Metaknowledge and Metalinguistic Strategies in the Spanish for Heritage Learners Classroom: a Curriculum Redesign

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Abstract
This article focuses on the curriculum redesign of a Spanish for Heritage Language Learners course sequence, and presents the results of two complementary studies: a) a pilot study on metaknowledge and management of strategies in the linguistic, socio-affective, and cognitive dimensions (Oxford, 2011; White et al., 2007; Wenden, 1998) among Spanish Heritage Language Learners (henceforth SHLLs); and b) the analysis of SHLLs’ written production during the curriculum implementation. The redesign of the program was built taking into account students’ previous knowledge and experiences, and aimed at: (1) advancing literacy in Spanish, (2) increasing management of academic registers, and (3) providing the foundation to develop and expand self-regulatory strategies for continuous language learning (Wenden, 1998; Van Lier, 2008; Duff, 2012). The new curriculum incorporated a modular organization that integrates linguistic, editing, and strategy-based activities along with cultural inquiry on main issues affecting Hispanic communities. The analysis of written samples validates the effectiveness of this metacognitive modular approach to teaching SHLLs.

Introduction

Spanish Heritage Speakers in Higher Education

Current USA Census data indicates that 60 million people speak a language other than English at home, and 62% of this population speaks Spanish (Census Bureau, 2011; Brown & López, 2013). A large number of these speakers are Spanish Heritage Speakers: they have acquired their heritage language at home and have achieved some degree of bilingualism in the minority and majority languages (Valdés, 2001). In the past decades, a growing number of Hispanic learners started to attend college: Treviño and DeFreitas (2014) report that between 2000 and 2010 the percentage of Latino students attending college increased from 9.5% to 13%, while Krogstad (2016) indicates that between 1993 and 2013 Hispanic enrollment in Higher Education more than tripled, with about 2.2 million Hispanic students enrolled in 2013. This trend has had a direct impact in traditional Spanish Language Programs: more and more higher education institutions have added courses for SHLLs, particularly in regions with large Hispanic populations (see Valdés, Fishman, Chávez, & Pérez, 2006 on the California region; Beaudrie, 2011 on the Southwestern states). However, Carreira warns us that there are still important issues to be addressed in Spanish Heritage Language instruction: low number of course options, insufficient professional training opportunities for instructors, inadequate placement tools and pedagogical materials, and, especially, low enrollment and retention (Carreira, 2014, p. 37).

Partly because of the complexity of describing Spanish Heritage Language Learners’ (SHLLs)
abilities—including significant proficiency variation among speakers and diverse sociocultural backgrounds (see Polinsky & Kagan, 2007)—and partly because heritage language pedagogy is a relatively new field, a reference model to assess SHLLs’ proficiency is still missing. Measures of proficiency commonly used in the context of second languages, such as the CEFR (Council of Europe, 2001) or the ACTFL Proficiency Guidelines (ACTFL, 2012), are not adequate to evaluate SHLLs’ abilities as these cannot capture their range of linguistic and cultural competencies and their specific needs, nor are they capable of reflecting learners’ motivations, challenges, and ultimate goals in relation to their heritage language (see Polinsky & Kagan, 2007; Fairclough, Belpoliti, & Bermejo, 2010). The lack of a reference model affects curriculum decisions, and frequently ends with students placed into second language courses, or in a ‘one shoe fits all’ Spanish Heritage Language course. Understanding the multilevel dimensions of their abilities in Spanish, and the particular use of cognitive and language strategies becomes a fundamental step in curricular designs and pedagogical implementations for courses that target SHLLs’ specific needs.

Research questions

This study provides insight into the implementation of a cognitive approach to language learning, integrating the META\(^1\) and CALLA\(^2\) models, as well as incorporating techniques from the New London Group (1996) model for multiliteracies development into the redesign of a SHL Program at the university level. Moreover, this study is piloting different methods of data collection and analysis for strategy and heritage language development, particularly in SHHLs writing skills.

The goal of this research project is twofold: first, we aim at better understanding how SHLLs develop and manage metacognitive strategies in the classroom. Secondly, we are interested in how students develop and improve their writing skills in Spanish. The research questions that guided the investigation are:

1. What metacognitive strategies do SHLLs use while developing their competence in the heritage language? What strategies need to be explicitly taught in the Spanish as a Heritage Language classroom?
2. What are the effects of implementing the new curricular redesign on SHLLs’ writing development after two semesters?

