

English goes digital: Framing pre-service teachers' perceptions of a learning management system in their EFL studies

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Abstract

This article introduces and discusses an empirical investigation that aimed to establish how pre-service teachers of English (hereinafter “participants”) framed their perceptions of Canvas, a learning management system (LMS), in their studies of English as a Foreign Language (EFL). In the present study, the participants and their respective controls (i.e., non-teacher EFL students) were requested to write a short reflective essay associated with the use of the LMS in their EFL course. All participants and the control group used Canvas as their LMS. The corpus of the participants’ and controls’ reflective essays was analysed qualitatively by means of framing analysis. The results of the qualitative framing analysis revealed that whilst there were similarities in the participants’ and controls’ framing, the corpus of the participants’ essays involved instances of framing that were specific to the participants’ perceptions of Canvas. These findings and their linguo-didactic implications were further presented in the article.

Key words: learning management platform; framing analysis; English as a Foreign Language (EFL).

1. Introduction

The process of teaching and learning of English as a Foreign Language (EFL) cannot be understood without digital tools (Amhag, Hellström, & Stigmar, 2019; Bensalem, 2019; Gran, Petterson, & Mølstad, 2019; Hidalgo, Huertas, & Gómez Parra, 2020). Learning management systems (LMSs) as a digital tool are thought to be an integral part of the recent digital turn in EFL teaching and learning (Kite et al., 2020; Lawrence et al., 2020). In light of the digital turn in EFL (Bensalem, 2019; Cardoso, 2018), LMSs “have become a key component of teaching and learning in higher education” (Kite et al., 2020: 183). The use of LMSs has a profound impact upon current practices of EFL

teaching and learning, as well as EFL teachers' and students' perceptions of these practices (Lawrence et al., 2020). One of the popular LMSs is Canvas (Fathema & Akanda, 2020; Kite et al., 2020), a digital cloud-based LMS that is designed to facilitate teaching and learning by providing online tools, a mobile application, file sharing tools, as well messages and announcements notification (Fathema & Akanda, 2020; Kite et al., 2020). The use of Canvas and other LMSs seems to be particularly topical in the context of the COVID 19 quarantine, when EFL students and teachers alike are advised to avoid face-to-face teaching and keep social distancing (Baloran, 2020).

Taking into consideration the current focus on LMSs in EFL research (Sihaan, 2020; Zhonggen et al., 2019), this article presents an empirical investigation that seeks to explore how pre-service EFL teachers (hereinafter "participants") frame their perceptions of LMS Canvas in their EFL studies. In order to investigate the framing, the participants are requested to execute an open-ended written task that involves a short reflective essay written on the topic "The Role of Canvas in My Studies of English." The corpus of the participants' essays is analysed in the study by means of the framing methodology in order to identify those frames that structure and organise the participants' discursive spaces associated with Canvas and its role in the participants' EFL teaching and learning experiences.

From a theoretical perspective, the present study is informed by the concept of digital literacy. Whilst there are multiple definitions of what constitutes digital literacy (Krumsvik et al., 2016; Maher, 2020), traditionally this term is defined as the ability to understand and process (i.e., read, write and deal with) data from digital sources (Gilster, 1997). Broadly, digital literacy is defined as the knowledge, skills and ability to use digital devices and resultant forms of communication associated with them (Dowell, 2019). In educational contexts, digital literacy is argued to involve digital competencies, which are regarded as the teachers' proficiency in using digital tools and the Internet in pedagogical and didactic contexts and the awareness of their implications for teaching and learning (Krumsvik, 2008). Digital competencies are theorised to be comprised of i) a generic digital competence (skills and knowledge about educational technology), ii) a subject didactic digital competence (i.e., digital competence in a particular subject), iii) a professional digital competence that involves those digital skills that a teacher can use both in and outside teaching situations (Krumsvik et al., 2016). Arguably, the use of LMSs in EFL teaching and learning is associated with in-service and pre-service teachers' generic and professional digital competences.

Whereas the use of Canvas as an LMS has been researched in the literature (Fathema & Akanda, 2020; Kite et al., 2020; Kruse & Rapp, 2019; Leuckert, 2020), little is known about how pre-service primary school teachers of English frame their perceptions of the digital practices afforded by Canvas

(Lee & Lee, 2019). Furthermore, there are insufficient studies that juxtapose the framing of Canvas by pre-service EFL teachers with that of non-teacher EFL students. The present study seeks to illuminate this under-researched issue by means of identifying, classifying and juxtaposing the participants' (i.e., a group of pre-service EFL teachers) and controls' (i.e., a group of non-teacher EFL students) framing of Canvas. Specifically, the study aims at answering the following research questions:

RQ 1: How do the participants frame their perceptions associated with the use of Canvas in their EFL studies?

RQ 2: Would there be potential differences between the participants' and controls' perceptions of Canvas?

