Diagnosis of the annual external communication of Facebook publications of the University of the Americas Puebla

Mariel García-Hernández  
First author and corresponding author  
Conceptualization - data curation  
Research, methodology - writing  
Validation - supervision  
mariel.garciah@udem.edu  
University of Monterrey  
San Pedro Garza García, Nuevo Leon, Mexico  
ORCID: 0000-0003-3154-9728

Marco Antonio Marín Alvarez  
Second author  
Investigation  
marcomarin@azc.uam.mx  
Metropolitan Autonomous University-Azcapotzalco  
Azcapotzalco, Mexico City, Mexico  
ORCID: 0000-0001-6267-6063

Adriana Acero Gutiérrez  
Third author  
Investigation  
adag@azc.uam.mx  
Metropolitan Autonomous University-Azcapotzalco  
Azcapotzalco, Mexico City, Mexico  
ORCID: 0000-0003-4615-6812

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Abstract

In this study, a quantitative analysis of 786 publications produced over a year at the University of the Americas Puebla was carried out. The study is focused on the management of external communication and the strategies adopted in response to the unexpected emergence of SARS-CoV-2 (COVID-19). The variables under analysis covered the presence, response, generation, suggestion and typology of the publications. The results reveal that the circumstances triggered by the pandemic led to a significant increase in the number of followers of the educational institution, suggesting a greater need to establish effective communication with the educational community in times of crisis. The prevailing need to develop a comprehensive communication strategy is concluded, emphasizing the adaptation of specific visual elements for each audience segment, the strategic incorporation of hashtags and other essential components to maximize the impact and resonance of the publications. This study provides a basis for the planning and execution of more effective communication strategies in university environments, especially in crisis situations, with the objective of maintaining a strong and meaningful connection with the educational community and other key stakeholders.

Keywords: External communication, Facebook, publications, educational institution

Resumen

En este estudio se llevó a cabo un análisis cuantitativo de 786 publicaciones producidas a lo largo de un año en la Universidad de las Américas Puebla, centrándose en la gestión de la comunicación externa y las estrategias adoptadas en respuesta a la inesperada irrupción del SARS-CoV-2 (COVID-19). Las variables objeto de análisis abarcaron la presencia, respuesta, generación, sugerencia y tipología de las publicaciones. Los resultados revelan que las circunstancias desencadenadas por la pandemia condujeron a un aumento significativo en el número de seguidores de la institución educativa, sugiriendo una mayor necesidad de establecer una comunicación efectiva con la comunidad educativa en momentos de crisis. Se concluye la necesidad imperante de desarrollar una estrategia de comunicación integral, haciendo hincapié en la adaptación de elementos visuales específicos para cada segmento de la audiencia, la incorporación estratégica de hashtags y otros componentes esenciales para maximizar el impacto y la resonancia de las publicaciones. Este estudio proporciona una base para la planificación y ejecución de estrategias de comunicación más efectivas en entornos universitarios, especialmente en situaciones de crisis, con el objetivo de mantener una conexión sólida y significativa con la comunidad educativa y otros stakeholders clave.
The SARS-CoV-2 (COVID-19) pandemic drastically changed the way the world operates and the way in which social networks affected the daily lives of their users was no exception. These platforms became essential for a society that needed information about the phenomenon around and the consequent actions that influenced different aspects of life, such as academic and college.

The present research work analyzes the case study of the University of the Americas Puebla (UDLAP), where an intensification of its communication efforts on the Internet is observed through a content analysis of 786 publications. Social Facebook. In addition, this research article exhibits an evaluation of the content, the growth of its presence and the direction of communication that was handled in general.

Starting on December 31, 2019, the date on which the SARS-CoV-2 (COVID-19) outbreak in Wuhan, China, became known worldwide, global attention turned to this location, monitoring the progress and evolution of the virus and its contingency. Four years after this historic event, public institutions continue to report on the virus, disclosing its main variants, consequences and propagation data. A multitude of interactive data visualization platforms have been released, drawing a clear image of the presence of the virus. On February 28, 2020, the first confirmed case was established in Mexico, on March 11, the World Health Organization declared a pandemic and on March 18 the first death was recorded in Mexico (Saenz Guzman, 2021).

