Use of WhatsApp in Synchronous and Asynchronous Education in Students of the IV Cycle of Peruvian basic Education

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Abstract

The study proposed to delimit the use of WhatsApp and its relationship with synchronous and asynchronous education in students of the IV cycle of basic education. For this purpose, the correlational descriptive study method was used and 74 students were considered a sample. The result revealed the existence of a positive relationship expressed in Spearman's Rho = 0.315,
p = .000; where it was found that the use of WhatsApp is an interactive technological resource that supports students in synchronous and asynchronous education. That is, WhatsApp is a didactic technological resource that supports synchronous and asynchronous learning, allowing students to build meaningful knowledge in a dynamic, attractive, interactive and autonomous way.

**Keywords**

Use of WhatsApp, Synchronous and Asynchronous Education, Basic Education.

**Introduction**

Digital competence has become an essential need in communication and in the promotion of competencies in basic education. In this sense; the use of technological resources such as WhatsApp has become necessary; especially because it combines technology, knowledge, exercise and experience for student learning (Rodríguez and Cabell, 2021).

This fact came to show in teachers and students the need to use technology to meet the educational requirement at a distance; in the context of isolation, due to the presence of the covid 19 pandemic (Heads, 2021). The same that significantly affected basic education, bringing to light its various weaknesses and demanding a timely response from educational management in the various regional settings. (Revatta et al., 2021).

For what was exposed in basic education, the emergencies of the sector, the need for a more pertinent educational management, the vulnerability of teachers and students in relation to the management of classes; using technological resources. And in this sense, these facts required pertinent responses in the distance education scenario. The same that would be taught beyond the classrooms and face-to-face classes (Llerena and Narvaez, 2020). Above all, because the educational service should be guaranteed, as it was an indispensable right and because the academic year should not be lost.

Fact that led teachers and students to adapt to the new reality of distance learning and teaching in the context of the pandemic (Santos et al., 2020) marked by social isolation and care for life. In this scenario, it was evident that teachers and students resorted to a technological resource of a social nature and that it was incorporated into the applications of cell phones or mobile phones. That is, basic education teachers began to use WhatsApp due to the same requirement of need (Diaz, 2020). Although WhatsApp as an application was already used by graduate students to carry out collaborative work (Quispe et al., 2020), for the ease of generating mobile learning in students (Lagunes et al., 2017); for being a
means of communication outside the classroom (Guadamuz, 2020) and for serving as a resource for academic activities reducing student absenteeism; due to the impact of messages being sent to students (Grassi et al., 2020).

In this context, the research question arises to what extent is the use of WhatsApp related to synchronous and asynchronous education in students of the IV cycle of basic education? An attempt was made to collect information at this level, because basic education teachers began to implement the use of WhatsApp more frequently for synchronous and asynchronous education. (Offir et al., 2008). In short, an attempt was made to collect information on the reality of the students, because the application had become a means that facilitated communication between students and teachers. And because it also developed visual, auditory and kinesthetic learning styles in the students. (Renteria, 2021). So as a mobile technological application it promoted communication, learning, collaborative work, synchronous and asynchronous learning. Promoting meaningful learning despite being a social application incorporated into mobile phones. In this sense, in an indisputable way WhatsApp became a popular technological application used as an educational resource by teachers and students in basic education (Zulkanain et al., 2020). Requiring the academic community to understand the significance of the use of WhatsApp in the educational field from research.

**Methodology**

The study is framed under the non-experimental design cross-sectional and descriptive-correlational level. In addition, a questionnaire was used to collect the data. Thus, information was obtained regarding the synchronous and asynchronous method used in distance education; adopted by the learning-teaching system (Offir et al., 2008). 74 students located in the IV cycle of basic education participated. The average age of the students is 8 to 10 years old; who answered a questionnaire related to the use of WhatsApp in synchronous and asynchronous education. These responses served to describe the age group and gender, as well as the established dimensions. The structure of the questionnaire included the motivational factor, critical thinking, knowledge construction and communication medium. Because WhatsApp became a technological support resource for students and teachers. By enabling the educational process of students successfully (Cetinkaya, 2017), in a scenario as difficult and complicated as distance education due to the presence of the health crisis.

**Results**

The results found are described below.
Table 1 Distribution of the data in the level of preference of the use of WhatsApp

<table>
<thead>
<tr>
<th>Levels</th>
<th>Use of WhatsApp</th>
<th>Motivational Factor</th>
<th>Thought Critical</th>
<th>Knowledge construction</th>
<th>Media</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>Low</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>4.1</td>
<td>5</td>
</tr>
<tr>
<td>Half</td>
<td>43</td>
<td>58.1</td>
<td>48</td>
<td>64.9</td>
<td>fifty</td>
</tr>
<tr>
<td>High</td>
<td>31</td>
<td>41.9</td>
<td>2. 3</td>
<td>31.1</td>
<td>19</td>
</tr>
<tr>
<td>Total</td>
<td>74</td>
<td>100.0</td>
<td>74</td>
<td>100.0</td>
<td>74</td>
</tr>
</tbody>
</table>

Figure 1 Level of preference of the variable and its dimensions considered

According to the analysis carried out, it was observed that 58.1% place the use of WhatsApp at a medium level and 41.9% at a high level. The foregoing expresses that the use of the application by students is a constant trend. Regarding the motivational factor, WhatsApp was placed at a medium level with 64.9%, high at 31.1% and low at 4.1%.

