

# DESIGN MATTERS: COURSE DOCUMENT DESIGN'S EFFECT ON LANGUAGE LEARNERS' PERCEPTIONS

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## ABSTRACT

*Literature in L1 learning contexts has indicated that the design of course documents can influence learner beliefs and attitudes toward the teacher and the learning process (Wolfe et al., 2019). In immersive L2 learning contexts, learners must navigate an additional layer of linguistic complexity as they interact with course documents. The current study explores the effect of course document design on language learners' perceptions of instructors and institutions in tertiary EFL classrooms. Three versions of a syllabus were created using differing degrees of document design principles. A counterbalanced within-subjects design was employed in which participants (N=56) were exposed to the different syllabi and asked for their impressions of both the author of the document and the university. Course document design had significant impact on ratings of the instructor and university, suggesting that language learners' perceptions and attitudes about a teacher and learning context are influenced by course document design.*

## INTRODUCTION

Though design is considered "ubiquitous professional activity" (Jonassen, 2008, p. 138), it takes on radically different connotations and applications depending on the contexts to which it is applied. For the field of language teaching and learning, Aakhus' (2007) definition of design is particularly applicable: "An activity of transforming something given into something preferred through intervention and invention" (2007, p. 112). Fundamentally, design is a deliberate process applied to improve some default condition. Education is constantly in a design loop, iteratively reaching for the next preferred state in response to changing contexts and societal needs. Many variables contribute to either the success or failure of educational models, making this design process particularly difficult, but as variables are isolated and studied it is possible to progress towards a more ideal outcome.

One such specific variable, texts, are a key part of virtually any educational model or practice and are often the primary means by which information is conveyed between stakeholders. Though texts can come in many forms and be presented in different mediums, documents are perhaps their most common form. Fundamentally, “the general purpose or ‘function’ of a document is to store data produced by a sender in a symbolic form to facilitate transfer to a receiver” (Doermann et al., 1998, p. 799). In educational contexts, the sender is often an instructor who is providing content or information to a receiver, the learner. If this transfer of information is successful, teaching and learning can take place more smoothly and fulfil learning outcomes. However, not all documents are designed well, and some may even cause confusion or be an impediment to the learning process. Materials design may be an important contributing factor to either the success or failure of an educational endeavor.

### **Document Design and Education**

Materials design is often approached in teacher training courses but is often not a core part of these programs. As a result, few teachers possess design expertise (Huizinga et al., 2013). However, out of necessity, many teachers design documents for their learning contexts, but without suitable skills and training it is difficult to ensure that these documents are fulfilling their purpose well. In light of this issue, drawing on the field of document design is particularly instructive. “Document design is the theory, research and practice of creating comprehensible, usable, and persuasive texts” (Schriver, 1997, p. 316). The results of document design can be seen in well-designed forms, instructions, and technical documents. Though document design clearly could be beneficial in educational settings, its principles are often not taught or practiced in these contexts. Indeed, though visual rhetoric is conclusively identified as a key part of shaping the meaning of texts (Felten, 2008), most first-year L1 writing instructors overlook document design, both in their instruction and in the documents that they produce for their students (Wolfe et al., 2019). Though these observations are directly concerned with L1 university composition classes, not language learning in ESL or EFL contexts, the conclusions are perhaps even more applicable for language teachers, as document design or visual rhetoric is not a standard part of many teacher-education courses or curricula and is not a part of every teacher’s skill set.

Why then is it worth looking at document design for language learners? Smith (2017) notes that document design helps readers find the information they need to complete tasks with minimal effort. Wolfe et al. (2019) also remark that course documents using document design principles can help students “understand assignment objectives” and establish “a student-centered ethos in the classroom” (p. 146).

Understanding of a text can also be facilitated by using features such as topic headings to localize or group information into more memorable, salient chunks (Hyönä & Lorch, 2004; Ganier, 2004; McCabe et al., 2006). Kumpf (2000) further elucidates the importance of arranging text in distinct visual parts that “allow the readers to process the content in parts, rather than as a continuous flow of text without breaks” (p. 409). The ultimate goal of document design is “about making complex information seem accessible and credible” (Moys, 2017, p. 14). Improving the accessibility of a text for language learners who are already devoting considerable cognitive resources to processing and parsing the text (Morishima, 2013) is a simple way to support them as they engage with a text.

Course documents that use document design principles are not only more effective at communicating content, but researchers in L1 contexts have found that they can have a marked effect on attitudes and perceptions of the course, the learner’s role, and perceptions of the instructor (Ishiyama & Hartlaub, 2002). Wolff et al. (2019) make the following observation about their research into the effects of design on writing prompts:

What took us by surprise was how often students made inferences about the personality of the instructor based on the design. Students found instructors of visually informative documents to be younger, more enthusiastic, and all-around someone from whom they would be more likely to want to take a class (p. 154).

This observation is not isolated, as other researchers have also found that syllabi are linked to perceptions of instructors (Harrington & Gabert-Quillan, 2015). Wolfe et al. (2019) even make the decisive assertion that “our classroom documents establish a relationship between us and our students” (p. 152).