Guided by these two research questions, the study employs a qualitative methodology of framing analysis that is further discussed in this article. The structure of the present article is as follows. First, there will be provided a review of literature associated with perceptions of LMSs in university contexts. Second, the notion of framing in EFL studies will be outlined. Third, digital literacy in EFL contexts in Norway will be presented. Thereafter, the present study with its hypothesis, participants, methods, and results will be introduced and discussed. Finally, the conclusions section will offer the summary of the present study and its linguo-didactic implications.

2. Literature review

Whereas there is a plethora of studies associated with EFL students' perceptions of digital artefacts and Internet-based teaching and learning (Xue & Churchill, 2020), research that investigates LMSs, and especially LMS Canvas, in university settings is under-represented (Fathema & Akanda, 2020; Karademir et al., 2019; Kite et al., 2020; Pan & Gan, 2020; Siahaan, 2020). Currently, research appears to focus on the perceptions of LMSs by i) university teaching staff (Fathema & Akanda, 2020; Karademir et al., 2019; Pan & Gan, 2020), ii) university student cohorts (Siahaan, 2020; Zhonggen et al., 2019), and iii) both university staff and the student population (Kite et al., 2020).

University teaching staff's perceptions of LMSs are elaborated upon in the studies conducted by Fathema and Akanda (2020), Karademir et al. (2019), Pan and Gan (2020), and Siahaan (2020). Fathema and Akanda (2020) seek to explore the effects of university instructors' prior experiences with Canvas. By means of a survey administered at two US universities, Fathema and Akanda (2020) have found significant differences in the instructors' use of Canvas. Specifically, Fathema and Akanda (2020) indicate that its frequent use positively correlates with the instructors' experiences with the LMS. On

the contrary, an insufficient use of Canvas results in problems either with communicating via Canvas or with technical issues. These findings are interpreted by Fathema and Akanda (2020) as the need to introduce courses on how to use Canvas by university staff. Similarly, the study reported by Karademir et al. (2019) elucidates how university instructors from different universities in Turkey perceive the use of the LMS that is analogous in function to Canvas, the Self-Directed Digital Learning Material Development Platform. That LMS is perceived as sufficient and valuable by Turkish university staff. These findings are echoed in a recent study conducted by Pan and Gan (2020), who report positive perceptions of LMSs by university EFL teachers in China. According to Pan and Gan (2020), their investigation has revealed positive attitudes and empowering feelings of Chinese EFL teachers towards LMSs.

University students' perceptions of LMSs are examined by Siahaan (2020) and Zhonggen et al. (2019), respectively. Siahaan (2020) investigates university students' perceptions of Edmodo, an LMS. The results in Siahaan's (2020) study show that university students in Indonesia perceive the LMS positively. In particular, they indicate that the use of LMSs facilitates their communication and ideas sharing, as well as enhances creativity and language skills. Concurrently with the positive perceptions of the LMS, they exhibit preferences for a more traditional manner of learning in person, i.e. face-to-face. Analogously to Siahaan (2020), Zhonggen et al. (2019) examine Chinese university students' perceptions of a mobile LMS. These authors posit that Chinese university students with the mobile LMS are more satisfied with their learning outcomes, whereas their cognitive loads are significantly lower owing to the use of a mobile LMS (Zhonggen et al., 2019).

University lecturers' and students' perceptions of Canvas are explored in a recent study by Kite et al. (2020), who interviewed university lecturers and postgraduate students at The University of Sydney (Australia). The results of their qualitative analysis indicate that university staff and students alike agree that the presence of Canvas appears to be essential in university settings (Kite et al., 2020). However, Canvas seems to be perceived as an information storage by academics and students. This view of Canvas is concomitant with the students' preference for face-to-face learning, which is seen as superior to online learning afforded by LMSs. Concurrently, the lecturers in the study suggest that their insufficient digital skills may hinder efficient teaching via Canvas (Kite et al., 2020).

3. Framing in applied linguistics and EFL studies

Methodologically, the present study is based upon the qualitative framing analysis of written discourse. Framing is informed by cognitive (Fillmore, 1976; Goffman, 1974; Minsky, 1975) and socio-discursive approaches (Entman, 1993; Dahl, 2015), respectively. Whereas the former is theorised to be associated with cultural conventions that are shared by the members of a community (Goffman, 1974), the latter is regarded as a socio-discursive construal of reality that purposefully conceptualises, orients and structures the narrative in order to persuade the audience (Entman, 1993). Guided by the socio-discursive approach (Entman, 1993), framing is deemed to involve one or several salient aspects and perspectives in the narrative that are selected to affect the audience's attitudes, judgements, and perceptions (Entman, 2003). It should be noted that the present study is based upon the socio-discursive approach to framing (Entman, 2007). Seen through the lenses of this approach, framing is defined