The contingency actions and compliance with the safety (or precautionary) measures established by the federal government led to the closure of some educational institutions in Mexico on March 17. From this moment on, the number of infections increased and unfortunately there were many human losses. Local governments, in coordination with the Federal Commission for the Protection against Sanitary Risks (Cofepris), reacted to the health emergency intuitively and the international communication on the subject caused uncertainty and paranoia among the population, in accordance with what the established health bureau, causing some disagreements towards what the federal government dictated.
Distancing prevented in-person communication and attention; The institutions of authority opted for virtuality and digital media, and just as “in the midst of this context, concern arises about the management of risk communication by the governments of Latin America” (Cardenas Ruiz and Pineda Rodriguez, 2022, p. 75), that also arose, on the part of educational institutions, the concern to stay connected to guide, alert and direct students, teachers, applicants and the population in general from the administrative standpoint. There was a latent need to maintain a connection and social networks were the appropriate means to reach multiple users with a single broadcast of the message.

External communication

External communication is defined, according to Esteban, Garcia, Narros, Olarte, Reinares and Saco (2008), as the transfer of information that is made to external audiences (stakeholders) and to those agents that are contained in their environment and social context, which are foreign to the institution that issues the information and that exercise is carried out massively, based on what Portillo (2012) proposes. External communication is an internal exercise that is managed and planned to be launched externally.

The objective of this information transmission process, according to what Loza (2018) points out, aims to “establish quality relationships between the institution and the mentioned stakeholders, seeking to strengthen a type of reputation and public image consistent with its activities and purposes” (p. 32). Burgos and Miranda (2021) point out that this objective also seeks to create, maintain and improve these relationships.

The external communication of institutions plays a fundamental role in the way they relate to the outside, and also creates a communication bridge with those who are outside of it, but who, in some ways, maintain a relationship with it. This resource has become an essential part of communication, and seeks to create trust, authority and, to a large extent, a response to their social responsibility as public institutions and even in the private sphere as brand values.

External communication of university educational institutions

The external communication that universities manage, according to Mujica (2020), is to build precisely this bridge that we mentioned in previous paragraphs, but something interesting that should be highlighted is that it seeks to create relationships with students, the media, and parents. On the other hand, Simancas Gonzalez and Garcia Lopez (2022) affirm that, through this practice, universities seek to transmit their brand, prioritizing the student as the audience. From this, we can point out that for universities, creating, nurturing and fostering a relationship with their students is an activity of prime concern that they look forward to strengthening.
Regarding the objective that is proposed in the context of university educational institutions, it is to establish relationships with students, as we had pointed out, but there is also an intention to disseminate the organization of events, transmit news that revolve around college and announce everything related to the internal academic activities of the organization, such as school movements, such as time frames for registrations, re-registrations or others. Based on this we can observe that universities seek to use this practice as a means of communication and to keep students informed, mainly, of what happens within it and what could be topics of interest to them.

In order to reach the desired audience and in the correct way, prudent communication instruments must be selected for this purpose. We understand these, according to Saló (2005), as those that the organization is going to implement to develop its communicative action, which, according to Li- baert (2005), will be selected based on three elements: 1) the message, that is, what what you want to communicate, 2) the objective, what you want to achieve, and 3) the audience, that is, those who receive the message.

Therefore, as Portillo (2012) states:

In this sense, the development of effective external communication must start from the strategic use of communication instruments which favor the recognition by external sectors of the university environment of the social efforts developed by these organizations and the possibility of being selected within the academic offer in your region. (p.1)

For this reason, social networks provide a different way to broadcast messages. Their level of assertiveness will be established according to their strategic implementation, which will depend on whether the market they are directed to is considered, as well as the possibilities of communication and interaction.

**Social networks as a means of communication**

Social networks are “a set of online computer tools that allow the management of contacts” (Aguilar and Perez, 2012, p. 3) and, consequently, the issuance of messages and the interaction with them, as well as with the administrators. of each social network.

