

Creating Persuasive Infographics for Advocacy Groups in an e-SL Language Course

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Abstract: Higher educational institutions adapt to the challenges of the pandemic through e-service learning courses that are equipped with an integration of methodologies and communication technologies. Designed as student-centered personal learning environments (PLEs), e-service learning language courses helped students to be self-directed, creative and collaborative in accomplishing learning tasks revolving around online learning and community service. In the virtual environment of e-service-learning courses, students immersed themselves in planning and creating projects that are embedded in advocacy communication campaigns such as infographics for advocacy groups. This qualitative investigation aimed to examine a small corpus of persuasive infographics created by Liberal Arts students of an e – service-learning language course, using linguistic genre analysis and the three-part Krum’s socio-semiotic perspective. Data from the reflection essays of the students were also analyzed using the thematic approach. The analysis revealed that teaching students how to create infographics in an ICT-supported online course develop qualities and skills of effective communicators and service-driven citizens. Paivio’s Dual Coding Theory and Constructivist Learning Theory underlie this study. The analyses of the infographics reveal that as narratives, the five infographics direct a viewer’s attention to the advocacies of the partner organizations in five different ways. The key message in the narrative structure was comprehensible through data visualization. In the conclusion, which is the third part of the narrative structure, explicitly stated calls-to-action are seen among the four infographics while the infographic for education implicitly invites a viewer to participate in the advocacy project. The communicative function was determined through Monroe’s motivated sequence. The communicative salience of the infographics is given prominence in the Need Step and Solution Step with the use of statistics, texts, and data visualizations.

Key Words: persuasive infographic; soft skills; personal learning environment; service-learning; e-service learning; self-directed learning

1. INTRODUCTION

The pandemic has abruptly changed instructional delivery in all educational institutions in economically depressed and rich economies alike. Schools implemented ways to adapt to the challenges that the pandemic brought. Electronic learning or distance learning has become a staple of students and teachers. At the height of the pandemic, schools used fully remote teaching solutions for instruction that would otherwise be delivered face-to-face. According to Hodges et al. (2020), the primary objective of this mode of learning is not to re-create a robust

educational ecosystem but rather to provide temporary access to instruction and instructional support in a manner that is quick to set up and is reliably available during an emergency or crisis. Relevant literature argued that online teaching may overlook the teaching of soft skills which include collaboration, interaction, leadership, etc. “The increasing emphasis on the use of ICTs in university education and a gradual trend towards blended-learning and virtual environments have prevented the development of these competencies as they are thought to require face-to-face interaction amongst

classmates and between students and teachers” (Garcia et al., 2016, p. 1). According to Riesco Gonzalez (2008), universities tend to focus on the development of formal competencies, whereas employers give primary value to soft skills which are related to instrumental, interpersonal, and systemic skills. At De La Salle University, Purposive Communication is one of its e-SL subjects that rely on information and communication technologies, such as Canvas, to enable students to experience the service or learning component completely online. E - service-learning subjects emphasize three features which are community service, reflection, and learning strategies that are linked to the academic discipline. This online course aims to develop their soft skills. Specifically, it seeks to mold students to become effective and ethical communicators who can appropriately use English in various forms with different audiences and for different purposes. It also develops their ability to use technology for civic participation in support of the UN’s Sustainable Development Goals (SDG). Furthermore, it aims to provide a virtual environment that fosters the goals and principles of personal learning environments (PLEs). PLEs primarily aim to develop self-directed learners. Creating infographics for advocacy groups is one of the learning objectives of the course. Infographic is a combination of the words *information* and *graphic*. Simply, it is a visual depiction of any kind of information or data. This investigation sought to prove that developing the soft skills of students in a virtual environment is possible and, in the process, enhances their communication skills and creativity in creating persuasive infographics. There has been a trend in monitoring higher education students’ learning and assessment processes using e-portfolios in virtual environments (VEs) (Barragan, 2005; Bernal, Arráiz, Sabirón, Bueno, Cortés and Escudero, 2006; y Guasch, Guárdia and Barberá, 2009; Barragán, García, Buzón, Rebollo and Vega, 2009; Barberá, Gewerc and Rodríguez , 2009; Cabero, López and Llorente, 2012; Aguaded, López and Jaén, 2013; Valverde Berrocoso and Ciudad Gómez, 2014). However, the teaching of soft skills in online e – service-learning university language courses that give importance to the creation of infographics has been dearth. This study attempted at providing answers to the following questions: (1) How did the infographics help the students realize the service component of the e – service-learning course? (2) How did the persuasive infographics created in an e – service-learning course promote the advocacies of the partner organizations in terms of layout, narrative structure, and communicative purpose?