In order to answer the first research question, we collected and analyzed responses to a questionnaire on self-perceived use of different metacognitive strategies before the beginning of the semester. Twenty SHLLs from two different institutions in the Southwest participated in the study. The data from the initial questionnaire was then integrated into the needs analysis that guided the design of a new Spanish as a Heritage Language Program curriculum. The second question on the effects of this curriculum redesign was answered by evaluating SHLLs’ language development in writing after two semesters of instruction.

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\(^1\) META is a holistic pedagogical model for language acquisition developed by Carrasco and Rigelhaupt (1992); the approach integrates metapsychological, metacultural, metalinguistic, and metacognitive knowledge; it has been successfully implemented to teach Spanish to Heritage Learners (see Carrasco & Rigelhaupt, 2003).

\(^2\) The Cognitive Academic Language Learning Approach (CALLA) was developed by Chamot and O’Malley (1987) in the context of English L2 acquisition and content-based instruction. The model integrates modules on language strategies, academic language development, and content-based instruction (see Chamot & O’Malley, 1994; Chamot & Robbins, 2005).
Metacognition and learning strategies

The term 'metacognition' refers to awareness and control of the cognitive processes, including how learners select and use different strategies when completing a certain task. Research in developmental and educational psychology indicates that students, in order be successful learners, need not only know and master different strategies, but also know when, how, and why to use them, as "the effective self-management of learning and remembering requires the on-line monitoring of one's knowledge during different phases of the process and the adaptive regulation of various cognitive operations" (Koriat & Helstrup, 2007, p. 246).

Metacognition is closely related to learning strategies, and effective management of both components is essential for language students as they achieve increased self-regulation and become independent learners. This perspective coincides with the main objectives of the CALLA project, which are "for students to learn essential academic content and language and to become independent and self-regulated learners through their increasing command over a variety of strategies for learning in school" (Chamot & Robbins, 2005, p. 11). According to this proposal, the management of metacognitive strategies entails control of five interlinked areas:

![Figure 1. Metacognitive strategies in a learning task (adapted from Chamot & Robbins, 2005)](image)

In the field of SLA, learning strategies have been discussed in relation to two areas of learning competence: self- regulatory skills and metacognitive knowledge (Zimmerman, 1989; Ertmer & Newby, 1996; Wenden, 1998; Oxford, 2011). Self-regulation relates to strong internal motivation and self-efficacy, and provides students a path to become active owners of their learning (Zimmerman, 1989; Ertmer & Newby, 1996). On the other hand, metacognitive knowledge (Ertmer & Newby, 1996; Rubin, 2005) is recognized as a main trait of expert learners, as it allows them to be successful when completing diverse learning tasks. Anderson (2002) considers that metacognitive knowledge plays a fundamental role in language learning, as it provides the foundation for acquiring and managing language strategies. As Duff (2008a) summarizes, metacognitive development and practice during the language learning process have overarching effects beyond language skills, creating a virtuous circle: language learning increases metacognitive abilities.
that, in turn, support language development.

Despite the available body of research in psychology and SLA, there is currently a gap in the knowledge and use of learning strategies among SHLLs who are taking Spanish classes at college level; few studies have focused on this area (but see Carreira, 2002; Hancock, 2002) and mainly deal with language strategies for writing (Martínez, 2007; Schwartz, 2003). We do not know what specific strategies SHLLs are already using to improve their competence in the heritage language, or what strategies they need to acquire and develop. Moreover, we do not know whether explicit strategies instruction would have a positive effect on SHLLs’ language development, and how such an approach could be integrated in SHL programs at the college level. The present study aims to fill this gap, and it is the first, to our knowledge, to utilize this combination of quantitative and qualitative methodology to understand strategy usage among SHLLs.

Metacognitive strategies questionnaire

Twenty students enrolled in SHL courses at two Southwestern universities (9 and 11 students, respectively) participated in this study. Overall, both groups presented similar characteristics regarding demographic backgrounds, language experience, and Spanish coursework; all participants indicated they were active users of Spanish in various domains (family, work, and school).

Participants completed an online questionnaire of twenty-four questions. Of these, twenty-two were 5 point Likert-scale questions (1-5, never to always) regarding their use of linguistic, cognitive, and sociocultural strategies (see Appendix A). After selecting their response, we asked students to provide one concrete example of usage for each question, which allowed validation of answers and provided a more detailed insight into how these strategies are used. The questions about metacognitive strategies concentrated on planning, monitoring, interaction and cooperation, and language value. The language strategies questions focused on the use of context, previous knowledge, prediction, resources management, and editing while completing a language task. The last two items were open-ended questions to be answered in Spanish; these questions were aimed at gathering information about students’ perceptions regarding the value of Spanish in their life, and what they considered useful practices to improve Spanish.