... as the process of culling a few elements of perceived reality and assembling a narrative that highlights connections among them to promote a particular interpretation. Fully developed frames typically perform four functions: problem definition, causal analysis, moral judgment, and remedy promotion (Entman, 1993, 2004). Framing works to shape and alter audience members' interpretations and preferences [...] That is, frames introduce or raise the salience or apparent importance of certain ideas, activating schemas that encourage target audiences to think, feel, and decide in a particular way. (Entman 2007: 164)

Recently, framing and framing analysis have been amply employed in research publications in applied linguistics, EFL studies, and teacher education (Barkhuizen, 2014; Benincasa, 2017; Germinario, 2019; Hiratsuka, 2018; Macalister, 2012; Pennington, 1999). The use of framing methodology in applied linguistics seems to follow the aforementioned approaches, namely cognitive (Benincasa 2017; Germinario, 2019; Lynxwiler 1999; Pennington, 1999) and socio-discursive (Barkhuizen, 2014; Hiratsuka, 2018; Macalister, 2012).

Set in the cognitive approach to framing formulated by Goffman (1974), Lynxwiler (1999) posits that a student's journal could be regarded as framing device, since it encapsulates ritualised cultural practices. Lynxwiler (1999) indicates that the journal as a framing device facilitates the students' connection to the course, enhances their understanding of the course material, and increases their involvement by means of "providing a keying device that connected students with their instructors in a mutually focused type of ritualistic interaction" (Lynxwiler, 1999: 10). Analogously to the cultural practices reported by Lynxwiler (1999), Germinario (2019) indicates that in EFL contexts in Japan cognitive culturally-embedded frames are assumed to govern classroom situations and a teacher's and students' involvement in

these situations. Germinario (2019) argues that Western EFL teachers and Japanese EFL students operate via similar, yet different classroom frames. The differences in framing diverse situations in an EFL classroom are accounted by the different communication rules “in which both a Western teacher and Japanese students operate under” (Germinario, 2019: 59).

Similarly to Lynxwiler (1999) and Germinario (2019), a case study conducted by Benincasa (2017) is based upon Goffman's (1974) framing methodology. Benincasa (2017) explores how verbal interactions are framed between a teacher and a student. It is argued in that study that cultural practices, cultural knowledge, values, and ideas are involved in the frames “as-if” and “make-believe,” which permeate the student's learning trajectory (Benincasa, 2017). The results of the study suggest that framing facilitates the identification of a teaching and learning space that can be regarded as a “joint enterprise of people interacting within a culturally-shaped setting” (Benincasa, 2017: 77).

By means of referring to the theoretical tenets proposed by Goffman (1974), Pennington (1999) analyses bilingual Cantonese/English classroom discourse in Hong Kong. She argues that bilingual classroom interactions could be described via the frame “lesson” that is focused on curricular content, and the frames which link the bilingual classroom to the larger community by communicative roles in bilingual settings (Pennington, 1999). In addition, Pennington (1999) proposes the frame “lesson-support” that structures communication and classroom behaviour.

In contrast to the cognitive approach to framing, the studies conducted by Barkhuizen (2014), Hiratsuka (2018), and Macalister (2012) are associated with the socio-discursive approach to framing and framing methodology. Specifically, framing in these studies is operationalised as a structured and organised template that could be employed in facilitating EFL students' narrative skills in EFL writing. Whereas Barkhuizen (2014) applies framing (referred to in that study as “narrative framing”) to elucidate problems experienced by migrant and refugee EFL learners in New Zealand, Macalister (2012) reports the use of narrative frames in the needs analysis of an EFL curriculum for trainee seamen in Kiribati. Analogously to the abovementioned studies, Hiratsuka (2018) applies narrative framing to elicit written feedback provided by a group of Japanese L1 EFL students. The studies conducted by Barkhuizen (2014), Hiratsuka (2018), and Macalister (2012), respectively, suggest that framing could be regarded as a practical tool in EFL teaching and learning.

4. Digital literacy in EFL contexts in Norway

Prior to proceeding to the present study, it seems appropriate to outline the current state of affairs associated with digital literacy in Norwegian EFL contexts. English is widely used in Norway in a variety of settings, ranging from EFL teaching and learning to multinational corporations that use English as a lingua franca in their corporate communication. As pointed by Rindal (2015), whereas English does not have an official second language status in Norway, “English exhibits considerable second language characteristics” (Rindal, 2015: 243). Arguably, such variables as prestige, visibility, and extensive use of English in Norway (Thomas & Breidlid, 2015) are facilitative of Norway’s ranking as a nation with one of the highest English proficiency levels (Graedler, 2014: 292).