2. METHODOLOGY

2.1 Research Design

This study is qualitative in nature. It analyzed students’ reflection essays using in vivo. Through the lens of linguistic genre analysis (Piotti and Murphy, 2019), the students’ infographics were analyzed.

2.2 Participants

Twenty-six DLSU Liberal Arts students enrolled in Purposive Communication (GEPCOMM) participated in the study. They individually wrote reflection essays and were grouped into five (5) for the infographics.

2.3 Corpus of the Study

Data came from a corpus consisting of five persuasive infographics created by groups of Liberal Arts students. The infographics represent the evidence for the learning outcome pertaining to the advocacy awareness campaign of the syllabus. Furthermore, local problems related to the UN Sustainable Development Goals (SDGs) are the topics of the collaborative projects of the students. Through the infographics, the students participated in promoting the advocacies of partner organizations to the public. Reflections of the students were the other sources of data. Figure 1 is page 1 of 2 of one of the infographics examined.

2.4 Theoretical Framework

The dual coding theory of Paivio (1990) lends support to this study. It posits that learners can make sense of information whether in words or pictures through pictorial and verbal memory (Clark and Paivio, 1991). By extension, learners as meaning-makers, learn well from instruction that uses visual and verbal materials. Another theory that underlies this investigation is the constructivist learning theory. The indicators of successful implementation of the theory are classroom practices that utilize learner-centered activities that stimulate the creative and constructive competencies of learners. Instruction, whether virtual or on-site, should involve the learners’ experience, physical and social context, and environment. These are useful factors that are considered by effective teachers in lesson planning, materials development, and assessment as students experience the processes of co-creating knowledge and sharpening skills with their peers and the teacher as a facilitator of learning.



Figure 1. Persuasive Infographic on SDG #6 (for the partner organization, SLMI)

2.5 Data Gathering Procedure and Methods of Analyses

The end-of-term reflections were written in week 13 while the infographics were taught in week 11. The students planned, researched and designed their infographics in week 12, then presented them online to the partner organizations in week 13. To answer research question 1, the reflection essays were read and analyzed using Open Coding and Axial Coding. In Vivo Codes or essential words and phrases were also derived from the reflections, tabulated and analyzed. Thematic coding was utilized in the recording, tabulating and analysis of the data. The Expected Lasallian Graduate Attributes (ELGAs) encompass the soft skills. These attributes serve as the themes to which the students' responses were related. Codifying involved two stages: 1st stage or open – coding, and 2nd

stage or axial coding (Lincoln and Guba, 1985 as cited in Saldana, 2016). In the open coding stage, data were scrutinized to note the themes and commonalities that were evident (Gallicano, 2013). In vivo coding was also used in the open coding stage where students' verbatim words or direct quotations were examined. In axial coding or the second sweep stage, the relationships among the themes in the first stage were identified and expressed in sentences. The themes that emerged out of the in vivo codes are shown in the third column. On the other hand, linguistic genre analysis was the lens used to examine the data of the infographics and the three-part Krum's socio-semiotic perspective or Krum's genre analysis. Central to the model of analysis is the narrative structure which consists of a three-part sequential order, namely: Introduction, Key Message and Conclusion. The communicative purpose of the infographics was scrutinized using the framework of Alan Monroe known as the Motivated Sequence. The framework served as a tool to determine how persuasive the infographics are.

3. RESULTS AND DISCUSSION

This section presents the research problems and their answers are discussed.

(1) How did the infographics help the students realize the service component of the e – service-learning course? The table that follows shows the summary of themes extracted from the open codes.