Table 1 provides the range of answers for each type of strategy included in the twenty-two Likert-scale questions. Overall, learners reported using different metacognitive strategies in the areas of planning, monitoring and interaction. However, a comparison between the Likert-scale answers (never to always) and the examples of strategies used revealed that a high percentage of students overestimated or underestimated their strategy usage.

<table>
<thead>
<tr>
<th>Table 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Students' self-reported use of metacognitive strategies</strong></td>
</tr>
<tr>
<td>Planning</td>
</tr>
<tr>
<td>Mean</td>
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<td>SD</td>
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</table>

These results indicate that at the time (before enrolling in the two-semester SHL program) participants were familiar with accessing strategies and had a grasp on ‘what is needed’ to fulfill a language task, although they had troubles in describing how they implemented a given strategy. Planning was the weakest area, as the questions on setting objectives, organizing ma-
materials, and preparing for the task were mostly answered with ‘sometimes’ (55%); there was also a relevant number of ‘rarely’ (20%) and ‘never’ (15%) responses. Similar results were obtained regarding language strategy use: participants reported using some strategies (for instance, using the context for decoding or paraphrasing) ‘sometimes’ (60%), but also ‘rarely’ (23%) and ‘never’ (8%); there were a few instances of ‘always’ and ‘frequently’.

The higher range of ratings (M=4.4) related to ‘language value’, as seen in Figure 2: when asked about the relevance of Spanish in their lives, most participants answered with very positive remarks. This signals a positive attitude towards the use and development of the language, which was strongly connected with affective (family, friends) and sociocultural (communities abroad, identity) domains.

The two open-ended questions at the end of the survey aimed at capturing perceptions of bilingual learners regarding what they consider are valuable methods and techniques to improving Spanish, and the relevance of Spanish in their personal and professional life. Participants’ answers were categorized based on an open coding of their lexical choices, rather than being placed in pre-defined categories: answers were lemmatized and analyzed using the Atlas.it software in order to obtain a list of types and tokens for each question. Function words and expressions that carried no relevant meaning (prepositions, articles, and light verbs such as ser) were excluded from the analysis. The resulting data was organized by semantic categories: responses to question 1 generated six categories: speaking (habl-, convers-, platic-, etc.), writing (escrib-, nota-, ortograf-, etc.), listening (escuch-, película-, entend-, etc.), reading (le-, lec- libro-, etc.), grammar (exam-, ejerci-, regla-, etc.), and resources (libr-, periódico, amig-, profesor-, etc.). The organization of answers around language skills and components reflected students’ perceptions of what improving Spanish entails, and therefore incorporated their own academic experience with the language. The analysis reveals that they regarded ‘speaking’ as the most relevant activity to improve Spanish (21 tokens) followed by reading (16 tokens) and listening (14 tokens). Writing and grammar were the least valuable options with 7 tokens each, and there was no mention of vocabulary as a relevant component of language development.

![Figure 2. Students' self-reported use of metacognitives strategies](image-url)
Table 2
Value of language skills and components for improving Spanish

<table>
<thead>
<tr>
<th>Language skills</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speaking</td>
<td>21</td>
</tr>
<tr>
<td>Reading</td>
<td>16</td>
</tr>
<tr>
<td>Listening</td>
<td>14</td>
</tr>
<tr>
<td>Writing</td>
<td>7</td>
</tr>
<tr>
<td>Grammar</td>
<td>7</td>
</tr>
</tbody>
</table>

Regarding Question 2, the main categories that emerged from the answers reflected the content of the question in equal portions: personal sphere (89 tokens), and professional sphere, (87 tokens). As part of the value that they attribute to Spanish in their personal life, the relationship with the family, especially with their parents, was the most frequently mentioned, followed by their relationship with abuelos, nietos, and tíos. For instance, the following answer exemplifies the relevance of Spanish in the personal sphere: “El español es muy importante en mi vida personal. Es mi lenguaje natal y el que uso para comunicarme con la mayoría de mi familia. Mis abuelos viven en México y nos vienen a visitar varias veces durante el año. Ellos no hablan inglés. Por lo tanto, tengo que hablarles en español” [Spanish is very important in my personal life. It is my native language and the one I use to communicate with most of my family. My grandparents live in Mexico and come to visit us twice a year. They do not speak English. Therefore, I have to speak with them in Spanish]. In constructing the value of Spanish in the professional sphere, students differentiated between employment and academic life. This distinction is not always clear-cut, however, because many students work as teachers. Therefore, in some cases it was impossible to distinguish the context they were referring to, as in the following example: “Como trabajo en un colegio, saber el español me ayuda bastante” [As I work in a school, knowing Spanish helps me quite a lot]. Within the professional sphere, students see Spanish as an instrument to obtain more and better job opportunities.

