacher to discuss matters with the students, to ask questions outside the class hours; schedules to meet virtually, arrange meetings with specialists or analysis of problems from different points of view, resource for activities in class or out of class, for example, the teacher can ask students to watch a video or read a text about a certain subject and make a critical analysis on the subject proposed in the chat and that they exchange ideas and discuss their opinions and then the class to make a synthesis of the subject (MERCADO, 2008, p. 3).

For Cruz (2006), the application of chat in education, is in the possibility to sharing information in real time (at the same time in different places or not) serving as a platform for debates, discussions, analysis of some problems, from different points of view.

For Prado (2001) the online meeting can be characterized as a creative moment, built collectively to generate new ideas and themes to be studied and deepened.

Didactically, the chat can be used as a very powerful tool so that people can communicate through dialogues or conversations in groups among the members through writing and rewriting, making comments, answering and asking questions. The communication can be written or unwritten, verbal or non-verbal, visual or non-visual, through texts, audio and/or images. It is very important to know how to conduct a chat so that the people involved do not run away from the established topic, so it is important for a moderator to participate, being a teacher, tutor or even a monitor or student.

In a chat it is very common to use *nickname*, which means, the name that users put and want to be associated with them. For Cruz (2006, p. 117), the use of these *nicks* is one of the great identities of the Internet; is one of the main features that have been associated with issues of virtual identities. Abbreviations, *acronyms* and *emoticons* are also widely used in a chat because of the rapidity with which participants respond to questions and questionings.

**The use of “emoticons”** –chat writing has developed its own symbology, the familiar *emoticons*, small sets of characters that convey an emotion or state of mind during a chat. Commonly known as little faces, which emphasize the expressive part of the message: (:, -o,: D,: \*), with the intention of transmitting to the recipient a reaction that would otherwise not be possible. Thus we have the laughter, the doubts, the cry, the embrace in cyberspace (MERCADO, 2008, p.3).

No quadro 1 temos os exemplos de vários *emoticons* utilizados em salas de bate papo. In chart 1 we have examples of several *emoticons* used in chat rooms.

Chart 1 – Emoticons List

I'm happy or smile	Big kisses	Hugs
I'm sad	I'm bald	With hiccups
Disconnecting smiling	Little kisses	Yawning
Bastard	I'm a pirate	Don't smoke
Sarcastic smile	Censored	Unbelievable
Blinking eye	I'm sleepy	I'm drooling
Grimace with tongue out	Crying	Very disappointed
I wear glasses	I'm so sleepy	Licking lips
Formal Message	Clown	Laugh
Handshaking offered	Angel/ innocent	Sick
Handshaking accepted	I have a mustache	With angry
I didn't get it	New hair style	Very sad
I'm confused	Screaming	Big mouth
Heartbreak message	Faking speaking	I broke my glasses
Confidential Subject	I don't know how to answer	Speaking several things

Source: <http://saladeaulainterativa.pro.br/moodle/mod/book/print.php?id=2605>

The *emoticons* serve to represent some kind of gesture, emotion, affection or feeling that could not be written, they serve to facilitate communication and to minimize the time of writing, as well as the acronyms that are commonly used in chat, (IMHO to say 'in my humble opinion'). Acronyms are derived from English and were universalized over the internet and used in any language, very few are used in Portuguese. What you see a lot are abbreviations: for instance, U= you, 2 = too, 2DAY = Today, W= Where, BC, COS, CUZ = Because etc.

For Cruz (2006 p.11), Mercado (2005 p.54), the ideal time for a chat is 60 minutes, and can be extended for up to 90 minutes. A very long chat tends to the participants to avoid the subject initially proposed. The ideal, as a didactic strategy, would be groups of students between 4 and 6 participants so that they are not so dispersed.