It should be noted that alongside English, digital literacy appears to be prioritised in Norwegian primary and secondary education (Madsen, Thorvaldsen & Archard, 2018). Digital literacy in primary and secondary schools constitutes one of the five basic skills for all subjects (inclusive of English), e.g. oral skills, reading, writing, and numeracy (Mellegård & Pettersen, 2012). Digital literacy, which is referred to by the Norwegian Ministry of Education and Research (in Norwegian, *Udir*) as *digital skills* (Udir, 2020), is operationalised as an EFL learner’s ability to use a variety of digital tools and online resources to facilitate the learning of the English language, communication in English, and the acquisition of relevant knowledge in the subject of English (Udir, 2020). The view of digital skills by Udir (2020) involves two main foci in relation to the Norwegian EFL classroom: first, there is a focus on digital skills as an EFL learner’s critical awareness of the digital text sources, whilst another focus is associated with “the ability to create texts in various digital formats” (Ørevik, 2018: 245). In conjunction with these foci, the Norwegian Directorate for Education and Training (i.e., a government agency that is responsible for kindergarten, primary, and secondary education), specifies that

The development of digital skills involves gathering and processing information to create different kinds of text. Formal requirements in digital texts means that effects, images, tables, headlines and bullet points are compiled to emphasise and communicate a message. This further involves using digital sources in written texts and oral communication and having a critical and independent attitude to the use of sources. Digital skills involve developing knowledge about copyright and protection of personal privacy through verifiable references to sources. (Udir, 2020)

In light of the institutionalised requirements for digital literacy, or digital skills in Udir’s terminology, it seems logical to assume that pre-service and in-service EFL teachers’ professional digital literacy is of increased importance in Norwegian EFL contexts (Ørevik, 2018). This contention is sup-

ported by Thorvaldsen & Madsen (2020), who posit that digital literacy is “one of the basic competencies that teacher educators and teacher students are required to focus on during their initial teacher education” (Thorvaldsen & Madsen, 2020: 1).

Given that EFL teachers in Norway are required by Udir to possess digital skills in order to teach, digital literacy forms a substantial aspect of teacher education programmes at Norwegian universities. Typically, the course description of such programmes specifically addresses the ability to use digital technology as an integral part of the university course (The University of Oslo, 2020). For instance, the course description of one the EFL teacher programmes at a regional university in Norway explicitly states that “the course includes a number of strategies for language learning and working with a foreign language, including through the use of digital tools” (HVL, 2020). Normally, pre-service EFL teachers as well as non-teacher students are expected to use an LMS, for example, Canvas, in order to submit assignments online, make use of the digital resources at the university library, and to be able to sit for digital exams.

5. The present study

As outlined in the previous section of this article, digital literacy appears to be integral to Norwegian pre-service EFL teachers' teaching and learning trajectory, as well as their future teaching experiences in Norwegian EFL contexts. The ability to use LMSs could be considered an essential part of pre-service EFL teachers' digital literacy. Whereas Norwegian pre-service EFL teachers are expected to make ample use of LMSs during their university studies, currently there is insufficient research into pre-service EFL teachers' attitudes and perceptions associated with LMSs. The present study seeks to generate new knowledge about the participants' (i.e., pre-service EFL teachers) perceptions of LMS Canvas in their EFL studies and how these perceptions are framed.

The study is embedded in a teacher training course offered at a regional university in Norway. The participants in the study are pre-service EFL teachers, who are enrolled full-time in a year course in English. The course is comprised of the following modules: functional grammar of English, English phonetics, English literature, and British and American civilization. LMS Canvas is employed in the teaching of all of the abovementioned modules in order to provide a detailed course description, the list of course literature, and teaching materials (Power Points, course-related scientific articles in pdf format, essay templates, and various Web links). In addition, the participants are made aware of i) the announcement function on Canvas that enables to provide notifications and ii) the messenger function which is inte-

grated with the university e-mail. Furthermore, LMS Canvas is used for submission of the participants' ongoing work, such as essays, essay drafts, short written assignments, and assignments in phonetics that involve sound files. In light of these functional settings, the participants are expected to access LMS Canvas either on their phones as an application (app) or on their PCs several times per study week.

Assuming that the participants would regularly access Canvas on a weekly basis, it is possible to theorise that after one semester of study they have experienced a substantial number of encounters associated with LMS Canvas. Following this assumption, it is hypothesised that the participants would be able to reflect on the role of Canvas in their university studies of English. Guided by the qualitative framing methodology, the present study seeks to establish how the participants frame their perceptions of Canvas and how the participants' framing of Canvas would be different from that of the controls (see specific research questions in the introductory part of the article). Presumably, the identification and classification of the participants' and controls' framing would be suggestive of the positive and/or negative facets of digital literacy associated with Canvas. Additionally, the juxtaposition of the participants' and controls' framing would reveal those aspects of the use of Canvas that could be specific to pre-service EFL teachers in contrast to the non-teacher student population.

5.1. Participants

In total, 15 participants (12 females and 3 males, mean age = 24.4, standard deviation = 3.5) and 15 respective controls (10 females and 5 males, mean age = 23.1, standard deviation = 6) took part in the study. All participants are pre-service EFL teachers, who at the time of the study are enrolled in a year programme in English at a regional university in Norway. Their controls are non-teacher EFL students enrolled in the identical English programme at the same university.