Results from this initial study revealed students’ management of linguistic and cognitive metaknowledge, and highlighted areas that required instructional intervention to maximize the use of these strategies. The general picture of SHLLs’ strategy use that emerges from the data indicates that at the beginning of the two-semester program, students reported having a good grasp of monitoring, value, and interactional strategies, but their answers indicated they were less familiar with planning and language strategies. Moreover, the examples of strategy use SHLLs offered for each question highlighted a disconnection between self-reported strategy use and actual practice. One of the goals of the curriculum redesign that we present in the following section was to address these needs by focusing more on planning and language strategies and modeling strategies implementation.

Curriculum redesign

One of the challenges to providing sound instruction in the SHL classroom at college level is the limited time available (Villa, 1996; Beaudrie, 2011), as most tertiary institutions offer only one- or two-semester sequences. Therefore, two relevant questions emerge when (re)designing SHL courses: How can we maximize the short time available? And, most vitally, how can we
implement instruction that endures beyond the classroom? With the goal of addressing these questions, a new curriculum for a sequence of two intermediate SHL courses was designed and implemented. The goals of this new curriculum were: 1) advancing literacy in Spanish, 2) increasing management of academic registers, and 3) providing the foundation for the development of self-regulatory metastrategies for continuous language development. The redesign process was based on data obtained in the initial study that measured the learners’ use and conceptualization of strategies, as described above.

The new curriculum incorporated adaptations of the Carrasco and Riegelhaupt’s META model (1992, 2003), a modular approach integrating performative and focus-on-form tasks (Ellis, 2001, 2002; Llombart-Huesca, 2012), and the New London Group’s methodology towards multiliteracies development (New London Group, 1996). The changes sought to foster the development of students’ linguistic awareness, as well as rhetorical sensibility (Shipka, 2011). Furthermore, the redesign strove to establish “pedagogical spaces that nurture and enhance the linguistic and cultural abilities of heritage speakers in the 21st Century” (Parra, 2014, p. 214), and to promote learning autonomy and self-regulation (Zimmerman, 1989; van Lier, 2008) to support continuous language development beyond the class setting.

The new curriculum

The curriculum redesign consolidated the main objectives of our SHL program into a sequence of two SHL courses. Table 3 summarizes the most notable changes implemented in the new curriculum, which affected student outcomes, student and teacher roles, materials, and classroom activities.

Table 3
Comparison between the previous and the new curriculum

<table>
<thead>
<tr>
<th>Previous curriculum</th>
<th>New curriculum</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objectives</strong></td>
<td></td>
</tr>
<tr>
<td>- Improve students’ knowledge and use of normative</td>
<td>- Develop advanced writing and oral skills in</td>
</tr>
<tr>
<td>Spanish grammar</td>
<td>Spanish in multimodal communication.</td>
</tr>
<tr>
<td>- Improve Spanish lexical knowledge and apply it to</td>
<td>- Understand cultural and social issues in</td>
</tr>
<tr>
<td>writing</td>
<td>the perspectives, practices and products of</td>
</tr>
<tr>
<td>- Be able to identify Spanish dialectal variation</td>
<td>Hispanic communities in the US.</td>
</tr>
<tr>
<td>- Compare and analyze bicultural experiences.</td>
<td>- Identify and analyze educational, social, and</td>
</tr>
<tr>
<td></td>
<td>ethical issues relevant to the Hispanic communities in the US and abroad.</td>
</tr>
<tr>
<td></td>
<td>- Advance effective management of cognitive and</td>
</tr>
<tr>
<td></td>
<td>language strategies.</td>
</tr>
<tr>
<td><strong>Student role</strong></td>
<td></td>
</tr>
<tr>
<td>Listener; writer; editor; test-taker.</td>
<td>Speaker; writer; editor; designer.</td>
</tr>
</tbody>
</table>