MSN, unlike other chats, was one of the pioneers in incorporating interfaces that enable and enable greater interaction among users. In Table 1 we have several examples of interfaces with their advantages and disadvantages:



**Table 1** – Vantages and Advantages of the MSN Interfaces

INTERFACE	ADVANTEAGES	DISAVANTAGES
Folder Sharing	Allow file sharing of different formats.	It does not support heavy files, with extensions: EXE, BAT, COM
Audio conferencing	Enables audio interaction	Limit of users, noises.
Video conferencing	Audio and video interaction.	It does not allow more than two people.
Cell Phone	Send and receive messages on the mobile even when disconnected.	You may be charged a fee by your mobile carrier.
Remote Access	Allows remote access from one computer to another.	Vulnerability in allowing access.
<i>Online Game</i>	Allows users play in network	Limit users and few games are made available.
Sending of Music	Allows users to receive music between users.	Downloading can take time and vulnerability to <i>Trojan</i> (virus).
Sending of Video	Allows users to receive videos between users.	Downloading can take a <i>Trojan</i> and vulnerability.
<i>Off-line Messages</i>	It even allows you to disconnect other users from sending messages.	It is asynchronous. (more can activate the interface to receive on the mobile).
Phone Calls	Allows the contacts to make calls.	You may be charged a fee by your mobile carrier.
E-mail	Direct e-mail sending.	There are no disadvantages
Sending of de <i>wink</i> e <i>emoticons</i>	It expresses emotions and feelings.	Many do not understand <i>emoticons</i> .
Blog	Allows to use a blog.	There are no disadvantages

Source: the authors

The interaction in MSN can happen between two users or more, depending on the type of interface being used, but this is only possible if both users have compatible versions, otherwise you may have accessibility problems of some interface.

## Reporting experience of data collection using MSN

In one of the activities planned in the subject "Seminar of Online Research" offered in the 1<sup>st</sup> Semester of 2009, in the Masters in Brazilian Education of the Federal University of Alagoas, the teachers planned to conduct an online interview using the possibilities offered by ICT such as: MSN, blogs, chat, *twitter*, *skype*, among others.

The main objective of the teachers was to have their students try the interview using the MSN tool in the data collection in an attempt to identify the facilitator aspects as well as the difficulties.

It was indicated to the group the use of MSN that involved a teacher-researcher of the Master's Degree in Education in the ICT line for having published an article dealing with the "Young Entrepreneur Program in Alagoas (JEP), and two students of said Master Course. The interviewee's work described the experience of the JEP program, which uses Distance Education with high school students in public schools. The objective was to analyze the contributions of the program through Distance Education to the qualification and insertion of high school students in the labor market and to investigate the potential of the Distance Education in high school and the possibilities provided by the JEP to reduce digital exclusion. The research involved two schools located in the city of Maceió, having as research universe 76 students and 2 instructors.

To carry out our work, as an initial procedure, we sent a script with 17 questions so that the interviewee could know the items that would compose the interview, among them we can mention: the difficulties and advantages to carry out the research, how to manage the difficulties, if the questionnaires were applied in a timely manner, if all the students in the sample answered the questionnaire, if the results of the research proved the hypotheses, such as the collection, tabulation and analysis of the data in the research conducted by it. Then, the best date and time for the implementation of the activity.

The MSN interview took place on the weekend, starting at 4.30 p.m. and ending at 5.25 p.m., totaling 55 minutes; ideal time for a chat of this nature.

In Chart 2 we present part of the interview that deal with the difficulties, the application of the questionnaires and the participation of the respondents.



### Chart 2 - MSN interview status

**Researchers says:** 1. What are the difficulties to carry out the research? How did you manage these difficulties?  
**Research Subject says:** For the research I had a few difficulties. What helped me a lot was to get closer to the JEP program and the universe of research. I was inserted since I was an instructor of the program. The greatest difficulty was in the accomplishment of the interviews, to conciliate schedules.  
**Research Subject says:** of course there is always one little problem or another.  
**Researchers says:** How did you manage these difficulties?  
**Research Subject says:** mine were more personal than referring to research  
**Researchers says:** 2. Did the questionnaires take place in a timely manner? What were the obstacles?  
**Research Subject says:** Yes, but there was a delay due to problems that I had in health. An obstacle was to apply them personally and in person. But he already had a good basis for depositions by e-mail.  
**Researchers says:** 3. All students answered the questionnaires? What made it difficult?  
**Research Subject says:** None of those who were asked refused to answer. Being an instructor of the program and getting to know the other instructors facilitated everything.

Source: The authors.