The participants' and controls' first language (L1) is Norwegian, whereas English is a foreign language to all of them. There are neither bilinguals nor English L1 speakers among the participants and the control group. The participants and their respective controls are assumed to be on the intermediate B1/B2 level of proficiency in English according to the "Common European Framework of Reference for Languages: Learning, teaching, assessment" (Council of Europe, 2011). This assumption is based upon the participants' and controls' secondary school leaving certificates, which indicate that their English proficiency is on the B1/B2 levels.

The participants and controls are requested to sign a Consent form that allows the author of the present article to process, analyse and publish their

written data for scientific purposes. To ensure confidentiality, the participants' and controls' real names are coded. The following coding scheme is used in the study, e.g. P as in "participant" and the number (P1, P2, ... P15) and C as in "control" and the number (C1, ... C 15).

5.2. Procedure, corpus and methods

The study involves the following procedure. At one of the seminars, the participants are asked by their course teacher (who is the author of the article) to write a reflective essay between 200 and 500 words on the topic "The Role of Canvas in My Studies of English." The participants are advised that the essay should be based upon their own experiences that involve the use of Canvas. The participants are instructed that the essays are reflective and open-ended. It is explicitly communicated to the participants that their essays are not grade-bearing. It is specified that the participants are free to do the following, i) structure their reflections in any suitable manner and ii) write them in any register of written English, even though the use of academic English in the essays would be desirable. In addition, the participants are given instructions that they can write their reflective essays on the personal computers or, alternatively, by hand. The same procedure is applied to the control group in a separate session. The participants and their respective controls are given three hours to complete the task of essay writing.

The participants' and controls' reflective essays are collected and analysed by the author of this article. The descriptive statistics of the corpus per group are calculated using the software program Statistical Package for the Social Sciences (IBM Corp., 2016). The total number of words in the corpus per group, means (M), and standard deviations (SD) are summarised in Table 1 below.

Table 1: The Descriptive Statistics of the Corpus.

N	Statistical Measures	Participants	Controls
1	Total words	5 236	2998
2	M words	349	199
3	SD	184	118
4	Minimum	124	69
5	Maximum	697	590

In the present study, the corpus is analysed by means of the framing methodology in order to elucidate how the participants and their respective controls frame discursive spaces associated with Canvas and its role in their EFL teaching and learning experiences. The qualitative framing methodolo-

gy in the study employs an inductive approach to identifying potential frames in the corpus rather than using frames and frame labels from previous research.

The qualitative framing analysis in this study is grounded in research methodology proposed by Entman (2003) and Dahl (2015), respectively. Following Entman (2003), framing involves “selecting and highlighting some facets of events or issues, and making connections among them so as to promote a particular interpretation, evaluation, and/or solution” (Entman, 2003: 417). In accordance with the framing analysis proposed by Dahl (2015), the present corpus is manually investigated for key words, recurrent phrases, stereotyped expressions, and sentences that provide thematically reinforcing clustering (see Dahl, 2015). Thereafter, the manual procedure is verified by means of the computer-assisted count of the most frequent words in the corpus by means of the software program WordSmith (Scott, 2008). Based upon the frequency lists yielded by WordSmith (Scott, 2008), the labelling of the frames is carried out by the author of the article and subsequently checked by a specialist in discourse studies. Finally, the corpus is examined again in order to establish the frequency of occurrence of adjectives and evaluative words so that the frames could be treated as positively and/or negatively connoted.

5.3. Results and discussion

The qualitative framing analysis has yielded seven qualitatively different frames that structure the participants' and controls' reflective essays. These frames are summarised in Table 2, where they are presented according to their frequency in the corpus. The frequency of frames per group has been calculated as percentage in the software program SPSS (2016), as seen in Table 2 below.

Table 2: The Participants' and Controls' Framing of LMS Canvas.

N	Frames	Participants	Controls
1	Canvas is helpful	66.6 %	86.6 %
2	Canvas is not face-to-face teaching	53.3%	0
3	Canvas is easy	40 %	46.6 %
4	Canvas is better	33%	6.6%
5	Canvas is storage	26.6%	40%
6	Canvas is difficult	20 %	26.6%
7	Canvas is environmentally friendly	6.6 %	6.6 %

The abovementioned frames are not equally distributed in the corpus, for instance Mean frames per group of participants = 1.7 (SD 0.6), whereas the controls' Mean frames = 1.5 (SD 0.5). Judging from the frequency of adjectives and evaluative words that has been computed in WordSmith (Scott, 2008), it appears possible to group the frames that are given in Table 2 into those that are associated with positive perceptions of Canvas (e.g., *Canvas is Helpful*, *Canvas is Easy*, *Canvas is Better*, *Canvas is Storage*, and *Canvas is Environmentally Friendly*), and those that reflect negative perceptions (e.g., *Canvas is not Face-to-Face Teaching*, and *Canvas is Difficult*). Further, the frames shown in Table 2 will be discussed from the vantage point of positive and negative aspects of framing of LMS Canvas in the corpus.