3 Focus-on-form tasks are designed to raise students’ awareness of the grammatical form of certain language features that they already use to communicate (see Ellis, 2001; Spada & Lightbrown, 2008; Collins, 2012).
<table>
<thead>
<tr>
<th>Instructor role</th>
<th>Lecturer; provider of content, activities, and assessment.</th>
<th>Facilitator; guide; provider of content, activities, and resources.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials</td>
<td>La lengua que heredamos (Sara Marqués).</td>
<td>Nuevos Mundos, textbook and workbook (Ana Roca)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Fichas de lectura</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Fichas de estrategias</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Videos and movie excerpts.</td>
</tr>
<tr>
<td>Assessment</td>
<td>- Chapter exams</td>
<td>- Multimedia projects integrating all language skills.</td>
</tr>
<tr>
<td></td>
<td>- Grammar and orthography quizzes</td>
<td>- Group work, attendance and participation.</td>
</tr>
<tr>
<td></td>
<td>- One written composition</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Exercises, attendance, and participation.</td>
<td></td>
</tr>
</tbody>
</table>

The new curriculum integrated components from two metacognitive perspectives—the META model (Carrasco & Riegelhaupt, 1992, 2003), and the CALLA project (Chamot, 1995; Chamot & Robbins 2005)—by implementing a series of units that alternatively focused on: a) communicative tasks (including intermediary activities on linguistic preparation such as verbal usage, lexical selection, discourse organization, and linguistic performance, combining reading, writing, speaking, and listening skills), b) cultural analysis (which included intermediary activities such searching for information, interviewing Hispanic people, comparing products and practices), and c) analysis and practice of metacognitive and metalinguistic strategies while completing activities chosen by the student (for instance, listening to songs, reading news, browsing for information, etc.). This new design shifted the focus of the class from grammar to literacy and sociolinguistic sensitivity, and adopted a student-centered approach in line with current trends in heritage language pedagogy (e.g., Beaudrie, Ducar, & Potowski, 2014). The new curricular structure is represented in Figure 3.

![Figure 3. The modular structure of the new curriculum](image-url)
The two courses were organized in modules that focused on specific cultural, strategic, or linguistic content and promoted students’ autonomy as language learners.

Workshops: The ‘language workshops’ focused on linguistic preparation, including grammar topics, such as the nominal phrase or tense use, as well as lexical development, such as working on a trilingual dictionary of English, US Spanish, and monolingual Spanish. During these workshops, students worked in small groups with a selection of resources in order to either a) explain main concepts to the class, b) design learning materials to improve classmates’ access to the concepts, or c) complete a language assignment selected by other students. This approach, besides teaching for diversity —as it allows students to reach the goal in diverse but equally valid ways (as proposed by Theisen, 2002, and Carreira, 2012)—fostered their autonomy as language learners, valued their insights and previous knowledge, offered them access to multiple resources to solve the task at hand, and promoted the use of self-regulatory strategies (see Chamot, 1995; Rubin, 2005; Duff, 2012).

The ‘editing workshops’ followed the same approach already described for the linguistic content, and included topics such as spelling differences between English and Spanish, how to report speech, and the stylistic values of punctuation. In addition, some editing workshops were dedicated to the analysis and design of multimedia materials (websites, online advertising, and short videos). This analysis provided students with different tools to manage audiovisual content, which were later used in the multimedia projects.

The workshops on strategies aimed at teaching students to select, use, and monitor self-regulatory strategies to become expert language learners (Rubin, 2005). During the two semesters, students were exposed to different strategies and techniques belonging to the cognitive, sociocultural, and linguistic domain. Each strategy workshop followed the steps for teaching strategies introduced in the CALLA model (as developed by Chamot, 1987, 1995): a) activating students’ background knowledge, b) explaining, naming, and modeling the strategy, c) prompting the use of the strategy and giving feedback, d) assessing the use of the strategy, and e) guiding the student to connect and transfer what they have learned to other areas. We gave particular relevance to modeling strategy use, as “the modeling of effective self-regulated strategies can improve the self-efficacy for even deficient learners [...] can boost the self-efficacy of individuals who have undergone many experiences confirming their inefficacy, as well as ‘the self-assured’” (Zimmerman, 1989, p. 331).