Of course, perceptions of the ethos of an instructor are not completely formed based on the design of a document; language choice (Ishiyama & Hartlaub, 2002; McCabe et al., 2006; McCroskey & Teven, 1999; Perrine et al., 1995) and length (Harrington & Gabert-Quillan, 2015) have also been shown to influence learner perceptions and beliefs. Though many factors are in play, the visual rhetoric of teacher-authored documents is immediately salient to students and plays a part in their process of assessing their educational context and instructor.

Notwithstanding the importance of visual rhetoric, there has been little research in the language education field examining the intricacies of document design and its effects on learners. One exception is input enhancement (Sharwood-Smith, 1993), which is the practice of using typographical or design cues to make language features or structures

more salient for learners. Input enhancement has been used to explore how some features of the visual design of a text, such as bolding, highlighting, or text-size manipulation can influence the acquisition of linguistic structures. While there have been many positive results (Fukuya & Clark, 2001; White, 1998; Wong, 2005; Zyzik & Pascual, 2015), other studies have also found that input enhancement techniques have either had no effect or a negative one (Jourdenais et al., 1995; Leow et al., 2003; Reinders & Ellis, 2009). Han et al. (2008), in a review of input enhancement studies, note that the complex nature of textual enhancement may be the cause for these mixed results. It is notably difficult, as these results indicate, to isolate design factors that impact language learning. However, it is possible to reliably investigate the effects of design on attitudes and beliefs of students about their course and instructors.

Course documents are not only an important medium for communicating information, but as the literature indicates, also important for establishing instructor ethos and credibility. Subtext concerning the course and instructor are communicated both through the content and the design of documents. Poorly designed documents can “disturb interpersonal relationships” or “create a negative image of an institution” (de Stadler, 2003, p. 42). Just how this affects language learners is worthy of investigation, as language learners have their own unique challenges when dealing with texts in an additional language. Syllabi, if designed well, should communicate information clearly to learners while simultaneously helping establish the ethos of instructors and setting expectations for the course. The current study investigated the effect of course document design on learners through the following research questions:

RQ 1. What effect does syllabus design have on language learners’ perceptions of the (1) instructor and (2) their educational institution in a post-secondary EFL environment?

RQ 2. What document design features most influence learner perceptions of their teacher or institution?

## **METHOD**

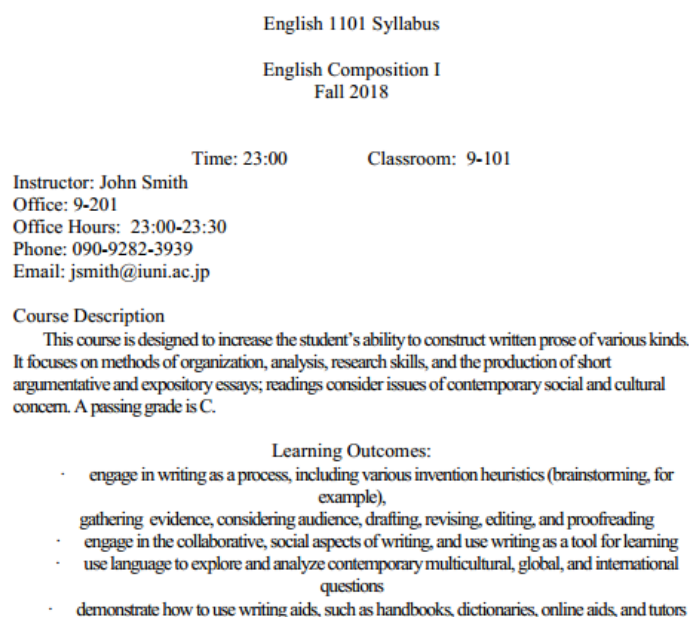
### **Syllabus Design**

Based on the considerable body of literature investigating the importance and effects of syllabi in L1 contexts (Harrington & Gabert-Quillan, 2015; Ishiyama & Hartlaub, 2002; Myers, 2004; Perrine et al., 1995), the researcher chose to use syllabi as the focus of the study. A simple English composition class course syllabus was sourced as

a baseline for this study, hereafter referred to as “Syllabus 1”. Syllabus 1 features extremely simple formatting. While it adopts some document design features, such as headings that break up the text into sections, the headings themselves are not differentiated or made to stand out either by bolding or a font size increase. Essentially, it is what could be characterized as a “low effort” (Belcak, 2020) document. The syllabus is set in Times New Roman, “the font that has become the standard for professional and educational communication” (Bean, 2015, p. 25), 12-point (Figure 1).

Syllabus 1 provided the lexical content for all three of the syllabi. Both the second and third version of the syllabus contained the same content, only formatted differently using design principles. Despite formatting changes, the length of all the syllabi were kept consistent at one page to avoid influencing student perceptions based on length as demonstrated by Harrington and Gabert-Quillen (2015).