In the previous chart, we identified as facilitator of the activity the fact that the researcher has an approximation with the program under study and be inserted as an instructor, but that the conciliation of the schedules was posed as the greatest difficulty. We emphasize that it is not a condition for the interview to have the friendship or not, with the target audience of the research, but it is, yes, one of the facilitating elements. It was asked if there was more than one type of questionnaire applied, the interviewee stated that she did use yes, and that she did participant observation. The chart 3 shows an excerpt of this chat.

### Chart 3 – Status of online interview conducted by MSN

**Researchers says:** 4. Has there been more than one type of questionnaire? One closed and one open?  
**Research Subject says:** Yes. There was. I preferred to work with a closed and open questionnaire. To verify if the data I already had with the observation were really reliable, increasing its validity. Also to respond, in a satisfactory and plausible way, to some questions that have arisen.  
**Research Subject says:** I also used interviews  
**Researchers say:** 5. Did the results prove your hypotheses?  
**Research Subject says:** In fact, a questionnaire model with open and closed questions was applied. As for the hypothesis, yes, it was confirmed. In addition to having the hypothesis confirmed, it was clear that programs such as the JEP can contribute to the improvement of basic education, using the Distance Education and adopting the teaching of entrepreneurship, providing access to several areas of knowledge.  
**Researchers says:** 6. With the application of the questionnaires was the possibility of understanding the reality?  
**Research Subject says:** The questionnaires were just one of the instruments used. What enabled me to understand reality, in fact, was to work with participant observation and with interviews, being inserted in the work as instructor (experiencing each difficulty and each conquest).

Source: the authors

In the data of Chart 3, the answers obtained when asked about the methodological procedures used by the interviewee regarding the tabulation and triangulation of the data that, according to Minayo (2005), confirm the hypothesis investigated or generate others.

The interviewee was asked how the data collected was tabulated. The questionnaires as well as the data were manually separated and the respondent took approximately five months to do this work. In addition to having done everything manually the interviewer still had personal problems that made it even more difficult to finalize her research.

At the end of the questions we had asked, we asked about her perception in the experience of participating in an online interview. The interviewee herself said "I found it interesting and I was not used to using MSN, but rather the email. We asked if it would recommend to other researchers the interview through MSN and obtained in response: "would recommend, because it is practical, because it facilitates access to the interviewee, even in different spaces."

Cruz (2006) corroborates with the researcher affirming that the online interview can be very useful when one has difficulties of access to a certain group of people, thus reducing expenses and time.

### **Advantages of online data collection using MSN**

One of the difficulties that can arise from the use of the MSN tool in the data collection is the fact that the researcher does not know how to use it; but this cannot be true because in choosing this tool the individual should demonstrate that he has the domain and, if he does not have it, he will first seek to learn the usability mechanisms.

Cruz (2006) presents problems in using chat:

- 1) Using the keyboard to communicate can become a heavy element;
- 2) People who have difficulty in writing feel inhibited;
- 3) By the speed of discussion, participation may not be productive;
- 4) It sometimes causes confusion because of the lack of clarity of the instructions that guide the conversation.

In this experience we did not identify difficulties, but according to Cruz (2006), this is due to the specificity of using MSN as a possibility in data collection in online research, which means, in the interview we do not have so much information noise that impairs the typing and attention of the participants, interviewed and interviewing.

### **Final considerations**

In research carried out in the Human Sciences and especially in the area of education, the research method must be carried out in all areas with great care and seriousness, especially when we use online interviews. We need to get reliable answers and be assured that the respondent is really the subject of the research; otherwise we will compromise the results.

ICT have given researchers several possibilities for data collection. This is a reality that we cannot leave aside especially who develops research in the area of online education.

The great majority of the researchers points out as a factor of difficulties of the interview the availability of time to move up to the interviewing and to carry out the activity. But the use of synchronous and asynchronous tools has helped lessen this difficulty and why not say, stop.

When we did our research using MSN we found a lot more facilitators than problems. This can be justified because in real time, it was possible to obtain the answers elaborated from a previous planning of what would be done. The interviewee's own availability was crucial to the performance of our work.

Finally, the article in question points to a deepening of other factors that may come with excessive use by researchers who use MSN for the purpose of data collection generating doubts to readers and academic institutions as to the reliability and veracity of those who is providing the collected data and also raising the possibilities of new studies regarding the use of MSN as a pedagogical tool in the classroom in distance courses.

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