Cultural component: The modules on culture content focused on selected topics relevant to the Hispanic communities in the US, (biculturalism, identity, immigration, minorities, bilingualism, etc.) as well as on overarching topics connecting Hispanic communities at large (human rights, education, multiculturalism, changing gender roles, etc.). These modules were built on reading activities that students completed each week, and on videos shown during class time. At the beginning of these modules, students worked in small groups to discuss relevant vocabulary, share their understanding of the texts, and posit questions or issues connected to the content. Then, we used these questions or issues to start a whole-class debate, guided and monitored by the instructor.

Fichas: The fichas we used in the courses were of two types: the first, fichas de lectura (see Appendix B), sought to promote students’ metalinguistic reflection and understanding, expand their vocabulary, test their reading comprehension, and promote cultural reflection. These fichas de lectura were used as a starting point for all class debates. The second type, fichas de estrategias (see Appendix C), aimed at helping student to apply different strategies learned and discussed in class to a variety of tasks. These fichas de estrategias often included pre-, during, and
post-strategy use sections to promote student awareness and critical use of different strategies according to their needs.

Multimedia projects: The goal of developing students’ multiliteracy and rhetorical sensibility was reached by means of adapting the New London Group’s instructional approach (New London Group, 1996; Luke & Freebody, 1999), following specific steps: 1) breaking the ‘code of texts’ by exploring conventions and features that expert writers use; 2) participating in the ‘meanings of the text’, by understanding its role within one or more communities; 3) using texts functionally for a purpose that transcends classroom instruction; and 4) critically analyzing and transforming texts by integrating media components and transitioning from one medium to other. Each course in the sequence included two multimedia ‘capstone’ projects that integrated all language skills, building on students’ previous knowledge, individual interests and personal questions. The projects aimed to promote: 1) use of academic Spanish in formal tasks (reporting, explaining, and debating), and 2) the development of transferrable skills on a variety of media (see Shipka, 2011), moving towards advanced multimodal competency. The four Multimedia Projects (two in each course, SHL I and SHL II) are described in Table 4.

Table 4
Main and intermediate tasks in cultural projects development

<table>
<thead>
<tr>
<th>Main tasks</th>
<th>Intermediate tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital family scrapbook</td>
<td>- selection of topics</td>
</tr>
<tr>
<td></td>
<td>- selection of materials (images and text)</td>
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<tr>
<td></td>
<td>- design and writing of the digital text (blog, webpage)</td>
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<tr>
<td></td>
<td>- editing</td>
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<tr>
<td></td>
<td>- oral presentation</td>
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<tr>
<td>Oral interviews report</td>
<td>- selection of participants and topics</td>
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<tr>
<td></td>
<td>- design of the interviews</td>
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<td></td>
<td>- recording of the interviews</td>
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<tr>
<td></td>
<td>- report of the interviews</td>
</tr>
<tr>
<td></td>
<td>- oral presentation of findings</td>
</tr>
<tr>
<td>Digital storytelling</td>
<td>- selection of topic and themes</td>
</tr>
<tr>
<td></td>
<td>- selection of materials (audio, video, images, and script)</td>
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<tr>
<td></td>
<td>- development of the storyline</td>
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<tr>
<td></td>
<td>- editing</td>
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<td></td>
<td>- presentation</td>
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</tbody>
</table>
By developing the individual projects, students were able to identify and analyze important issues in their own lives and communities, and organize content in different formats to fulfill individual and course-related objectives moving from one medium to another. Appendix D presents a sample rubric to assess these projects. In the following sections we present the analysis of learners’ written samples used to measure the effectiveness of implementing this new curriculum.

Effectiveness of the curriculum redesign

In order to measure SHLLs’ progress after the implementation of the new curriculum we analyzed three writing samples produced by students at three stages of the program. A total of 20 SHLLs in our participant group gave permission to collect and analyze their oral and written assignments. Of these, five students who completed the two-semester sequence were selected; their writing production served as a representative sample of the students’ performance on the goals of ‘advancing literacy in Spanish’ and ‘increasing management of academic registers’. The analysis measured the following components:

1. Vocabulary development:
   (a) Lexical variation (TTR),
   (b) Lexical range,
   (c) Lexical density.

2. Grammatical complexity:
   (a) Number of complete sentences (Kellogg, 1965),
   (b) Number of clauses per sentences.

3. Rhetorical adequacy:
   (a) Use of a variety of discourse markers,
   (b) Discourse organization (management of descriptive, narrative, explicative, and argumentative structures).

Rhetorical adequacy was defined in terms of communicative functionality and textual structure; development of rhetorical competence was measured using a rubric based on the instructions given to the students prior to the task.

