IDENTIFYING STUDENT PREFERENCES IN ONLINE CONTENT AND LANGUAGE INTEGRATED LEARNING COURSES

IDENTIFICAR LAS PREFERENCIAS DE LOS ALUMNOS EN LOS CURSOS A DISTANCIA DE APRENDIZAJE INTEGRADO DE CONTENIDOS Y LENGUAS EXTRANJERAS

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Abstract
Currently in Mexico, 51% of Mexicans who are studying use online platforms and courses. A study was conducted in the Fall of 2019, 162 students’ perceptions in various online Content and Language Integrated Learning courses offered completely in English in a university in Monterrey, Mexico. The purpose of the study was to determine students’ perceptions of the most important and least important components, as well as students’ greatest challenges in taking online courses in a foreign language. The students’ perceptions were categorized into six areas: course organization, interaction with teachers and classmates, ease of navigation, technology, course materials and content, and assessment. Students selected the following as the most important course components: course organization, easily understood content, quality of course materials. The online course components that students selected as the least important were interaction with classmates, videos recorded by the instructor, and course objectives. The study also revealed a weak relationship in the student to student interactions. This study provided the instructor with feedback on the online courses so that the instructor can make future course modifications to increase student success in the online courses.

Key Words: Online Course Design; Content and Language Integrated Learning; Student Feedback; Surveys; Online course delivery

Resumen
Actualmente en México, el 51% de los mexicanos que estudian usan plataformas y cursos en línea. En el otoño de 2019, se realizó un estudio sobre las percepciones de 162 estudiantes en diferentes cursos de Aprendizaje Integrado de Contenidos y Lenguas Extranjeras en línea que se ofrecen completamente en inglés en una universidad de Monterrey, México. El propósito del estudio fue determinar las percepciones de los estudiantes sobre los componentes más importantes y menos importantes, así como los mayores desafíos de los estudiantes para tomar cursos en línea en un idioma extranjero. Las percepciones de los estudiantes se clasificaron en seis áreas: organización del curso,
interacción con maestros y compañeros de clase, facilidad de navegación, tecnología, materiales y contenido del curso y evaluación. Los estudiantes seleccionaron lo siguiente como los componentes más importantes del curso: organización del curso, contenido fácil de entender, calidad de los materiales del curso. Los componentes del curso en línea que los estudiantes seleccionaron como los menos importantes fueron la interacción con los compañeros de clase, los videos grabados por el instructor y los objetivos del curso. El estudio también reveló una relación débil en las interacciones entre estudiantes. Este estudio proporcionó a los instructores las herramientas para evaluar los cursos en función de las preferencias de los estudiantes con el fin de realizar futuras modificaciones del curso para aumentar el éxito de los estudiantes en los cursos en línea.

**Palabras clave:** Diseño de cursos en línea; Aprendizaje Integrado de Contenidos y Lenguas Extranjeras; retroalimentación; encuestas; enseñanza en línea
1. **INTRODUCTION**

Modern technologies and the Internet have greatly influenced the design and delivery of university courses. Currently in Mexico, 51% of Mexicans who are studying use online platforms and courses (Ortega, 2018). Regarding the percentage of online students in Mexico, 48% are studying a bachelor’s degree. In the United States, the Center for Online Education identified the percentage of college and university students taking at least one online course at 33% in 2019. According to a 2011 report by Radford, “From 2000 to 2008, the percentage of undergraduates enrolled in at least one distance education class expanded from 8 percent to 20 percent…” (2011: 3). Kentor further stated another reality that “Today, with the advancements in communications technology and the connectivity of computers and the Internet, distance education is commonplace” (2015: 30). Beyond doubt, a significant majority of students will take an online course or degree program at some point in their academic studies.