As shown in the table below, effective communicator and service-driven citizen are the Expected Lasallian Graduate Attributes (ELGAs) in the course syllabus that encompass the traits and abilities that make a good student. These qualities or soft skills pertain to communication, empathy, and interpersonal skills. The students' effective communication skills play a vital role in spreading awareness about the advocacies that their infographics promote. The relative theme of this component is that the subject allowed the students to construct and apply knowledge, concepts and theories using clear and appropriate language. The analysis of the reflections also revealed that collaboration, interpersonal skills, engagement, creativity and heightened motivation are recurrent concepts and qualities that are linked to service-driven citizen. It may be inferred therefore that the e – service-learning course offered educational technology, online tools like Canvas and applications such as Canva that engaged the students well. "This way of engaging students helps them to achieve

learning outcomes structured around communication, teamwork, media literacy and language skills” (Mokwa-Tarnowska, 2020, p.1).

Summary of Themes Derived in the Open Codes

COMPONENT	OPEN CODING	AXIAL CODING
Effective Communicator	It really helped me to communicate well in my writing and also with my classmates. Effective communication is displayed within the group, especially in this activity that involved more than one output. This course helped us the most when we were studying other courses. Whether it was infographics or other academic writing, it taught us how to express our ideas clearly.	The subject allowed the students to construct and apply knowledge, concepts and theories using clear and appropriate language.
Service-Driven Citizen	Teamwork: Interpersonal skills: Collaborated and worked with my groupmates: Taught us how to work in groups and be accountable for the tasks that were assigned to us. I learned to respect and value others' opinions and accept that I may not always be right. Creativity, Consistency, and Competency. Doing the infographic enhanced our creativity Yes, I was researching for a grade but I was also fueled by the motivation to help create an infographic Concretely apply our learnings and propose our project to an organization Creating our advocacy plan also helped us discover ourselves in terms of being of service to others, especially those in need in our communities. This helped us change our perspectives and view their struggles as our own and make sure that we understand it. Producing the infographic made me feel empowered as a citizen. I felt like a doer: like I am making a worthwhile impact. Even through small acts like sharing information and creating publicity materials to raise awareness, I was already able to serve and help our community. The infographic is as good an example as any for both creativity and citizenry. We made that infographic in accordance with our emotions. To the realizations of our research.	The students' collaboration, interpersonal skills, engagement, creativity, and heightened motivation during the conceptualization and creation of infographics helped the students transcend the digital space of virtual environment. The infographic project enabled the students to create purposeful products that address the needs of their intended audience. In the course, the students felt empowered as service-driven citizens who regard collaborative processes as a key to the accomplishment of team goals.

(2) How did the persuasive infographics created in an e – service-learning course promote the advocacies of the partner organizations in terms of layout, narrative structure, and communicative purpose? Table 2 below shows the results of the analyses of the infographics.

Table 2.
Narrative Structure and Communicative Function

Narrative Structure			Communicative Function
Introduction	Key Message	Conclusion	
1 Malapropism (“rates” instead of “rest”) is attention-getting as it can entice a viewer to read on.	Data visualization (statistics, big font size of key ideas, i.e., lead causes of deaths, etc.; self-care tips, Logo and mission of SLMI on page 1 is	Indirectly stated call-to-action: the hashtag is catchy and contains the partner organization's name which implies that	The discourse about the seriousness of morbidity and mortality in the Philippines is magnified by a good contrast of green (for the text) and white (background), typography