There are various social networks with focuses mainly on work or social issues, and with more or less limited interaction proposals, but in Mexico, according to Statista (2022), the most used social network is WhatsApp, whose main limitation is that it is requires a cell phone number that can be registered as a business or personal to be able to generate interaction, the sending of information becomes more personal and its reach is not as broad as the second most used social network, which is Facebook, and offers a greater number of ways to interact.
Gurevich (2016) raises five points of analysis for Facebook:

1) The way in which Facebook, from a biographical model, organizes our time as a record of life, as a personal identity service,

2) The present as the governing time of the platform, which proposes a pedagogy of use linked to the recent, a streaming of “live” publications produced in unitary moments,

3) In a primarily visual network, [...]

4) We think of interactions between users (like, comment, share, tag, mention) as the way in which publications manage to endure in the ephemeral, the way in which the problem of time is articulated with it for the visibility of interaction,

5) We analyze the Home page as a “place” where user activity and the interface activity converge as a macro enunciator, and then, we rethink the platform-user relationship as a power relationship. (pp. 219-220)

These five points of analysis help to raise all the benefits that Facebook provides to administrators and users, since from this life record it is possible to recover the publications of the universities from March 17, 2021 to 2022.

The present tense defines the temperature of the message, understanding it as the way in which the context helps to propose the way of communicating, being sensitive to the environment; The fact that it is a mainly visual network means that there is constant design work and most likely there is a graphic code for the type of messages to be published; The interactions that are expected to provoke range from a simple like to the sharing of information, generating a power relationship, where the user has the power to transmit or share a message with a feeling of being aware of what is happening in day to day and by doing so it gives power to the sender because it sends important messages worth sharing.

For these reasons, the publications made by the University of the Americas Puebla during the established time have been analyzed to understand how it issues information and the interactions produced.

UDLAP is a private university located in the magical town of Cholula in the state of Puebla, Mexico. It is divided into four vice-rector’s offices (Academic Vice-rector’s Office, Administrative Vice-rector’s Office, Student Affairs Vice-rector’s Office, Finance and Institutional Development Vice-rector’s Office) and five directorates (Information Technology Directorate, Institutional Planning and Management Directorate, Cultural Diffusion Directorate, Security Directorate and Directorate of Medical
Services). In turn, the vice-chancellors and directorates are subdivided into various instances. Officially, the UDLAP manages different Facebook pages for the agencies, as shown below in Table 1:

Table 1. Facebook pages of the different UDLAP agencies

<table>
<thead>
<tr>
<th>UDLAP Instance</th>
<th>Facebook page name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rectory</td>
<td></td>
</tr>
<tr>
<td>Art Chapel</td>
<td>UDLAP Art Chapel</td>
</tr>
<tr>
<td><strong>Academic Vice-Rector’s Office</strong></td>
<td></td>
</tr>
<tr>
<td>Research and postgraduate studies</td>
<td>UDLAP Postgraduate Programs</td>
</tr>
<tr>
<td>Exchanges</td>
<td>UDLAP International</td>
</tr>
<tr>
<td>Linking with graduates</td>
<td>UDLAP Graduate Community</td>
</tr>
<tr>
<td><strong>Professional development</strong></td>
<td></td>
</tr>
<tr>
<td>UDLAP Professional Development Center</td>
<td></td>
</tr>
<tr>
<td><strong>School Services</strong></td>
<td></td>
</tr>
<tr>
<td>UDLAP School Services</td>
<td></td>
</tr>
<tr>
<td><strong>Football</strong></td>
<td></td>
</tr>
<tr>
<td>UDLAP Aztecs</td>
<td></td>
</tr>
<tr>
<td><strong>Vice President of Finance and Institutional Development</strong></td>
<td></td>
</tr>
<tr>
<td>Lottery</td>
<td>UDLAP Lottery</td>
</tr>
<tr>
<td><strong>UDLAP Consultants</strong></td>
<td></td>
</tr>
<tr>
<td>UDLAP Consultants</td>
<td></td>
</tr>
<tr>
<td><strong>General Directorate of Information Technologies</strong></td>
<td></td>
</tr>
<tr>
<td>Servicedesk</td>
<td>Servicedesk</td>
</tr>
<tr>
<td><strong>General Directorate of Planning and Institutional Management</strong></td>
<td></td>
</tr>
<tr>
<td>UDLAP TV</td>
<td>UDLAP TV</td>
</tr>
<tr>
<td><strong>College Connection</strong></td>
<td></td>
</tr>
<tr>
<td>UDLAP Connection</td>
<td></td>
</tr>
</tbody>
</table>