5.3.1 Positive framing of Canvas

Positive framing of Canvas is represented by the frames *Canvas is Helpful*, *Canvas is Easy*, *Canvas is Better*, *Canvas is Storage*, and *Canvas is Environmentally Friendly*. The results of the qualitative framing analysis indicate that five out of seven types of frames are associated with positive perceptions of Canvas in the participants' and controls' EFL experiences. These findings lend support to the prior literature that reports positive perceptions of LMSs by university EFL students (Siahaan, 2020; Zhonggen et al., 2019). Additionally, the present findings provide indirect support to Pan & Gan (2020), and Karademir et al. (2019), who posit that university EFL lecturers tend to perceive LMSs positively.

In terms of the positively framed perceptions, the participants and controls appear to be similar in structuring their perceptions of Canvas by means of the frame *Canvas is Helpful*. Excerpt (1) below exemplifies the participant's positive perception of Canvas which is viewed through the lenses of helpfulness, e.g.

- (1) The digital world can be helpful in different ways and make us more efficient in our everyday life. An example of such a helpful digital invention is Canvas as it in many ways makes communication, sharing and finding information concerning school topics easier for all. (Participant P 14)

As seen in Table 2, *Canvas is Helpful* is the most frequent frame in the corpus of participants' (66.6%) and controls' (86.6%) essays. Similarly to the participants, the control group appears to frame their reflections by foregrounding the helpfulness of Canvas, e.g. "I think it's also helpful to get notifications and announcements on Canvas" (Control C 5).

It follows from excerpt (1) that the participant tends to frame the helpful aspect of Canvas in conjunction with the easiness and user-friendliness, e.g. "...Canvas (...) makes communication, sharing and finding information

concerning school topics easier for all" (Participant P 14). Arguably, in (1) there is a case of superposition of two frames, *Canvas is Helpful* and *Canvas is Easy*, respectively. The latter is another frequent framing in the corpus (40% in the participants' essays and 46.6% in the control group). As evident from the data, the frames *Canvas is Helpful*, *Canvas is Easy*, and *Canvas is Better* seem to be preferred by the participants, whereas the occurrence of *Canvas is Storage* and *Canvas is Ecologically Friendly* is less frequent. These findings are illustrated by Figure 1 below.

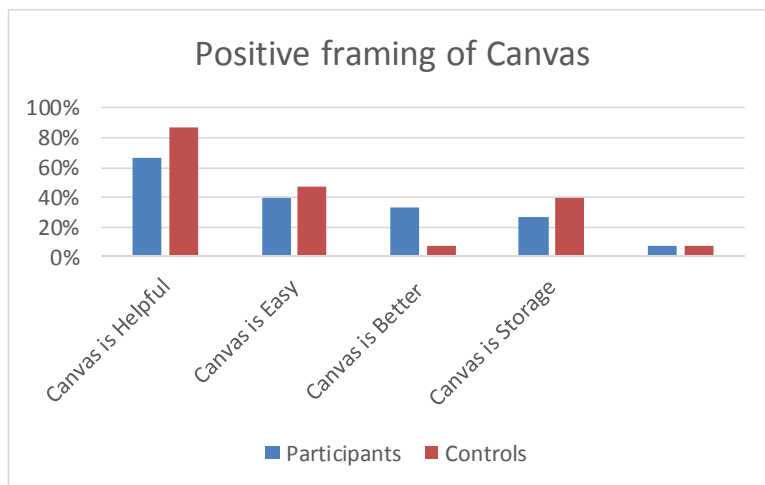


Figure 1: Positive Framing of Canvas.

As mentioned before, two frequent frames *Canvas is Helpful* and *Canvas is Easy* are characterised by the instances of co-occurrence and superposition. However, the analysis of data indicates that the frame *Canvas is Easy* occurs as a stand-alone frame, as see in excerpt (2).

(2) It is easy to navigate Canvas due to the graphic approach they have used regarding the dashboard. There's also continuity in how the different subjects are arranged within Canvas. They all have the same layout and menu. This makes it easy to find what you are looking for, even when you have not opened the subject before. The Canvas app makes it a lot easier to stay in the know, as you can get alerts directly on your phone. (Participant P6)

Excerpt (2) represents a typical framing both on the part of the participants and their controls. Judging from the data, the frame *Canvas is Easy* is associated with the ease of using Canvas and is reflective of its user-friendliness. Often, those participants and controls whose essays are structured by the frame *Canvas is Easy* refer to the ease of using Canvas as an app,

e.g. "The Canvas app makes it a lot easier to stay in the know..." (Participant P6). These findings seem to support the study conducted by Zhonggen et al. (2019), where the use of an LMS on app has been found to be positively perceived by university EFL students.