	complemented on page 2 by the hashtag and the UN's SDG#3 Logo: This means that SLMI helps on the ground in realizing the goals of UN's SDG#3.)	the meaning-makers are inviting the readers to join SLMI's mission as a member or donor.	combine in moving forward the narrative.
2 Youth unemployment, the topic, is superimposed on what appears to be an image of a desktop computer.	The hashtag: #youthful opportunities. To help the unemployed youth, solutions such as workshops (offered by private and public institutions and organizations) and job fairs.	The authors are encouraging the stakeholders (youth) to solve their problem by taking the opportunities that are accessible.	There are few pictures but plenty of texts. The meaning-makers acknowledged their partnership with SLMI by placing the logo and text about SLMI on page 1. Big font size of the solutions to the problem.
3 Page 1 presents the topic with an attention-getting image of a human hand: half-open fist with forefinger pointing downward.	The importance of revamping drug rehab centers aligns with the weight of substance abuse in the country (as the statistics tell). The data visualization magnifies it.	Page 2 presents the solutions, namely: invitation to the readers to act (the different ways to help are given). Joining SLMI as a solution is emphasized.	Layout, typography, pictorials, data visualization combine leading to a clear understanding of the message and serve powerful persuasive tools.
4 Hashtag: Overcoming barriers: Leading Beyond Gender Graphics (color) represents the female gender for which the infographic was created.	Solutions are offered but the invitation to be part of FLP is highlighted.	“Get involved” is a direct call-to-action to the readers.	All the resources (layout, pictorials/graphics, data visualization and text) integrate to convey the message convincingly.
5 #EDUNATION is the hashtag for the topic quality education for Filipino youth. Written in big font and superimposed on images	The 1 st page presents the objectives of the group. These are linked to SDG#4 which is one of the advocacies of SLMI. Visualization resources that emphasize the	Page 2 transitions to the call-to-action which is also visually appealing. The artists skillfully use good layout, pictorials, and	The absence of statistics as part of its data set could have made the infographic more visually impactful. Nevertheless, the narrative elements such as graphics, layout and text work coherently in

of flags with rainbow colors, the topic is catchy.	message are bright colors, graphics and a clean lay out.	typography to highlight the benefit of using social media platforms in advocating the causes the organization represents	promoting the importance of education.
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The five infographics promote SLMIs advocacies while only one infographic focuses on FLP. All five infographics have a vertical layout and used Canva as the graphic design tool. Canva's multiple features and easy drag-and-drop format make an easy graphic design tool. The students found its almost countless photos, graphics and fonts very useful. The vertical layout was used in all infographics because it allows easy scrolling. Table 2 presents the components of the infographics as narrative visualizations (Segel & Heer, 2010; Krum, 2013). In graphic design, persuasive infographics follow a three-part sequential order: introduction, key message and conclusion. The introductions of the five infographics direct a viewer's attention to the advocacies of the partner organizations in five different ways. Each one has an appropriate hashtag. The key message of each infographic is conveyed well by semiotic resources such as data visualizations, typography and short but coherent texts which make the narratives easily comprehensible. The conclusions of the four infographics carry explicitly stated calls to action while the infographic for education implicitly invites a viewer to participate in the advocacy project.

Using Monroe's Motivated Sequence, it seems that each infographic has a strong convincing appeal. There are striking techniques in the Attention step of the infographics in that a viewer's interest is sparked. The Need step presents the problems surrounding the issues (SDGs) that the advocacy groups champion through statistics, pictorials and texts. However, the infographic on education implies the problems concerning education. In the Solution step, all five infographics push forward viable solutions that viewers can do either personally or through participation in projects of the partner organizations. Data visualizations of the solutions are noticeable in all five infographics. The narratives of the infographics conclude with the specific calls to action viewers are persuaded to take. Indeed, the Need step and the Solution step give prominence to the communicative purpose of the infographics which

make them distinct from other types of infographics: informative, public relations and visual explanations.

4. CONCLUSIONS

Teamwork, collaboration, interpersonal skills, empathy, and leadership can still be developed in online language classes that use web-enhanced technology to actualize the service component of e-service learning courses such as Purposive Communication. The findings of this study support the study of Myers, Blackman, Andersen, Hay and Lee (2014) that interpersonal skills and teamwork can be developed in online classes that use ICT. Creating persuasive infographics for advocacy groups as a learning outcome of the course is impactful to students as it changes their mindset about advocacy and advocacy campaign. As a result, students grow academically, emotionally and psychologically. Lastly, this study that utilized linguistic genre analysis of infographics shows that the infographics in the corpus can be used as promotional materials for advocacy awareness campaigns of advocacy groups. The results of the analyses reveal that infographics are a genre with conventionalized features, typical textualization patterns and socially recognized communicative purposes (Bhatia, 1993). The corpus mirrors the students' creativity, technical knowledge of graphic design tools such as Canva, high level of motivation, imagination and communication skills. The results of this study validate past research on infographics as a pedagogical tool (Beheshti, 2017; Tahir, 2020; Khan, 2021). This investigation may serve as a contribution to a small body of research on linguistic genre analysis of infographics in applied linguistics and language pedagogy.

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