Which leads us to effective and appropriate design and delivery practices for students along with their preferences for the design and delivery of online courses. Online courses continue to expand and grow, but design and delivery issues directly impact the course quality and student learning. Thus, this study seeks to examine students’ preferences for online Content and Language Integrated Learning (CLIL) courses. The goal is to determine students’ preferences in blended CLIL courses and based online course design evaluation rubrics. ELT Think Tank stated that “Student feedback can be a powerful tool for teachers to improve their skills and increase their delivery effectiveness all while increasing their students’ performance and engagement.” (2018: 2). Vonderwell (2003) made the suggestion that students’ perspectives can give teachers a detailed view on the students’ learning in an online course. Thus, this study will use student feedback in an anonymous survey with both multiple choice and open questions to identify student preferences for blended CLIL courses.

In a traditional face-to-face session or on-site class, the instructor receives instant feedback on topics, activities, and the course overall. While in the online classroom, that student feedback on effectiveness of activities, curriculum, and course design are not as readily available. In the field of asynchronous and multimedia learning, Bradford (2011) mentions one of the components of providing feedback is to further improve design. Consequently, in the Fall 2019 semester, an anonymous survey was conducted to receive students’ feedback on most important and least important components of the course design and delivery.

2. **THEORETICAL BACKGROUND**

2.1. A brief history

The first courses using computer assisted instruction started with the development of P.L.A.T.O. (Programmed Logic for Automatic Teaching Operations) at the University
of Illinois in 1960. Additionally, in the 1960s, Stanford University taught beginning level Russian using Computer Assisted Language Learning (C.A.L.L.). These beginning courses were based on a behaviorist approach of language learning—and teaching that used listen and repeat drills, learning vocabulary, grammar drills, and direct translation (Butler-Pascoe, 2011). Today, teachers teach languages using a more integrative approach.

Since online classes became a reality in the 1980s, which was approximately 10 years after the internet was founded, teachers have been trying to optimize the online learning, teaching environment, and course design to help students learn. Kentor summarized the history of online education with “Online educational programs emerged in 1989, when the University of Phoenix began using CompuServe, one of the first consumer online services” (2015: 28). In the 1990s, many more universities and colleges started experimenting with the online delivery of courses.

Warschauer (1996) commented that thanks to the technological developments of multi-media computers and the Internet, CALL has transformed from a behaviorist CALL to an integrative CALL. This integrative CALL is more complete integration of the teaching of the linguistic skills, authentic environment, and with a focus on the content and learning strategies. In addition, the transformation from using web 1.0 in which users can only read internet page content to today’s web 2.0 and 3.0 in which users can now interact with the pages as well as create and participate to influence the internet. This internet transformation and evolution have directly impacted course design and delivery.

Now, students can choose from a variety of online courses in a second or foreign language from basic to advanced levels. Students can also choose the online language course either on only learning the language or actually taking a content course in that language. This study focuses on online courses in Content Language Integrated Learning (CLIL). Given the current growth in online courses, the author has concentrated on the students’ perceptions of the most important course components, the students’ challenges, and their difficulties in taking an online course.

The importance in designing, teaching, and delivering a course for online learning is to not just replicating a traditional, on-site, face-to-face class, but rather designing the course for an online environment. While online learning and online courses continue to expand in higher education, the instructors must attain knowledge of online course quality. This knowledge of the online course can be used to effectively design and deliver an online course, identify the weaknesses, and focus on opportunities for online course design. Understanding the barriers, difficulties, challenges, and opportunities in designing and delivering an online course are essential components for an online instructor.

2.2. Student feedback to instructors

After several years of teaching online courses, the author felt both out of touch and out of date with the students, the course design, and the delivery. Questions began to arise regarding the most appropriate and effective online course design and delivery methods along with an overall increasing quantity of students per semester. Consequently, the author began to use anonymous exit surveys for all students to express their concerns and
feedback at the end of a course. Then fast forward a few years to 2019 and now the author has an increasing number of online and blended course in CLIL and with a much larger number of students. Smyth states that “continuous student feedback is essential to designing a course that delivers the appropriate learning outcomes and experiences” (2019: 1). Teachers, like students, also need feedback to continually and constantly improve and adapt the classes and courses to the students’ needs and the ever-changing Information and Communications Technology (ICT). Smyth summarizes with “Student feedback allows the faculty and I to understand which ideas and course design elements benefit the students (and which ones don’t) so that we can create more effective and engaging online learning experiences” (2019: 1).