It was evidenced that there is a motivational factor in the use of WhatsApp as an application. Regarding the development of critical thinking, the responses indicated a low level of 6.8%; medium of 67.6% and high of 25.7%. In relation to the construction of knowledge using WhatsApp, students indicate a low level of 10.8%; at an average level of 70.3% and a high level of 18.9%. Therefore, it can be seen that the use of WhatsApp in its synchronous and asynchronous function favored the construction of knowledge in the students. When asked about their use of WhatsApp as a means of communication, the students indicated a low level of 1.4%; medium of 66.2 and high of 32.4%. He evidenced that it is a means of communication used by students in their learning and teaching process.
In this sense, the results confirmed the support that students give to the use of WhatsApp in the process of their learning. Likewise, these evidences corroborated that this interactive messaging application; It is used as a means of exchange and assisted consultation to solve not only social but academic problems. And that contribute to the development of critical thinking in students. For this reason, they use it as a means of interactive communication. And also for perceiving it as a motivational factor. That is, both students and teachers allow them to access information immediately in the form of text, audio, video or informational record. Details that make them attractive for allowing synchronous and asynchronous communication.

In this sense, the own experience that students have in social networks was channeled by teachers with an academic purpose. And even though it was a social application; a didactic turn was given that contributed to the significant construction of new knowledge among students (Faggiano, 2009). And despite the fact that it was an interactive resource that provides sufficient autonomy; has made teachers consider it as an educational tool that helps in a fun way in promoting new information and producing their own knowledge (Somyürek, 2015). Therefore, WhatsApp stands as a stimulating resource for students insofar as it contributes to empowerment by new meaningful learning (Novak, 2002). Therefore, it is essential to observe the level of relationship between the use of WhatsApp and synchronous-asynchronous education.

Table 2 Relationship of use of WhatsApp with synchronous and asynchronous education

<table>
<thead>
<tr>
<th></th>
<th>Use of WhatsApp</th>
<th>Synchronous and asynchronous education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman's Rho</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of WhatsApp</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation coefficient</td>
<td>1,000</td>
<td>.315 **</td>
</tr>
<tr>
<td>Sig. (Bilateral)</td>
<td></td>
<td>.006</td>
</tr>
<tr>
<td>N</td>
<td>74</td>
<td>74</td>
</tr>
<tr>
<td>Synchronous and asynchronous education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation coefficient</td>
<td>.315 **</td>
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</tr>
<tr>
<td>Sig. (Bilateral)</td>
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<td>.</td>
</tr>
<tr>
<td>N</td>
<td>74</td>
<td>74</td>
</tr>
</tbody>
</table>

**. The correlation is significant at the 0.01 level (bilateral).

And, when making the relationship between the use of WhatsApp and synchronous-asynchronous education, it was found that there is a direct relationship expressed in Spearman's Rho = .315, p = .000. Relationship that expresses the link that exists between synchronous and asynchronous work with the use of the technological application known as WhatsApp. Technological resource that, in a distance education context and due to its accessibility, plays an important role as a work strategy in basic education.
In this sense, the significant relationship found confirmed that WhatsApp has become a synchronous and asynchronous teaching tool in distance education. This has been possible thanks to the fact that social networks have been incorporated into the world of education. Turning WhatsApp into a didactic resource used by educators and learners (Branon and Essex, 2001). So its use stimulates electronic learning and confirms the paradigm shift that is currently operating in education. But, above all, the growing trend of the shift from face-to-face education to distance education based on e-learning was ratified (Casas et al., 2021).

This means that it goes beyond physical classrooms, educational institutions and makes way for mobile learning; with which the majority of students are generating an increasingly diversified and significant construction of their learning; through the use of the mobile and generating satisfactory results (Amiti, 2020). Thus, basic education teachers have the challenge of turning WhatsApp into a didactic resource in pedagogical work, channeling its use not only as a means of social communication but also as an assistant for meaningful learning. That is to say, what it is about is to make the adaptive circumstances become generative for the new learnings of generation "z" and "Alpha"(Шиліна, 2020). Because these students learn and share information in an E-learning context. And they study in a context where the various technological resources will have a much wider and more everyday space.

Conclusions

So it is concluded; that the use of WhatsApp is an interactive technological resource that significantly supports synchronous and asynchronous education as there is a positive relationship; expressed in Spearman's Rho = 0.315, p = .000, for being a motivational factor, for allowing the development of critical thinking, for favoring the construction of knowledge and for being a means of communication.

In addition, the use of the WhatsApp application allows students to establish a connectivity link and, in real time, synchronously or asynchronously, they can exchange texts, audios, videos or information records; allowing them to build meaningful learning in relation to the various topics dealt with by teachers in basic education. And as an interactive resource, the WhasApp is an educational tool that significantly supports the construction of synchronous and asynchronous learning in a context. E-learning. Promoting meaningful learning in students in a dynamic, attractive, interactive and autonomous way.
References


http://www.webology.org