Source: self-made.

These Facebook pages are used to provide relative and specific information to what each instance concerns, without covering information of interest to its audience in general, so we can say that the Facebook
page that is most relevant to your relationship with the external public is the one called Universidad de las Américas Puebla, which serves as the university's main Facebook page.

**Methodology**

For the purposes of this study, a period spanning from October 17, 2020 to October 17, 2021 was analyzed, such period includes a before and after of the SARS-CoV-2 (COVID-19) pandemic in Mexico.

The variables that were analyzed were those proposed by Marin-Gutierrez, I., & Gonzalez, K. O. (2018) to understand the effectiveness and activity of the brands: presence, response, generation, suggestion and the type of publications made in the social network. These variables are described by the authors as follows:

1. **Presence**: Refers to the number of fans or followers on the brand's social network page and the number of publications on said page.

2. **Answer**: This variable addresses the number of like reactions or some similar gestures of users in the publications of the page or social network profile that is being analyzed.

3. **Generation**: Generation is the number of comments that have been made on the publications found on the social network page.

4. **Tip**: This variable considers the number of times a publication was shared or recommended.

5. **Type of publications**: It tells us about the nature of the file that was shared on the brand's page or social network profile, these can be images, links or videos.

Regarding this variable, we can observe that it can also be classified from concepts that refer to the type of information that these publications represent, in the case of universities: events, academic life, courses, internal news, etc.

Something that we believe is relevant to this research work is the way in which some variables relate to each other. Within the proposed proposal, the interaction variable is considered, which is obtained from the association of the variables presence, response, generation and suggestion. On the other hand, Gutiérrez et al. (2018), analyzing Castello (2012), Oviedo-Garcia, Munoz-Exposito, Castellanos-Verdugo and Sancho-Mejias (2014) and Buhalis and Mamalakis (2015), propose the fusion of the response and generation variables to know what it would be engagement. The formula to know this attribute is the following:
engagement = ni (nr + nc + nco)np

ni= number of interactions in the period analyzed.¹

nr= number of reactions in the publications of the period analyzed.

nc= number of comments on the publications of the period analyzed.

nco= number of times in which the publications of the analyzed period were shared.

np= number of total publications of the period analyzed.

By knowing the result derived from the formula presented, we could obtain a number that serves as a comparison parameter between two or more pages or profiles of social networks, in such a way that we can have an overview of which of these platforms is being more effective for the company or brand.

Another perspective that was analyzed in this research work was how the communication strategy of each of the universities evolved in relation to the context before and during the pandemic.

Results  Quantitative analysis

For the quantitative analysis, a count of the response variables, number of comments, generation, suggestion, type of publications with respect to the format and with respect to the content in the period analyzed (count carried out on January 22, 2022), was carried out. found in table 2.

¹ When we talk about interaction we refer to the sum of the total reactions obtained, the number of comments and the number of times the content was shared.
Table 2. Analysis of the variables that make up engagement