*Figure 1. Portion of Syllabus 1*



The first variation, referred to as Syllabus 2, used document design principles to help the document better match the purpose of a syllabus, which is to communicate course information efficiently and effectively and serve as an easily accessible reference about the course. According to Doermann, Rivlin, & Rosenfeld (1998), documents can be categorized into three basic categories: reading, browsing, or searching. As syllabi often need to be referred to after initial exposure, particular attention needs to be given to the browsing and searching aspects. To address this in Syllabus 2, the hierarchical organization of the text was strengthened by adding emphasis and a point-size increase to the headings, with the aim

of creating a more “modular organization” that “facilitates localization of information” (Ganier, 2004, p. 23). Easily identifiable headings also serve the purpose of chunking or “arranging text into distinct visual parts” (Kumpf, 2000), which is important as it allows readers to easily browse or search for relevant content. Hyönä and Lorch (2004) highlight the importance of a strong heading structure, stating that “the presence of headings may help readers to construct a more accurate and complete representation of the topic structure with the consequence that text recall is better” (p. 4). Headings and font size have also been shown to be a factor in increasing learner motivation to engage with a text (McCabe et al., 2006). Aside from the adjustments to make the headings more salient, the hierarchy was strengthened by applying a consistent left alignment within a strong grid system (Lupton, 2014).

Figure 2. Portion of Syllabus 2

## English Composition I Syllabus

<b>Course #</b>	English 1101	<b>Instructor</b>	John Smith
<b>Title</b>	English Composition I	<b>Office</b>	9-201
<b>Semester</b>	Fall 2018	<b>Office Hours</b>	23:00-23:30
<b>Time</b>	23:00	<b>Phone</b>	090-9282-3939
<b>Classroom</b>	9-101	<b>Email</b>	jsmith@iuni.ac.jp

### Course Description

This course is designed to increase the student’s ability to construct written prose of various kinds. It focuses on methods of organization, analysis, research skills, and the production of short argumentative and expository essays; readings consider issues of contemporary social and cultural concern. A passing grade is C.

### Learning Outcomes

- engage in writing as a process, including various invention heuristics (brainstorming, for example), gathering evidence, considering audience, drafting, revising, editing, and proofreading
- engage in the collaborative, social aspects of writing, and use writing as a tool for learning
- use language to explore and analyze contemporary multicultural, global, and international questions
- demonstrate how to use writing aids, such as handbooks, dictionaries, online aids, and tutors

Additionally, the font used on the syllabus was changed from the serif font, Times New Roman, to the sans-serif font, Calibri. Calibri was chosen for its ubiquity as a default font (much like Times News Roman), which lends it familiarity while avoiding distinctive or distracting features. Mead and Hardesty (2017) note that both Times New Roman and Calibri are characterized fluent fonts, meaning that they allow readers to easily process content because they are not distinctive enough to distract the reader from the content itself. Conversely, disfluent fonts, or those that distract the reader from the content, can be useful because they cause a reader to devote more mental resources to process the text, causing them to slow down, which has been shown to increase recall and test performance (Oppenheimer et al., 2010). As the current study was designed to focus more on participants’ overall

judgments and perceptions, rather than their recall of information, fluent fonts were chosen. Both fonts, Times New Roman and Calibri, have been employed as defaults in the popular word-processing software Microsoft Office, thereby increasing the likelihood that participants had both been exposed to and were comfortable with reading in the fonts. The switch from serif to sans-serif was made for Syllabus 2 and 3 to better align with the purpose of the document, as sans-serif fonts have been found by some literature to be more suitable for scanning (Krause, 2016) whilst serif fonts may be better for extended reading (Williams, 2006), which is not the purpose of syllabi. Figure 2 shows the overall design changes of Syllabus 2.

The final version, Syllabus 3, was created using the same basic principles as Syllabus 2, but with more attention placed on the aesthetic features of the syllabus, which included both color and imagery. One of the purposes of the third version was to ascertain whether the addition of decorative design elements would influence participants' perceptions. In a study comparing perceptions of syllabi length and use of images, Harrington & Gabert-Quillen (2015) concluded that when compared to clearly important factors such as overall organization, white space, and large bold headings that "the use of images...did not add much value" (p. 8). The researcher wanted to see if this was not only true for L1 students, but for the case for language learners as well. Syllabus 3 was also further split into smaller chunks by including a dual-column layout, with borders clearly separating sections of the text. Headings were also placed in vertical orientation to increase font disfluency (Cacali, 2016),

Figure 3. Portion of Syllabus 3

The image shows a portion of a syllabus with a dark blue header containing the text 'English Composition Syllabus' and a photograph of a pen on a notepad. Below the header is a table with course details, followed by a dual-column layout for course description and evaluation criteria.

<b>Course #</b>	English 1101	<b>Instructor</b>	John Smith
<b>Title</b>	English Composition I	<b>Office</b>	9-201
<b>Semester</b>	Fall 2018	<b>Office Hours</b>	23:00-23:30
<b>Time</b>	23:00	<b>Phone</b>	090-9282-3939
<b>Classroom</b>	9-101	<b>Email</b>	jsmith@iuni.ac.jp

<b>Course Description</b>	This course is designed to increase the student's ability to construct written prose of various kinds.	<b>Assignments &amp; Evaluation</b>	<b>Journal</b>	15%
	It focuses on methods of organization, analysis, research skills, and the production of short argumentative and expository essays; readings consider issues of contemporary social and cultural concern.		<b>In-Class Assignments</b>	15%
A passing grade is C.		<b>Three Essays</b>	45%	
		<b>Writing Across the Curriculum Assignment</b>	25%	
		Interview 10%		
		Essay (and draft) 15%		

causing readers to devote more mental resources to processing them (Hyönä & Lorch, 2004), further supporting the chunked structure. Figure 3 shows the overall structure of Syllabus 3.