Language and discourse gains

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4 The lexical variation component was analyzed through TTR, or type-token ratio, a measure of vocabulary variation within a text. TTR is calculated dividing the number of lexical types by the number of lexical tokens, and then multiplying the result by 100 in order to obtain a percentage value. A text that shows greater lexical variety will
In order to quantify language and discourse gains in the pilot implementation of the curriculum, we collected all major work written by the students at three points: a) Sample 1: An opinion essay at the Program’s entrance (written component of the Placement Test); b) Sample 2: A narrative report at the end of the first semester (written component of the interview project), and c) Sample 3: An argumentative essay at the end of the second semester (written component of the research project). All writing assignments were open topic essays and each student was free to write about any topic of his or her choice. Each document was coded in preparation for the analysis, and then analyzed as described here.

**Lexical Measures.** Three measures were included in the comparison among the three sets of written samples, in order to determine learners’ vocabulary development: lexical density, lexical range, and lexical variation. For this section of the analysis, all words were coded as lexical / functional and then assigned to six frequency bundles following Davies’ *A Frequency Dictionary of Spanish* (2006). Proper names, English words, and loans were excluded in the lexical range analysis in order to only measure Spanish lexical development, which is one of the linguistic objectives of the course.

1. **Lexical Density** is the ratio of lexical words to functional words; this ratio measures the informational weight of a particular text. Halliday (1985, 2002) uses this measure to place texts on the oral-writing continuum: “Since written language is characteristically reflective rather than active, in a written text the lexical density tends to be higher, and it increases as the text becomes further away from spontaneous speech” (2002, p. 328). In the same line, Achugar and Colombi (2008) describe how increased lexical density and nominalizations in SHLLs writing show their progress in the academic writing register. Figure 3 shows how learners produced increasingly dense text as they move in the program sequence: they increased the use of content words by 8% (45% > 49%) from the first sample to the third, with an increment of 4% (49% > 51%) between the second and the third samples. The changes were significant between samples 1-2 and 3 (Fisher exact, p < 0.002) but not between samples 2-3 (Fisher exact, p < 0.9).

\[
\begin{array}{ccc}
1 & 2 & 3 \\
45\% & 49\% & 51\%
\end{array}
\]

**Figure 4.** Lexical density by % of content words across two semesters

have a high percentage value for TTR, as the number of types is greater in comparison to the number of tokens (see also Doró, 2015).

Two tools were used in the analysis: MSFT Excel 2016 with Statistical Package and Adelex (freely available at [http://www.ugr.es/~inped/ada/ada.php?ada=17r650t16n1amh39v1joubbd71&lng=english](http://www.ugr.es/~inped/ada/ada.php?ada=17r650t16n1amh39v1joubbd71&lng=english)).
2. **Lexical range**, also known as **vocabulary size** or **lexical breadth**, measures the range of a language learner’s lexicon (Daller et al., 2007) and includes a scalar description of lexical knowledge based on word frequency. Laufer and Nation (1995) explain that this scalar knowledge indicates both vocabulary **quantity** and **quality**: “if the Lexical Frequency Profile (LFP) can be shown to bear a relationship to vocabulary size, then it also has value as an indicator of quality of vocabulary in that it can show the extent to which learners are making the fullest use of their available vocabulary knowledge” (1995, p. 310). In this study, analysis of vocabulary size showed relevant changes among the three sets of samples. As learners moved through the course sequence, they acquired and produced more advanced vocabulary, moving from general vocabulary (3K most frequent words) to a broader use of academic and technical vocabulary (words in the 5K & 5K+ range). As Table 6 and Figure 5 show, only 6% of the content words used in the first sample belonged to the advanced vocabulary ranges (5K & 5K+), while advanced vocabulary constituted 7% of the second essay and 11% of the final essay, almost doubling initial use.

### Table 6

**Lexical range results across semesters**

<table>
<thead>
<tr>
<th>Essay</th>
<th>1K</th>
<th>2K</th>
<th>3K</th>
<th>4K</th>
<th>5K</th>
<th>5K Plus</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>808</td>
<td>87%</td>
<td>48</td>
<td>5%</td>
<td>18</td>
<td>2%</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>3835</td>
<td>84%</td>
<td>295</td>
<td>6%</td>
<td>112</td>
<td>2%</td>
<td>99</td>
</tr>
<tr>
<td>3</td>
<td>3477</td>
<td>78%</td>
<td>343</td>
<td>8%</td>
<td>121</td>
<td>3%</td>
<td>85</td>
</tr>
</tbody>
</table>