<table>
<thead>
<tr>
<th>VARIABLE: PRESENCE (NP)</th>
<th>UDLAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of analyzed publications</td>
<td>786</td>
</tr>
<tr>
<td>Number of followers</td>
<td>19,367</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VARIABLE: RESPONSE (NR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Like</td>
</tr>
<tr>
<td>Love</td>
</tr>
<tr>
<td>Hug</td>
</tr>
<tr>
<td>Sad</td>
</tr>
<tr>
<td>Hahaha</td>
</tr>
<tr>
<td>Wow</td>
</tr>
<tr>
<td>Angry</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VARIABLE: NUMBER OF COMMENTS (NC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total comments</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VARIABLE: GENERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive comments</td>
</tr>
<tr>
<td>Negative comments</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VARIABLE: SUGGESTION (NC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total times the content has been shared</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VARIABLE: PUBLICATION TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of publications (format)</td>
</tr>
<tr>
<td>Posts with video</td>
</tr>
<tr>
<td>Posts with image</td>
</tr>
<tr>
<td>Number of images published</td>
</tr>
<tr>
<td>Links</td>
</tr>
</tbody>
</table>
Continuing with the formula proposed in previous sections, the engagement of the Universidad de las Americas Puebla from October 17, 2020 to October 17, 2021 turns out to be 41,566,344.31. It can be seen that the most used form in terms of reactions is likes, that comments imply only an eighth of the reaction of likes, which is undoubtedly intuitive for the followers of this university social network. Sometimes it is simpler to share a post than to say something about it, since the numbers indicate that suggestions are made three times more often than something is commented on. It is also worth mentioning that more static images are used than video. In this regard, it stands out that in this period the publications revolved around the university itself, followed in numeral by the events carried out by the university and, thirdly, by anniversaries.

**Qualitative analysis**

For the qualitative analysis, an evaluation of what has happened with the publications will be presented with respect to the response variable with the greatest number of reactions, the generation variable that will observe the positive and negative comments and finally the suggestion variable that corresponds to the times shared.

The variables that were analyzed are grouped into seven categories: response, generation, presence, suggestion, type of publication, classification of publication according to content, and guidelines regarding the composition of the publication, which will be presented below.

**Response variable**

For the response variable, the three publications with the most likes, I love it, it saddens me, it amuses me, it surprises me and it angers me were considered, which will be presented below.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching</td>
<td>88</td>
</tr>
<tr>
<td>Events</td>
<td>196</td>
</tr>
<tr>
<td>Courses</td>
<td>81</td>
</tr>
<tr>
<td>Same university</td>
<td>732</td>
</tr>
<tr>
<td>Ephemeris</td>
<td>133</td>
</tr>
<tr>
<td>Contingency</td>
<td></td>
</tr>
<tr>
<td><strong>ENGAGEMENT</strong></td>
<td>41 566 344.31</td>
</tr>
</tbody>
</table>

Source: self-made.
Regarding the highest number of likes, the one that obtained 3.1k was published on June 29, 2021, with the text: “The University of the Americas Puebla, regarding the events of this day on its campus, reports:”; The second publication obtained 2.6k and corresponds to the one made on June 19, 2021, with the text: “The #UDLAP invites you to the webinar for the presentation of the book ‘Natural lighting through windows: Window criteria for climates in Mexico’ . Register your attendance at www.udlap.mx/webinarseditorial”; and the third publication with 2.3k refers to “The demonstration in the vicinity of the University demonstrates the strength of the udlap community and its interest in returning to campus. #YoSoyUDLAP” and was published on August 30, 2021 with 2.3k
Perhaps something that can produce a bias in the UDLAP publications is the internal situation that was experienced regarding the takeover of the facilities by an armed group, since two of the publications with the greatest response refer to this event, while that the third publication is more academic and deals with the presentation of a book.

For the highest number of loves (with 2k), UDLAP published the following on May 10, 2021: “After 415 days closed, the time has come to open our doors. Today we welcome our community in this #SafeReturnToCampus”; The second note (with 1.3k) was published on July 3, 2021, with the text: “UDLAP means institutional prestige. We are the best private university in Mexico and one of the most important in Latin America, thanks to our accredited academic programs, excellent professors, international experience and successful graduates #YoSoyUDLAP #OrgulloUDLAP”, where the sense of belonging is emphasized, and thirdly place (with 1.2k) is the same publication that has the third place with the most likes. All three are focused on love and actions for the university.