### **Participants**

Participants (N=56) were selected from second-year students in the International Communications department of a private Japanese international university. Participants' first language was Japanese and were predominantly female (N=50). All participants received a bilingual explanation of the research, their involvement, and the associated risks. The participants indicated their consent on a bilingual consent form in accordance with the university's research ethics policy.

### **Procedure**

Each participant was given a folder containing all three variations of the syllabus in random order. On an iPad, participants opened the research instrument, an online survey hosted by Qualtrics (<https://www.qualtrics.com/>). After reading the research description and agreeing to the consent form, each participant was asked to confirm that all three versions of the syllabus were contained in their folder. As participants would need to rate each version of the document, it was crucial that they would be able to identify the correct syllabus that each block of the survey referred to. This was accomplished by adding a color-coded banner to the top of each syllabus that was also used in the online survey itself to identify each syllabus. Each banner also featured a visual icon and a title (the name of an animal). The researcher avoided labeling the surveys with a letter or number, as participants could mistakenly infer that the quality of the syllabus correlated with the assigned number or letter.

Following their confirmation of the materials, participants were presented a block of questions about one of the syllabi. A within-subjects design was selected as the research design for this study to allow for comparison of participants' ratings of the three syllabi. This was counterbalanced by randomizing the order in which the syllabi were presented to each participant. Participants completed the same block of questions about each of the three syllabi. In each block, there were seven statements. Participants indicated their agreement with the statements (designated S1 through S7) on a 5-point Likert scale ranging from strongly disagree to strongly agree (Table 1).



*Table 1 Statements Used to Rate Each Syllabus*

<b>Statement stem</b>	<b>Criteria</b>	<b>Designation</b>
The teacher who created the NAME (color) document is...	professional	S1
	prepared	S2
	caring	S3
	good at teaching	S4
The university where the NAME (color) document is used is...	high level	S5
	beautiful	S6
	a good place to study	S7

After participants completed their ratings of each syllabus, they were presented with two final holistic items. The first asked them to rank the three syllabi from best to worst, and the final item was an open-ended question that asked participants to explain their rationale for both the highest-ranked and lowest-ranked document. The average time to complete the entire survey was 8 minutes.

### **Analysis**

Responses to the Likert scale questions were assigned point values from - 2 to 2 points with negative values representing the “strongly disagree” and “disagree” and positive values representing “agree” and “strongly agree”. A repeated-measures analysis of variance (rANOVA) was used to compare the mean values of participants’ ratings for the three different syllabi.

The rankings data were also codified into numerical values, the worst-ranked syllabus assigned 0, the middle 1, and the highest ranked syllabus being assigned 2. The ranking question was analyzed using a Wilcoxon sign-ranked test as the ordinal data compared three matched pairs (Syllabus 1 & Syllabus 2, Syllabus 1 & Syllabus 3, and Syllabus 2 & Syllabus 3), the distribution of which are symmetrical in shape.

Furthermore, open-ended responses were thematically codified. An independent rater completed the coding process, and the Pearson correlation coefficient was calculated at  $r = 0.898$ .

## RESULTS

### Ratings of the Teacher

Participant agreement that the teacher who created the syllabus was professional,  $F(2, 110) = 10.890$ ,  $p = 0.000$ , prepared,  $F(2, 110) = 19.317$ ,  $p = 0.000$ , caring,  $F(2, 110) = 35.248$ ,  $p = 0.000$ , and good at teaching,  $F(2, 110) = 24.269$ ,  $p = 0.000$ , were all statically significant. A Bonferroni post-hoc analysis was performed to show the difference between pairs of the three syllabi, revealing significant difference on the mean values between Syllabus 1 and both Syllabus 2 and Syllabus 3, but not between Syllabus 2 and Syllabus 3 (Table 2).

Table 2. Pairwise Results for Statements about the Teacher

Syllabus Pair	Professional (S1)		Prepared (S2)		Caring (S3)		Good at teaching (S4)	
	MD	Sig.	MD	Sig.	MD	Sig.	MD	Sig.
1 2	0.857*	0.000	0.839*	0.000	1.482*	0.000	1.214*	0.000
1 3	0.554*	0.026	0.982*	0.000	1.429*	0.000	1.179*	0.000
2 3	0.304	0.194	0.143	1.000	0.054	1.000	0.036	1.000

\*Significance at the 0.05 level

### Ratings of the University

Participant ratings were not statistically different with regards to participants' agreement with the statement that the university was high level,  $F(2, 110) = 1.701$ ,  $p = 0.187$ . However, the results were significant for the university is beautiful,  $F(2, 110) = 37.016$ ,  $p = 0.000$ , and a good place to study.  $F(2, 110) = 14.272$ ,  $p = 0.000$ . A Bonferroni test indicated that for significant items, the difference again was found between Syllabus 1 and both Syllabus 2 and 3, but not between Syllabus 2 and 3 (Table 3).