2.3. Standards of Design for Online Courses

In 2016, Jaggars and Xu examined over 20 online courses from different areas with 687 students in community colleges to investigate correlations between course design and the students’ grades in the courses. Jaggars and Xu developed a course design rubric with four general areas of an online course: 1) course organization and presentation, 2) learning objectives and assessments; 3) interpersonal interaction; and 4) use of technology. A second source, Quality Matters (2018) developed 8 general standards of a Quality Matters Course Design Rubric Standards for Higher Education. The eight standards are:

1. Course Overview and Introduction
2. Learning Objectives (Competencies)
3. Assessment and Measurement
4. Instructional Materials
5. Learning Activities and Learner Interaction
6. Course Technology
7. Learner Support
8. Accessibility and Usability

Thirdly, Southern Oregon University details six areas in best course practices for online course design and delivery (2009). The six areas are syllabus, course content, opportunities for interaction, opportunities for feedback, assessment, and accessibility.

Fourth, Bradford (2011) conducted an investigation of college students who had taken online courses on student satisfaction and cognitive load. Bradford concluded from his study that the three factors important to students were: awareness, challenge, and engagement. The three categories proposed by Bradford would fall in the categories of course content and interaction for the previous researchers.

Thus, the author will examine these areas that are shared by Bradford, Jaggars and Xu, Quality Matters and Southern Oregon University 1) course organization, 2) interaction, 3) learning objectives, 4) assessment, 5) accessibility, and instructional materials (or presentation as named by Jaggars and Xu).

More studies were conducted by Muilenburge and Berge (2007) and Morville (2005). Muilenburge and Berge (2007) conducted a survey on barriers to student success on online learning on social interaction, academic skills, technical skills, learner motivation, and technical problems, to name only the barriers over which the instructor
has influence. Next, Morville (2005) mentions the factor of findability as a barrier to student success in a course. The findability that Morville mentions falls in the categories of course organization and presentation for Jaggars and Xu, for accessibility and usability in Quality Matters, and accessibility for Southern Oregon University. The components mentioned by Muilenburge and Berge also are included in the categories already mentioned by Jaggars and Xu, Quality Matters, and Southern Oregon University.

To sum up the common areas from the above authors, the researcher identified these six areas to ask for feedback on...

- Course organization
- Interaction with teacher and with classmates
- Accessibility, ease of navigation, usability
- Technology – difficulties using platform, effectiveness of the selected technology to support the curriculum and learning objectives (using videos, having students make videos, including slide decks, etc.)
- Presentation (course materials and content)
- Assessment

3. PURPOSE OF STUDY

The basic purpose of the study is to discover the students’ perceptions regarding their online courses. Following are the questions of this study:

1. Which components of the online course are most important to students?
2. Which components are least important?
3. Which components do the students think can be modified to improve their learning?
4. What are the students’ biggest challenges when taking an online course?

4. METHOD

4.1. Survey Design

The author designed a survey was designed to cover all the general standards of the Quality Matters, Southern Oregon University, and Jaggars and Xu categories. The author developed the rubric to identify students’ perceptions on most and least important course components as well as their difficulties in the course.

The survey was designed to cover the areas of: course organization; interaction with teacher and with classmates; accessibility, ease of navigation, usability; technology; presentation; and assessment. An anonymous website called survs.com was used to apply the survey and students were offered an incentive of extra points to complete the survey. The survey was designed to be completed in a short time to encourage students to complete the survey. Lastly, a combination of open and closed questions were used to allow the students to express their thoughts, preferences, and opinions and to allow for
both qualitative and quantitative analysis. Each student was sent a link to an anonymous survey in survs.com. See survey in appendix.