Figure 2. The three most liked posts from UDLAP.
Regarding the I care, the UDLAP obtained 159 on July 12, 2021 with a statement whose text says: “To public opinion and the UDLAP community”; 153 with a text published on May 5, 2021, which said: “To the university community, Regarding the return of in-person activities, we inform the following: https://bit.ly/3upMDvV”; and with 136 in the following text published on August 20, 2021: “To the university community.” It is evident that the community that follows the university’s Facebook cares a lot about what happens there.

Figure 3. The three posts I care most about from UDLAP.
Among the UDLAP publications that sadden me the most, one with 527 stands out, published on October 7, 2021, which mentions: “To our players, university community and Azteca fans”, visually accompanied by a statement about the withdrawal of the team from American football of the 2021 ONEFA season. There is also a publication with 404 it saddens me, it is a note without an image that was published on July 2, 2021 and said: “Respect for our house of studies is our greatest objective, we need to recover the house of the entire # UDLAP Community #YoSoyUDLAP”; and another with 383, published on June 29, 2021, with the text: “The university community, regarding the Summer II period, is informed of the following”, which is supported by the image that says “activities are suspended in person to safeguard the student and academic community during the summer period.”

The publications with the most fun from UDLAP are the following: one with 84, published on February 26, 2021, which indicates: “To the university community, regarding the return of in-person activities, we inform the following”, this links to the image that refers to postponing the return to school. There is also a publication with 66, which was made on September 24, 2021, with the text: “For UDLAP, the most important thing is the well-being of our community 🧡💚 Stay informed through institutional communication channels”; and another with 56, the publication of April 7, 2021, with the text: “To the university community,
Regarding the return of in-person activities, we inform the following”, which links to the image that mentions the decision to conclude the online spring term.

**Figure 5. The three posts that amuse me the most from UDLAP.**
*Source: UDLAP Facebook page, February 26, 2021, September 24, 2021 and April 7, 2021.*

Regarding wows me, UDLAP scored 511, with the May 10 post having garnered the highest number of likes; 162 with the publication of October 22, 2020, with the text: “We reiterate our gratitude for the work carried out by the National Guard in all its instances, especially the actions carried out by the National Cyber Incident Response Center”; and 98 with the publication of June 29, 2021, with the text: “The University of the Americas Puebla, about the events of this day on its campus, reports”, which links to a statement regarding the armed takeover of the university.
The UDLAP has 155 angry me in the publication of July 3, 2021, with the text: “Students have organized themselves in different peaceful protest acts to demand that the state government liberate the campus with the hashtags: #YoSoyUDLAP, #CampusLibre and #supportmydirector”; 148 in the publication of August 23, 2021, which says: “To the university community” and introduces a statement stating that classes will continue online, and the possible dates for return; and 108 in a later publication, dated September 24, 2021, but related to the previous one, with the text: “For UDLAP, the most important thing is the well-being of our community 🧡❤️. Stay informed through institutional communication channels.”
For the generation variable, the highest frequency of favorable comments and negative comments were taken into account, such that the publication of June 29, 2021 obtained 872 favorable comments as opposed to 49 negative comments and corresponds to one of the three publications with it amazes me more.
Some of the comments favorable or in support of the publication are the following:

- **Total and absolute support to the UDLAP community**

- **Full support to UDLAP 💚🧡💚钍**

- **We demand respect and freedom to Universities and Public and Private schools. #apoyoudlap**

- **All our support to UDLAP 💚🧡UDLAP #Libre**

- **#apoyocomunidadudlap My support for UDLAP, the students and the educational community.**

- **UDLAP we are together! If we have to gather signatures, post, speak, demand, label the government. I am willing as an ex-UDLAP to raise my voice in favor of education and to defend SO many Udlap students and community that are currently being affected.**

While some of the negative comments are as follows:

- **I would like that just as they arrived at UDLAP today, they would arrive where the criminals are (assailants, rapists, kidnappers...), but we already know what the authorities in Puebla are missing. I am a graduate of BUAP and I sincerely support Udlap in this difficult time.**
This type of circumstances diminishes the prestige of the University and, above all, raises doubt about the values with which they educate their students. I hope they fix their situation at home and don’t expose their issues in the open air.