Table 3. Pairwise Results for Statements about the Institution

Syllabus Pair	High level (S5)		A good place to study (S6)		Beautiful (S7)	
	MD	Sig.	MD	Sig.	MD	Sig.
1 2	0.357	0.185	1.321*	0.000	0.929*	0.000
1 3	0.143	1.000	1.607*	0.000	0.839*	0.000
2 3	0.214	0.183	0.286	0.427	0.0890	1.000

\*Significance at the 0.05 level

### Ranking of the Three Syllabi

The Wilcoxon signed-rank test showed that there was a significant difference in the rankings assigned by participants to Syllabus 1 and

Syllabus 2 ( $Z = -6.076$ ,  $p = 0.000$ ) and between Syllabus 1 and Syllabus 3 ( $Z = -5.242$ ,  $p = 0.000$ ). The test did not elicit a statistically significant difference between Syllabus 2 and Syllabus 3 ( $Z = -1.397$ ,  $p = 0.162$ ). Descriptive statistics showed considerable variation in the mean values between Syllabus 1 (0.21) and the other two syllabi, Syllabus 2 (1.50) and Syllabus 3 (1.29). Remember that the syllabi were ranked on a scale from 0 to 2 (Table 4).

*Table 4. Descriptive Statistics for Syllabus Ranking Item*

Document	Mean score	Score distribution numbers		
		0 (Worst)	1	2 (Best)
Syllabus 1	.21	46	8	2
Syllabus 2	1.50	2	24	30
Syllabus 3	1.29	8	24	24

### **Open-ended Comments**

Thematic analysis of the comments yielded several common threads. For this study, categories were only considered a “theme” if there were three or more comments (see Hagaman & Wutich, 2016, p. 27). Since participants only provided comments related to their highest and lowest ranked syllabi, the number of comments respective to each syllabus is different from the total number of participants in the study.

*Table 5. Open-ended Comment Themes for Syllabus 1*

Themes from best rankings	Number
Total number of rankings as best	2 (3.6%)
No themes	
Themes from worst rankings	Number
Total number of rankings as worst	46 (82.1%)
Hard	18
Too many words	10
Lack of emphasis	9
Lack of clarity	3
Poor font choice	8
Couldn't understand important things	4
Poor layout/organization	6
Boring	3

Syllabus 1 received the highest number of negative evaluations, 46 (82.1%) participants ranked it as “worst”, with only two participants (3.6%) indicating that they thought it was the best. Frequent themes included that it appeared “hard” (18), there were “too many words” (10), and that there was a “lack of emphasis” (9) in the syllabus. Less frequent themes and the number of times each appeared in the comments are summarized in Table 5.

Of all three syllabi, Syllabus 2 was the most positively evaluated, with 30 (53.5%) participants indicating that it was the “best”. The most common rationales for this ranking were “organization and layout” (11), “easy to understand” (11), and “easy to read” (11). “Simplicity” and “font choice” also emerged as themes in participant responses, albeit less frequently. The frequency of all themes can be found in Table 6.

*Table 6. Open-ended Comment Themes for Syllabus 2*

Themes from best rankings	Number
Total number of rankings as best	30 (53.5%)
Organization/layout	11
Easy to understand	11
Easy to read	11
Simplicity	6
Font choice	4
Themes from worst rankings	Number
Total number of rankings as worst	2 (3.6%)
None	

Syllabus 3 was the most divisive. 24 (42.8%) participants indicated that it was the “best”, and 8 (14.2%) reporting that it was the worst. Rationales for ranking it as the best included the following themes: “Organization and layout” (8), “easy to read” (7), “easy to understand” (5), and “good emphasis” (4). On the other hand, of the eight participants who indicated that they felt that it was the worst, 3 indicated that they felt it was “not suitable for purpose” (see Table 7).

## **DISCUSSION**

Overall, the data show that participants rated both the instructor and the institution differently depending on the version of the syllabus. Participant evaluation of statements concerning the instructor (the teacher is professional, prepared, caring, and good at teaching) were all

statistically significant, with pairwise analysis showing a strong difference between Syllabus 1 and the other two syllabi. The findings fall in line with the literature that suggest that course documents influence student perceptions of their instructor. The same trend of participants ranking items differently between Syllabus 1 and the other two syllabi was also evident in their ratings of the university as beautiful and a good place to study.

*Table 7. Open-ended Comment Themes for Syllabus 3*

Themes from best rankings	Number
Total number of rankings as best	24 (42.8%)
Organization/layout	8
Easy to read	7
Easy to understand	5
Emphasis	4
Themes from worst rankings	Number
Total number of rankings as worst	8 (14.2%)
Not suitable for purpose	3

The reasons for the difference between Syllabus 1 and the other syllabi, and similarity between Syllabus 2 and Syllabus 3, can be traced to some fundamental differences in their design, which is corroborated by participants' open-ended responses. One of the fundamental differences between Syllabus 1 and the others is a lack of clear organizational features such as emphasized section headings that divide the syllabus into sections. Though Syllabus 1 does have section headings and white space after each section, both other syllabi featured an increase in font size and the use of bold text to make them stand out from the body text. The most common theme in participant comments about both Syllabus 2 and 3 was that they had good organization and layout, with Syllabus 2 receiving 11 comments and Syllabus 3 receiving 8 comments. One participant remarked that "[Syllabus 2] is organized and I can understand the content easily at a glance". Participant comments seem to support Deming's (1994) view that "format is perhaps the most essential element in document design. It enables the reader to see immediately the structure, hierarchy, and major content sections of a document" ("Format", para. 1).