4.2. Participants

This survey was conducted in Monterrey, Nuevo Leon, Mexico in CLIL courses offered by a private university in Fall of 2019. The courses were offered completely in English and ranged from English for Academic Purposes, English for Specific Purposes, and General English. The variety of courses were all offered in a blended mode of delivery that included several on-site, face to face sessions and synchronous online sessions. Approximately 93% of the students were Mexicans and the other 7% were International students studying via the student exchange program at the university.

The students ranged from 18 to 28 years old and varied from first semester freshmen to last semester seniors. The same teacher taught all of the courses, but the courses were on different topics, different curriculum, and different in course design and activities. Out of a total of 192 students enrolled, 162 students took the survey. Students were offered extra points for completing the anonymous survey. Moreover, the students were of diverse majors as well as their reasons for taking the courses. Some of the courses were optional elective courses while other courses were obligatory core curriculum courses.

4.3. Online class delivery

All courses were given using the Blackboard learning management system. There were mandatory on-site, face to face sessions during the first week of class and other face to face sessions in the last weeks of class. The instructor interacted with students using asynchronous messages, e-mails, and video messages along with also monthly, synchronous sessions using both video and audio in the Collaborate tool in Blackboard. In addition, the collaborate sessions were also recorded for students to watch and for students unable to attend the synchronous session to watch. The instructor also offered office hours both on-site and online for synchronous sessions.

The courses were all regular semester long courses in the Fall of 2019 semester. All of the courses used a similar organization and design as mandated by the university’s online department. All courses were for students to both practice their English as well as develop their knowledge in academic areas or specific purposes.

5. RESULTS

5.1. Student experience with online courses

87 students (54%) were taking their first online course and that can be attributed to a significant number of students enrolled in these participating courses were first semester freshmen. The distribution of the 162 students according to the number of online courses taken is below.
The next question was on the students’ experience in taking online courses. The figure, below, details the percentage of students and their answers to the question of satisfaction with taking online courses.

Concerning the student satisfaction, 50% were very satisfied with their online course, 41% were somewhat satisfied and 8% were disappointed or had negative experiences.

5.2. Course Organization Preferences

In response to the question regarding students’ preferences in taking courses online, face to face, or blended courses, here is how the students responded on their preferences.
When the data between number of online classes students have taken was cross tabulated with their preferences on the class delivery mode, the students with less experience in taking online or blended classes, preferred more face to face sessions. On the other hand, the students with more experience in taking online courses, preferred less face to face sessions and more online sessions.

Table 1

Cross tabulation of student experience and preferences

<table>
<thead>
<tr>
<th>numbers of classes taken online</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% online</td>
<td>0%</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>80% online and 20% face to face sessions</td>
<td>3%</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>50% online and 50% face to face sessions</td>
<td>4%</td>
<td>3</td>
<td>3</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>100% in classroom</td>
<td>3%</td>
<td>2</td>
<td>2</td>
<td>9</td>
<td>8</td>
</tr>
</tbody>
</table>

Concerning the course materials for learning preferences, students had several options to choose from and could choose multiple options which means the students could select more than one answer. Below is the table summarizing student preferences of course materials.

Table 2

Students’ preferences for course materials

<table>
<thead>
<tr>
<th>Response</th>
<th>Number of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slide decks</td>
<td>91</td>
</tr>
<tr>
<td>A combination of slide decks and videos</td>
<td>67</td>
</tr>
<tr>
<td>A mix of digital textbook, power point slides and videos</td>
<td>54</td>
</tr>
<tr>
<td>Online session with the teacher</td>
<td>49</td>
</tr>
<tr>
<td>Textbook in pdf format</td>
<td>38</td>
</tr>
<tr>
<td>Videos</td>
<td>38</td>
</tr>
<tr>
<td>Recorded lecture by teacher</td>
<td>31</td>
</tr>
</tbody>
</table>
5.3. Course Accessibility, Ease of Navigation, Usability Preferences

On how the students prefer to access the course: 7 students (4%) preferred to access the course via the cellular telephone while 151 students (93%) preferred using their computers to access the course. Only 4 students (2%) preferred using their tablets to access the course. The component of course access via laptop or desktop computer was additionally selected as a highly important component for students.