In addition to *Canvas is Helpful* and *Canvas is Easy*, another frequent framing is represented by the frame *Canvas is Better*. This frame typically emphasises the participants' positive experiences with Canvas in contrast to other LMSs that they previously used, such as Fronter and Itslearning, e.g.

(3) I think Canvas is better than Fronter in some ways. Canvas has an app which really gives a huge advantage compared to Fronter. On Canvas you get notifications for whenever your teacher posts a new file or you get a message from someone. Fronter did not have this. (Participant P15)

Notably, the frame *Canvas is Better* is more frequent in the sub-corpus of the participants' essays ($M = 33\%$) in contrast to the control group ($M = 6.6\%$). A relatively high frequency of this frame in the sub-corpus of the participants' essays could be explained by the fact that the group of participants is comprised of those students, who previously studied at the same university and experienced the use of several LMSs prior to Canvas (e.g., Fronter) in contrast to the controls, many of whom have taken only one course and whose university experiences are limited to Canvas.

Another positive framing of Canvas is represented by the frame *Canvas is Storage*. Whereas this framing seems to be preferred by the control group and less so by the participants (see Table 2), both of these groups note that Canvas is associated with a digital repository or a digital archive, as evident from the following quote, e.g. "To me Canvas is a place where I go to get the files I need and upload the files I must upload. Nothing more than a storage place" (Participant P 4). These findings support a prior study conducted by Kite et al. (2020), who indicate that Canvas is perceived as a digital repository by the students in that study. It is, however, not explicitly stated by Kite et al. (2020) whether or not Canvas as a digital storage place is perceived positively or negatively. To reiterate, the frame *Canvas is Storage* appears to be positively connoted by the participants and their controls, who employ it alongside such frames as *Canvas is Helpful* and *Canvas is Easy*, respectively.

Unlike the frames *Canvas is Helpful* and *Canvas is Easy*, the frame *Canvas is Environmentally Friendly* is less frequent in the corpus. It has been identified in the reflective essays written by one participant (6.6%) and one control (6.6%), respectively. The frame *Canvas is Environmentally Friendly* foregrounds the concept of sustainability in the teaching and learning process that involves the consideration of environmental protection, as illustrated by the following quote, e.g. "Canvas allows us to use learning materials as pdfs and other electronic files in a paper-free way. [...] It is responsible and smart

to use paperless e-materials and that makes Canvas environmentally friendly." (Participant P 11)

5.3.2. Negative framing of Canvas

In contrast to the positive frames discussed in the previous section of the article, there appear two frames, namely *Canvas is Difficult* and *Canvas is not Face-to-Face Teaching*, which reflect negative perceptions of Canvas. The frame *Canvas is Difficult* is present in the participants' (20%) as well as controls' (26.6%) essays. Judging from the data, this frame is associated with technical difficulties that are related to navigation and file management on Canvas., e.g.

- (4) It has also been quite a few cases where information has disappeared, or that some assignments should be open but cannot be found. At times it can also be difficult navigating back to a specific file on Canvas if you do not remember exactly where it was. Another considerable disadvantage is that it can also be difficult to check Canvas every day, which again can lead to the loss of information. Also, to upload audio files is difficult on Canvas, it took me several times to attach the file. (Participant P 13)

It is seen in (4) that the participant mentions several technical aspects of Canvas and frames them by means of referring to a number of negatively connoted problematic features associated with the use of Canvas. These findings are in line with the previous studies by Kite et al. (2020), and Fathema & Akanda (2020), where the negative perceptions of LMSs have been found to correlate with technical issues posed by LMSs.

Another negatively connoted frame in the corpus is *Canvas is not Face-to-Face Teaching*. As seen in Table 2, the frame *Canvas is not Face-to-Face Teaching* is present exclusively in the reflective essays written by the participants. This finding is exemplified by Figure 2 below.

As evident from Figure 2 and Table 2, 53.3% of the participants seem to structure their essays via the frame *Canvas is not Face-to-Face Teaching*. In the frame *Canvas is not Face-to-Face Teaching*, the participants highlight the need to decrease the use of Canvas as a digital tool in the teaching and learning process and, at least, to keep the current amount of digital teaching via Canvas without any further increase in digital teaching. The participants' negative perception of Canvas is emblematised by Excerpt (5), e.g.