A second major difference between Syllabus 1 and the other two versions was the font type classification. Syllabus 1 used a serif font, Times New Roman, while the other versions used the sans serif font

Calibri. In hindsight, the research design of the study could have been improved by unifying the font of all three versions of the syllabus to eliminate this as a potential cause for the differing ratings between Syllabus 1 and the other syllabi, allowing the study to better focus on the organizational and layout or hierarchical principles of document design. As it stands, it is clear from comments about Syllabus 1 that participants considered Syllabus 1 to have a “poor font choice” (8 comments) and “too many words” (10 comments), though in the case of the latter, the number of words on each syllabus were the same. In contrast, regarding Syllabus 2, four participants remarked positively about the font. Regarding Syllabus 3, font type was not mentioned by participants, suggesting that organizational/layout factors may have been more important.

Another interesting finding is the lack of statistical difference between Syllabus 2 and Syllabus 3. Though Syllabus 2 was marginally more highly rated, it did not approach statistical significance. Both Syllabus 2 and 3 used document design principles to clearly segment sections of the document with large bold headings. As a result of the clear grouping of information, there is also more perceptible white space around items. White space is important as it helps the reader feel that the text is more comfortable and accessible (see Lupton, 2014). Additionally, Syllabus 3 contained color, a picture, and borders clearly separating each section of the syllabus. Surprisingly, only one participant commented on the picture, while none mentioned the color; but this is in line with the findings of Harrington and Gabert-Quillan (2015) that images possibly “did not add much value” (p. 8). It seems to indicate that there are diminishing returns or even detrimental effects if too many stylistic differentiations are applied to a text. This seems to suggest that there may be a happy medium when designing documents, a moderate level of textual formatting rather than exaggerated differentiation that could be perceived as negative attention-seeking features by readers (see Moys, 2017, p. 10). Some participants even remarked that Syllabus 3 was “not suitable for purpose”, which emerged as a theme from the comments (3 total mentions). One participant said, “I feel this document focuses on design rather than the importance of telling information.” This suggests that if effort is devoted to ensuring that course documents have a clear structure of headings and emphasize important information, additional embellishments and differentiations may simply be superfluous for university course syllabi.

Only one item, “the university is high level” did not reach statistical significance, and no differences were observed between the three syllabi. Interestingly, the reason for this may be found in the open-ended responses. The degree to which a university is high-level is often correlated with difficulty in part because of the entrance exam

system (Kuramoto & Koizumi, 2018), so a course document perceived as difficult would fit well within that paradigm. The most common themes in participant comments about Syllabus 1 were that it was “hard”, at 18 comments, and had “too many words”, at 10 comments. Based on their impression that the syllabus was hard or difficult to read, participants may have connected it with their impression that high-level universities are difficult.

### **Limitations**

Based on the data collected from the participant population of this study, broad conclusions cannot be made about the effect of document design on language learner’s perceptions of their teacher and university. More research is needed to test with other populations having different L1s or from different educational contexts. Furthermore, the participants were all second-year students at the university, whose personal experiences with university education may have informed their opinions. Their exposure to both well-designed and poorly-designed course materials over their university career may have influenced their perceptions of each syllabus. Administering the study to first-year students may reduce the potential inference from participant experiences.

Furthermore, as mentioned previously, the data from the study does not conclusively find which features of document design contributed to the difference in ratings. While organization and layout are important, the degree to which the font type influenced ratings is an issue in the study. Based on the available data, this is not easily quantifiable, reducing the certainty of conclusions about the layout and organization. Further research is needed to isolate specific features of document design that influence student perceptions of their teacher and institution.

### **CONCLUSION**

The current study echoes findings in L1 settings that course documents influence student perceptions of their learning context. The design of course documents can influence perceptions positively or negatively of their instructor and their institution. Syllabi that are administered at the beginning of a course, are especially of interest as the perceptions and impressions created by these documents could color student perceptions for an extended time. Whether these are administered on paper, or through an online course management system, students will make judgments partially based on their design. Linaard et al. (2006) make the astute assumption that “in the presence of a very positive first impression, a person may disregard or downplay possible negative issues encountered later” (p. 115). Establishing instructor ethos and rapport with students as early in the progression of a course as possible will lead to more positive experiences and outcomes. While this is a

complex, multi-faceted process, each factor that is isolated and demonstrated to have a role in this process aids instructors in improving their experience and that of their students.

The findings of this study also highlight the importance of considering knowledge and best practices from other fields to improve practice within one's own. Though document design is often perceived to be useful for technical communication, instruction manuals, and forms, it also has clear applications in education, specifically in language education. However, without concerted effort to demonstrate its importance and promote attention to design in educational communities, changing practices will be difficult. Teacher education programs and professional development initiatives should incorporate training about the role of design in supporting the teaching and learning process. Educators with experience in design need to have opportunities to share their valuable skill set with their peers. With more attention to the impact of design in education on both research and practice, the experiences of both teachers and students will be improved. The practice of teaching and learning will be enhanced as we incorporate the expertise, knowledge, and research from other fields or disciplines.