It cannot believe how the Government attacks Private educational facilities in this way, many of the best professionals in Mexico graduate from UDLAP, they are attacking the future of Mexico.

One of the posts garnered 200 negative comments with 89 favorable comments and was published on July 1, 2021.

Some of the negative comments are as follows:

These circumstances had never happened before. It comes to mind to see how the rector Enrique Cardenas got out of a Cholula/4 😃. Caminos truck. We all thought a lot about them!
Nora arrived, and soon the others... and with them a host of legal problems. They were so cool to see the original shield at the main entrance. It’s so cool to see the flag of Mexico and the Uni flag in the Plaza de las Banderas.

By questioning their organizational integrity, he also questioned whether to continue supporting them in the raffles that help student scholarships. Because I wonder if my effort truly reaches its purpose. I am not a former member of the university but I always like to support those causes that are now unfortunately called into question with neighborhood disputes. Not typical of an institution of that magnitude.

But what happens when 3 members of that legally constituted board of which they speak have arrest warrants for three months now? What does "#supportUDLAP" really mean in a case like this? Is supporting the UDLAP supporting a board that has arrest warrants precisely for having embezzled the Mary Street Jenkins Foundation (from which the university, and other schools, also drinks), taking 720 million dollars belonging to said Foundation to Barbados? ? From my perspective, no. That is not supporting the UDLAP. Getting advice to see if the University itself can legally form a new board of trustees, and looking for a new rector (if he is involved in the embezzlement, as it seems), is what should be done to really support the UDLAP. And yes, also #yosoyudlap

But who is doing these things, how is it possible that in a democratic country the government comes and imposes an owner on a third party company? What a shady thing

Some positive comments are as follows:

- Total support for the UDLAP
- I hope things are clarified soon and in a positive way for our beloved institution. #exaUDLAP #todosomosUdlap #yosoyudlap
- 🧡💚excellent posture 💪

It is worth mentioning that when they are favorable messages, followers generally use hashtags or heart-shaped emoticons with the colors that identify the university.

_Suggestion variable_

For the suggestion variable, the number of times a publication was shared is taken into account, which in this case corresponds to 3.4k, which reaffirms the importance of the publication of June 29, 2021,
which is also one of the three with more likes, it amazes me, it saddens me and with more favorable comments.

Table 2 shows the total number of reactions obtained in the publications, subcategorized; Now, in Table 3, the three maximum values of each of them are presented, in addition to the largest data of the generation variable and the suggestion variable to identify where there are coincidences.
It was found that the publication of June 29, 2021, which explains the situation of the university, coincides in five analyzed aspects, while the publication of August 30, 2021, referring to the free campus, coincides with the sub-variables of me I like it and I love it, and the one on September 24, 2021, where there is talk of continuing with online classes, coincides with what amuses me and makes me angry.

The number of publications is not necessarily directly proportional to the number of likes nor is it correlational to the number of followers of an account, everything is variable, and although a trend can be defined, one cannot be completely certain of what will happen, as for example, when the analysis of UDLAP’s Facebook was carried out it had 19,367 followers and five months later it has 271,725 followers.

Sometimes it is evident that followers observe without reacting or sharing; However, when a political situation arises, as occurred at UDLAP, it generates greater interest than usual on the part of its followers, among whom could include students, graduates or people who are part of the UDLAP community and seek to support the university, a situation that is evidenced by the publications related to official communications for UDLAP’s own activities that obtained great importance, with the greatest frequency in reactions, favorable comments and sharing actions, which marks a great importance based on the engagement established throughout this document in the management of social networks for educational institutions.

Of the 21 publications of the variables analyzed, only four made reference to topics of sense of belonging such as I am UDLAP, We continue with online classes and the presentation of the book Natural lighting through the windows, the rest were extremely important to make clarifications and show what was happening at the university, as well as to maintain communication with the followers.