- (5) Teaching should stay in the classroom. Canvas should only be used as a tool to help with that. I think digital lessons would be a step in the wrong direction, because it makes it less personal and the class loses out on the community aspect that is so crucial to develop. (Participant P3)

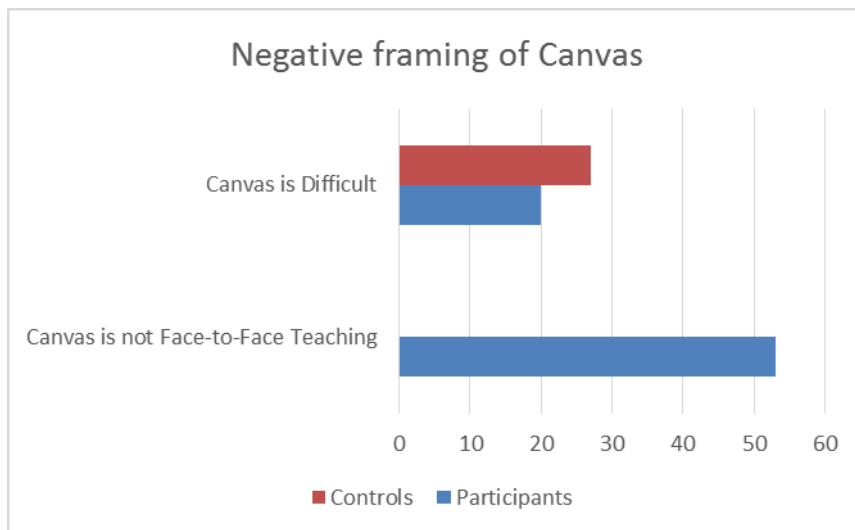


Figure 2: Negative framing of Canvas.

It is inferred from (5) that whilst Canvas is seen as a necessary digital tool, the participant would prefer having more face-to-face teaching and learning in contrast to the potential increase in online learning associated with Canvas. This finding is argued to be in unison with Kite et al. (2020), whose participants seem to favour face-to-face learning instead of digital learning via Canvas. The importance of having face-to-face learning is further specified by another participant, who writes that “[...]it is important to meet in a classroom and learn in an environment like that because it gives me as a student the opportunity to ask questions and get answers face to face” (Participant P 10). Presumably, the frame *Canvas is not Face-to-Face Teaching* is indicative of the participants’ need to have more contract teaching hours, more time allocated to person-to-person, or face-to-face group discussions, and more face-to-face interactions with the university teaching staff. It could be assumed that this frame is evocative of the participants’ interest in face-to-face teaching and learning experiences that cannot be overridden by online experiences offered by an LMS. These findings could be taken to indicate that the participants, in contrast to the control group, perceive the presence of online teaching via Canvas as potentially detrimental to their learning experiences.

6. Conclusions

The study presented and discussed in this article aims at establishing how the participants, who are pre-service EFL teachers, frame their perceptions of LMS Canvas. Based upon the methodological premises of qualitative framing analysis, it is possible to conclude that the participants frame their positive perceptions of Canvas via the frames *Canvas is Helpful*, *Canvas is Easy*, *Canvas is Better*, *Canvas is Storage*, and *Canvas is Environmentally Friendly*, whilst their negative perceptions are reflected in the frames *Canvas is not Face-to-Face Teaching* and *Canvas is Difficult*, respectively.

It is observed in the corpus that the participants and their controls (i.e., non-teacher students) frame their positive perceptions of Canvas via qualitatively similar frames. The overall positive perception of Canvas could be treated as an index of the participants' and controls' satisfaction and proficiency in using Canvas as a digital tool in pedagogical and didactic contexts. Another possible explanation of the predominantly positive perceptions in this study could be offered by the participants' and controls' demographics. Namely, both these groups are similar in the age characteristics (participants' M age = 24.4 and controls' Mean age = 23.1) that qualify them to be regarded as a part of the digital natives generation (Amhag, Hellström, & Stigmar, 2019; Bensalem, 2019; Gran, Petterson, & Mølstaad, 2019; Hoppmann, Anadon, & Narayanamurti, 2020). Presumably, their exposure to digital tools and digital artefacts in the course of their early and adult lives has positively impacted upon the participants' and controls' perception of Canvas, which is perceived as a helpful digital tool (see Tale 2) by the participants and controls alike.

Whilst the participants and controls exhibit similarities in their positive framing of LMS Canvas, there is one frame that substantially differentiates the participants from the control group. This is a negatively connoted frame *Canvas is not Face-to-Face Teaching*. In contrast to the controls, more than a half of the participants perceive digital teaching and learning experiences negatively due to the assumption that Canvas decreases face-to-face teaching that is feared to be superseded by digital-only teaching provided by Canvas. To reiterate, the participants are a digital natives generation whose perception of Canvas as a digital tool is predominantly positive. However, the frame *Canvas is not Face-to-Face Teaching* signals the participants' ambivalent perceptions of Canvas which they also associate with the attempt of digital technology to eliminate physical face-to-face teaching. Its potential elimination is perceived negatively by the participants, who explicitly want face-to-face teaching as a part of their teaching and learning experiences.

Arguably, these findings would facilitate a deeper understanding of digital teaching provided to the generation of digital natives in the time of the

COVID 19 quarantine, when EFL programmes, as well as other university courses, have to be delivered digitally due to the pandemic. It is quite possible that in the post-quarantine world, EFL teaching and learning will experience an even more increased demand to go digital. However, the results of the present study suggest that the digital strides of English could be associated with the negative perceptions on the part of the future EFL teachers.

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