## REFERENCES

- Aakhus, M. (2007). Communication as design. *Communication Monographs*, 74(1), 112–117.  
<https://doi.org/10.1080/03637750701196383>
- Bean, J. (2015). The Times New Roman lie. *Interactions*, 22(3), 24–25.  
<https://doi.org/10.1145/2742938>
- Belcak, A. (2020, August 25). *How to list your resume references*. Cultivated Culture. <https://cultivatedculture.com/resume-references/>
- Cacali, E. (2016). The effects of font on vocabulary memorization. *Kwansei Gakuin University Humanities Review*, 21, 63–72.  
<http://hdl.handle.net/10236/00025549>
- Deming, L. (1994). Document standardization: Maintaining project harmony. In O. J. Allen & L. H. Deming (Eds.), *Publications management: Essays for professional communicators*. Routledge.  
<https://www.routledge.com/Publications-Management-Essays-for-Professional-Communicators/Allen-Deming/p/book/9780895031631>
- de Stadler, L. (2003). 'Paying' too much? The cost of bad document design in internal communication. *Document Design*, 4(1), 42–47.  
105
- 
- Lege, R. (2023). Design Matters: Course document design's effect on language learners' perceptions. *Literacies and Language Education: Research and Practice*, Spring 2023, 90-109. English Language Institute, KUIS.



<https://doi.org/10.1075/dd.4.1.04sta>

Doermann, D., Rivlin, E., & Rosenfeld, A. (1998). The function of documents. *Image and Vision Computing*, 16(11), 799–814. [https://doi.org/10.1016/S0262-8856\(98\)00068-7](https://doi.org/10.1016/S0262-8856(98)00068-7)

Felten, P. (2008). Visual literacy. *Change: The magazine of higher learning*, 40(6), 60–64. <https://doi.org/10.3200/CHNG.40.6.60-64>

Fukuya, Y., & Clark, M. (2001). A comparison of input enhancement and explicit instruction of mitigators. In L. Bouton (Ed.), *Pragmatics and Language Learning Volume 10* (pp. 111–130). University of Illinois at Urbana-Champaign. <https://files.eric.ed.gov/fulltext/ED503649.pdf>

Ganier, F. (2004). Factors affecting the processing of procedural instructions: implications for document design. *IEEE Transactions on Professional Communication*, 47(1), 15–26. <https://doi.org/10.1109/TPC.2004.824289>

Hagaman, A. K., & Wutich, A. (2016). How many interviews are enough to identify metathemes in multisited and cross-cultural research? Another perspective on Guest, Bunce, and Johnson's (2006) landmark study. *Field Methods*, 29(1), 23–41. <https://doi.org/10.1177/1525822x16640447>

Han, Z., Park, E. S., & Combs, C. (2008). Textual enhancement of input: Issues and possibilities. *Applied Linguistics*, 29(4), 597–618. <https://doi.org/10.1093/applin/amn010>

Harrington, C. M., & Gabert-Quillen, C. A. (2015). Syllabus length and use of images: An empirical investigation of student perceptions. *Scholarship of Teaching and Learning in Psychology*, 1(3), 235–243. <https://doi.org/10.1037/stl0000040>

Huizinga, T., Handelzalts, A., Nieveen, N., & Voogt, J. M. (2013). Teacher involvement in curriculum design: need for support to enhance teachers' design expertise. *Journal of Curriculum Studies*, 46(1), 33–57. <http://doi.org/10.1080/00220272.2013.834077>

Hyönä, J., & Lorch, R. F. (2004). Effects of topic headings on text processing: Evidence from adult readers' eye fixation patterns. *Learning and Instruction*, 14(2), 131–152. <https://doi.org/10.1016/j.learninstruc.2004.01.001>

Ishiyama, J. T., & Hartlaub, S. (2002). Does the wording of syllabi affect student course assessment in introductory political science classes? *Political Science and Politics*, 35(3), 567–570.

106

---

Lege, R. (2023). Design Matters: Course document design's effect on language learners' perceptions. *Literacies and Language Education: Research and Practice*, Spring 2023, 90–109. English Language Institute, KUIS.

<https://doi.org/10.1017/S1049096502000860>

Jonassen, D. (2010). *Learning to solve problems: A handbook for designing problem-solving learning environments*. Routledge.  
<https://www.routledge.com/Learning-to-Solve-Problems-A-Handbook-for-%20Designing-Problem-Solving-Learning/Jonassen/p/book/9780415871945>

Jourdenais, R., Ota, M., Stauffer, S., Boyson, B., & Doughty, C. (1995). Does textual enhancement promote noticing? A think-aloud protocol analysis. In R. Schmidt (Ed.), *Attention and Awareness in Foreign Language Learning (Technical Report #9)* (pp. 183–216). University of Hawaii.