5.4. Course Presentation (Course Materials and Content) Preferences

Regarding students’ preferences on using a paper or digital textbook. Students felt they learned more from using a paper textbook with 100 students or 62% choosing this option. On the digital textbook, 62 students or 38% felt they learned from this option.

5.5. Order of importance of course features

Next, the question was regarding the online course components and the students’ opinion of the most important components. Students rated the components from 1 to 5, with 1 being the most important and 5 the least important.

Students chose the most important components as course organization, easily understood content, course can be easily accessed via laptop or desktop computer, and quality of course materials as the most important online course components. The components chosen as the least important were interaction with classmates and videos recorded by teacher. The students identified the following components as of intermediate importance: the items of teacher’s announcements, course activities, teacher’s feedback, topic of the course, interaction with the teacher, technical support, course objectives, course can be easily accessed via cellular telephone, and online chats with the teacher.

![Figure 4. Order of importance of course features](image-url)
5.6. Students’ open answer responses

The survey also included an open question for students to write down their greatest challenge in taking an online content course in English. The answers were classified into categories. The greatest number of students responded that the greatest challenge was the due dates and self-organization. The distribution of the students’ greatest challenges is below.

Moreover, the detailed summary on the students’ greatest challenges was linked to one of the six categories of an online course design rubric. Below is the table summarizing the results.

Table 3

*Categorization of greatest challenge*

<table>
<thead>
<tr>
<th>Number of students</th>
<th>%</th>
<th>Category</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>89</td>
<td>55%</td>
<td>due dates, calendar, remembering to submit work, self-organization</td>
<td>Course organization</td>
</tr>
<tr>
<td>21</td>
<td>13%</td>
<td>course content and assignments</td>
<td>Presentation</td>
</tr>
<tr>
<td>18</td>
<td>11%</td>
<td>Miscellaneous</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>11%</td>
<td>interaction with instructor</td>
<td>Interaction with teacher</td>
</tr>
<tr>
<td>4</td>
<td>2%</td>
<td>tech- fast internet and blackboard</td>
<td>Technology</td>
</tr>
<tr>
<td>6</td>
<td>4%</td>
<td>feedback on assignment</td>
<td>Assessment</td>
</tr>
<tr>
<td>4</td>
<td>2%</td>
<td>online session</td>
<td>Interaction with teacher and classmates</td>
</tr>
<tr>
<td>4</td>
<td>2%</td>
<td>interaction with classmates</td>
<td>Interaction with teacher and classmates</td>
</tr>
</tbody>
</table>

Figure 5. Students’ greatest challenges in taking online course
The students’ answers to the question: if one area or detail of the online course could be changed, what would the student change, can be found next.

Figure 6. Categorization of students’ suggestions for course modifications

Concerning the reason why students take online courses, students had several options to choose from and could choose multiple answers for this question.

Table 4

*Reasons for taking online courses*

<table>
<thead>
<tr>
<th>Question</th>
<th>Number of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy to fit in my schedule</td>
<td>62</td>
</tr>
<tr>
<td>I work so I cannot come to class</td>
<td>18</td>
</tr>
<tr>
<td>The content of the course is easier online</td>
<td>7</td>
</tr>
<tr>
<td>On-site classes are boring</td>
<td>4</td>
</tr>
<tr>
<td>Course is only offered online</td>
<td>46</td>
</tr>
<tr>
<td>I simply prefer online classes</td>
<td>14</td>
</tr>
</tbody>
</table>

6. DISCUSSION

Results were analyzed both qualitatively and quantitatively. Results from this study correlated with Bradford’s study (2011) in the important areas of: active communication, due dates, and course presentation. More significant points were: 55% prefer the blended mode of an online course with several face-to-face sessions; learning materials most preferred by students were slide decks, videos, online simultaneous session with teacher, and digital resources; and 51% chose very satisfying as their experience in taking online courses. Additionally, the students’ biggest challenges in taking an online course were mentioned due dates, calendarization, remembering to submit work and self-organization as their biggest challenge, as mentioned by 55% of the students. This also correlates with the students’ suggestions for course modifications, since 17% of the students stated they wanted more notifications as well as modifications in due dates and the calendar. A smaller number of students (11%) also mentioned the preference for more face to face
sessions and more interaction with the teacher. Hence, this active communication is important for a successful online class experience. The study identified the strong areas of the course as: course organization, grading, and content. While, the course weak points that were determined by this study are: modify the notifications in the learning management system and change due dates to a fixed, determined day of each week.