Table 3. Maximum values of each variable

<table>
<thead>
<tr>
<th>Variable response</th>
<th>Like</th>
<th>Love</th>
<th>Hug</th>
<th>Sad</th>
<th>Hahaha</th>
<th>Wow</th>
<th>Angry</th>
</tr>
</thead>
<tbody>
<tr>
<td>1o.</td>
<td>3.1k</td>
<td>2k</td>
<td>159</td>
<td>527</td>
<td>84</td>
<td>511</td>
<td>155</td>
</tr>
<tr>
<td>2o.</td>
<td>2.6k</td>
<td>1.3k</td>
<td>153</td>
<td>404</td>
<td>66</td>
<td>164</td>
<td>108</td>
</tr>
<tr>
<td>3o.</td>
<td>2.3k</td>
<td>1.2k</td>
<td>136</td>
<td>383</td>
<td>56</td>
<td>98</td>
<td>148</td>
</tr>
<tr>
<td>Variable generation</td>
<td>Positive comments</td>
<td>Negative commentarios</td>
<td>Variable suggestion (Number of times shared)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>872</td>
<td>200</td>
<td>3.4k</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: self-made

Conclusions

The number of publications is not necessarily directly proportional to the number of likes nor is it correlational to the number of followers of an account, everything is variable, and although a trend can be defined, one cannot be completely certain of what will happen, as for example, when the analysis of UDLAP’s Facebook was carried out it had 19,367 and five months later it has 271,725 followers.

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It is common for the same publication to have the highest frequency of interactions, as occurred in the period analyzed, in which the publication of June 21, 2021, where a statement is issued to explain the political situation of the university, obtained first place with the highest number of likes, the third place with the highest number of saddens me, the third place with the highest number of amazes me, the highest number of favorable comments and the highest number of shares.

Furthermore, the reactions of followers can be polarized, such is the case of the publication of September 24, 2021, where reference is made to the continuation of online classes, which obtained second place for the most fun and the third with the most annoy me.

Definitely the main reactions, according to the frequency presented, are in order from greatest to least quantity: I like it with up to 3.1k, I love it with up to 1.3k, it saddens me with up to 527, it amazes me with up to 511, I care with 159, I get angry at 155 and amused at 84, which was the least used.

With respect to the generation variable, until now there have always been more favorable comments than negative ones, which speaks of a community in favor of the university, that supports and has a marked sense of belonging. ☕️

References


Statista. (2022). Redes sociales con el mayor porcentaje de usuarios en enero 2022. Recovered on May 5th, 2022 from https://es.statista.com/estadisticas/1035031/mexico-porcentaje-de-usuarios-por-red-social/?#:~:text=Een%20enero%20de%202022%20Facebook%2020,revel%C3%B3,Messenger%2C%20con%20un%2080%20porcentaje

About the authors

Mariel Garcia-Hernandez

Doctor in Information Design and Visualization from the Universidad Autonoma Metropolitana, full-time professor at the University of Monterrey for the Department of Art and Design and member of the National System of Researchers.

Marco Antonio Marin Alvarez

Doctor in Design with a specialty in New Technologies, master in Administration with a specialty in Strategic Marketing and a graduate in Graphic Communication Design. Since 1989 he has been a full-time professor-researcher at the Universidad Autonoma Metropolitana-Azcapotzalco. He is also a columnist for various national and international magazines belonging to the areas of design, education and art.

Adriana Acero Gutierrez

Master in Editorial Design from the Universidad Anahuac-Norte and graduate in Graphic Communication Design from the Universidad Autonoma Metropolitana-Azcapotzalco. She is a professor-researcher at the Universidad Autonoma Metropolitana-Azcapotzalco, where she was also the editor of the magazine Tecnologia & Diseño, of the Department of Processes and Production Techniques of the Division of Sciences and Arts for Design and advisor of editorial design in the divisional magazine Tiempo de Diseño, from the same institution. She is currently a member of the Scientific Committee and organizer of the Congress “Advances of women in the sciences, humanities and all disciplines”, of the Universidad Autonoma Metropolitana-Azcapotzalco.