Krause, J. (2016). *Lessons in Typography: Must-know typographic principles presented through lessons, exercises, and examples*. New Riders.  
<https://www.peachpit.com/store/lessons-in-typography-must-know-typographic-principles-9780133993752>

Kumpf, E. (2000). Visual metadiscourse: Designing the considerate text. *Technical Communication Quarterly*, 9(4), 401–424.  
<https://doi.org/10.1080/10572250009364707>

Kuramoto, N., & Koizumi, R. (2018). Current issues in large-scale educational assessment in Japan: Focus on national assessment of academic ability and university entrance examinations. *Assessment in education: principles, policy & practice*, 25(4), 415–433.  
<https://doi.org/10.1080/0969594X.2016.1225667>

Leow, R., Egi, T., Nuevo, A. M., & Tsai, Y. (2003). The roles of textual enhancement and type of linguistic item in adult L2 learners' comprehension and intake. *Applied Language Learning*, 13(2), 1–16.  
<http://www.dliflc.edu/wp-content/uploads/2014/04/13twop0.pdf>

Lingaard, G., Fernandes, G., Dudek, C., & Brown, J. (2006). Attention web designers: You have 50 milliseconds to make a good first impression! *Behavior & Information Technology*, 5(2), 115–126.  
<https://doi.org/10.1080/01449290500330448>

Lupton, E. (2014). *Thinking with type: A critical guide for designers, writers, editors, & students* (2nd ed.). Chronicle Books.

McCabe, P. P., Kraemer, L. A., Miller, P. M., Parmar, R. S., & Ruscica, M. B. (2006). The effect of text format upon underachieving first year  
107

---

Lege, R. (2023). Design Matters: Course document design's effect on language learners' perceptions. *Literacies and Language Education: Research and Practice*, Spring 2023, 90-109. English Language Institute, KUIS.

college students' self-efficacy for reading and subsequent reading comprehension. *Journal of College Reading and Learning*, 37(1), 19–42. <https://doi.org/10.1080/10790195.2006.10850191>

McCroskey, J. & Teven, J. (1999). Goodwill: A reexamination of the construct and its measurement, *Communication Monographs*, 66(1), 90–103. <https://doi.org/10.1080/03637759909376464>

Mead, J. A., & Hardesty, D. M. (2017). Price font disfluency: Anchoring effects on future price expectations. *Journal of Retailing*, 94(1), 102–112. <https://doi.org/10.1016/j.jretai.2017.09.003>

Morishima, Y. (2013). Allocation of limited cognitive resources during text comprehension in a second language. *Discourse Processes*, 50(8), 577–597. <https://doi.org/10.1080/0163853X.2013.846964>

Moys, J. (2017). Visual rhetoric in information design: designing for credibility and engagement. In: A. Black, P. Luna, O. Lund, & S. Walker (Eds.), *Information design: research and practice*. Routledge. <https://www.routledge.com/Information-Design-Research-and-Practice/Black-Luna-Lund-Walker/p/book/9780415786324>

Myers, S. (2004). The relationship between perceived instructor credibility and college student in-class and out-of-class communication. *Communication Reports*, 17(2), 129–137. <http://dx.doi.org/10.1080/08934210409389382>

Oppenheimer, D., Diemand-Yauman, C., & Vaughan, E. (2010). Fortune favors the bold (and the italicized): Effects of disfluency on educational outcomes. *Proceedings of the Annual Meeting of the Cognitive Science Society*, 32, 2739–2742. <https://escholarship.org/uc/item/4wd1s7hj>

Perrine, R. M., Lisle, J., & Tucker, D. L. (1995). Effects of a syllabus offer of help, student age, and class size on college students' willingness to seek support from faculty. *The Journal of Experimental Education*, 64(1), 41–52. <https://doi.org/10.1080/00220973.1995.9943794>

Reinders, H., & Ellis, R. (2009). The effects of two types of input on intake and the acquisition of implicit and explicit knowledge. In *Implicit and explicit knowledge in second language learning, Testing and Teaching* (pp. 281–302). Multilingual Matters. <https://doi.org/10.21832/9781847691767>

Schriver, K. (1997). *Dynamics in document design: Creating text for*

readers. Wiley. <https://dl.acm.org/doi/book/10.5555/249331>

Sharwood-Smith, M. A. (1993). Input enhancement in instructed SLA: Theoretical bases. *Studies in Second Language Acquisition*, 15(2), 165–179. <https://doi.org/10.1017/S0272263100011943>

Smith, M. (2017). Merging mediums: Applying document design to online help systems to increase usability. *MSU Graduate Theses*. <https://bearworks.missouristate.edu/theses/3064>

White, J. (1998). Getting the learner's attention: A typographical input enhancement study. In C. Doughty & J. Williams (Eds.), *Focus on form in classroom second language acquisition* (pp. 85–113). Cambridge University Press.

Williams, R. (2006). *The non-designer's type book* (2nd ed.). Peachpit Press.

Wolfe, J., Roderick, R., & Rooney, A. F. (2019). Improving instructor ethos through document design. *Composition Studies*, 47(2), 146–166. <https://eric.ed.gov/?id=EJ1270430>

Wong, W. (2005). *Input enhancement: From theory and research to the classroom*. McGraw-Hill.

Zyzik, E. & Pascual, L. M. (2015). Spanish differential object marking: An empirical study of implicit and explicit instruction. *Studies in Hispanic and Lusophone Linguistics*, 5(2), 387–421. <https://doi.org/10.1515/shll-2012-1135>