Jaggar and Xu (2016) discovered their investigation that the strongest correlation was in the student to instructor relationship and a weak relationship in the student to student interaction. These same results are also confirmed here in this study because the students wanted more interaction with the instructor and placed much less importance on the interaction with their classmates. In this study, accessibility was not mentioned by students since the university uses the same standardized organization and format for all online courses. As a result, the students are already familiar with the organization and accessibility for the online courses.

This study has limitations since the survey could be more complete and in-depth for a more detailed analysis. Consequently, the survey could be administered to a larger sample size and to more classes over a longer period of time.

An important but indirect result of applying the surveys, was the students felt much more willing to express their difficulties and views on the course. The students felt that they had a voice in the course design and consequently, the students reflected on and realized which factors helped them to succeed in an online course. Many students realized and even directly stated that they needed assistance in their own time management for them to have success. The student’s viewpoint can be an important tool in improving the online course design and delivery since it allows them to have an ownership in the course and in their own learning.

Based on the above results, recommendations are to increase the frequency of online chat sessions. Secondly, to modify the notifications in the learning management system and due dates will change to a fixed, determined day of each week. Another recommendation is to develop and include a new unit on time management and self-organization for students to be aware of strategies and tips for better time management.

Lastly, this study provided the instructor with the tools to assess the courses, so that future course modifications can be made, to increase student success in the online courses. As ELT Think Tank states that “If we ask the right questions, we’ll hopefully get feedback we need to make meaningful changes in our teaching to create an effective and engaging environment” (2018: 2). Hence, student feedback on courses via surveys can help teachers to continually improve their courses.

REFERENCES


**APPENDIX: STUDENTS’ SURVEY**

1. How many TOTAL online classes have you taken or are currently taking now?
   - 1
   - 2
   - 3
   - 4
   - 5

2. How do you prefer to take your classes?
   - 100% online
   - Blended - 90% online and a few face-to-face sessions
   - Blended - 10% online and 1 short weekly face-to-face session
   - 100% in the classroom

3. What is the most important feature or features of an online course?
   rate from 1 to 5
   1 is the MOST important and 5 is LEAST important

   - course organization
   - course can be easily accessed via cell phone
   - course can be easily accessed via laptop or desktop computer
   - interaction with the teacher
   - videos recorded by teacher
   - online chats or online sessions with teacher
   - technical support for problems using blackboard and email
   - easily understood content
   - quality of course materials
   - the topic or subject of the course
   - interaction with your classmates
   - teacher’s feedback and comments on assignments
   - teacher’s announcements or messages
   - course objectives
   - course activities and assignments

4. What is your biggest difficulty or challenge in taking an online course?

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5. Which do you use more to access the online course?
   - cell phone
   - computer
   - tablet

6. Course materials:
   What do you prefer for learning?
   - textbook in pdf format
   - powerpoint slides
   - voice
   - a combination of powerpoint and videos
   - a mix of digital textbook, power point slides, and videos
   - online session with the teacher
   - recorded lecture by the teacher

7. Which do you feel you learn from more?
   - Digital textbook or paper textbook
   - digital textbook
   - paper textbook

8. Your experience with taking online courses has been...
   - very satisfying
   - somewhat satisfying
   - disappointing
   - absolutely terrible

9. Why do you take online courses?
   - easy to fit into my schedule
   - I work so I cannot come to class
   - the content of the course is easier online
   - online (pros/cons) classes are boring
   - course is only offered online
   - I simply prefer online classes

10. If you could change one thing about the online course that you are currently taking...
    what would you change?