![Lexical range results across semesters](image)

![Lexical range development](image)

3. **Lexical Variation** measures the use of different words in a given passage by correlating the number of types with the total number of tokens, which reveals repetition of words. A larger ratio of types indicates access to a larger, more developed lexicon (Crossley et al., 2010a, 2010b). The growth of a diverse vocabulary directly correlates with literacy development, and has been used as a strong
predictor of writing quality in L2 studies (Zareva et al., 2005; Daller et al., 2007; Crossley et al., 2010a, 2010b). To control for text size, TTR was calculated with the Guiraud's Index (Root TTR).6 The results in Table 7 show improvement among the samples: while the first essays presented a 7.9 index of variation, the second and third samples increase to 11.9 and 12.4, respectively.

Table 7  
Guiraud's Index across semesters  
<table>
<thead>
<tr>
<th>Essay</th>
<th>AVG</th>
<th>Max</th>
<th>Min</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7.9</td>
<td>9.8</td>
<td>6.6</td>
</tr>
<tr>
<td>2</td>
<td>11.9</td>
<td>13.2</td>
<td>9.9</td>
</tr>
<tr>
<td>3</td>
<td>12.4</td>
<td>14.7</td>
<td>10.9</td>
</tr>
</tbody>
</table>

The growth in the three indexes indicates increasing ability in vocabulary management among participants, as they use different words while writing instead of reliance on a few items.

**Discourse measures.** Two measures were included to compare the three sets of written samples, in order to measure learners' development of advanced discourse structures: **textual structure** and **use of connectives**.

1. **Textual Structure** measures students' ability to produced texts that accomplished the purpose of presenting facts and/or arguing in favor or against a given topic. This measure was assessed by using a rubric developed and applied by the authors, based on each assignment's instructions (see Appendix D). Each aspect on the rubric was evaluated independently by the two authors on a scale from 3 (efficient) to 1 (inadequate), and the average value of each writing task is presented in Table 8 below.

Table 8  
Textual structure score across semesters  
<table>
<thead>
<tr>
<th>Essay</th>
<th>AVG</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.02</td>
</tr>
<tr>
<td>2</td>
<td>2.24</td>
</tr>
<tr>
<td>3</td>
<td>2.78</td>
</tr>
</tbody>
</table>

The average scores per essay show a steady increase in students' ability to follow genre conventions and accomplish their communicative goal in writing. This improvement is also reflected in the next measure, use of connectives.

2. **Use of connective words** measured frequency and variety in the usage of connectives, as summarized in Table 9 below.

---

6 The Guiraud's index allows comparison among texts of diverse lengths. The index is calculated by dividing the number of types by the root of total tokens = \( T/ \sqrt{VT} \). The higher the index, the more lexical variation is present in the text (Daller, 2010).
As the data in the gray cells in Table 9 show, the overall number of connective words students used in their texts increased. Moreover, participants amplified the range of connectives in their writing, moving from structuring the text mostly by additive connectives such as ‘también’ or ‘y’, to a more complex organization using temporal (‘entonces’, ‘en el pasado’), consecutive (‘así que’, ‘por lo tanto’), concessive (‘aunque’, ‘a pesar de’), and conclusive connectives (‘finalmente’, ‘en conclusión’) in their final writing. Usage of connective words is an especially relevant measure that has been correlated with writing competence and level of reading comprehension (Duggleby et al., 2015), and linked to overall linguistic competence in L2 studies (Tapper, 2005; Carlsen, 2010). In SHL research, most studies have focused on the oral use of connectives as discourse markers (for instance, Díaz-Campos & Torres, 2011), but there are very few studies regarding connective usage in writing (see Pinto, 2012). These initial results need to be expanded in future studies considering how connective usage represents management of academic writing.

**Grammar complexity measures.** Three measures were included in the comparison among the three sets of essays in order to measure learners’ grammatical complexity development: *number of sentences per text, number of words per sentence, and number of clauses*. The general results in the writing production for each participant are summarized in Table 10 below.
The data summarized in Table 10 show students’ progression towards developing longer texts (from 954 words in the first essay to 4626 in the third) comprising more and longer sentences (from an average of 20 words per sentence to an average of 29 words per sentence), and using a higher number of clauses per sentence (from an average of 1.03 clauses per sentence in essay 1 to an average of 1.32 clauses per sentence in essay 3). On average, by the end of the SHL sequence students produced texts that were 4 times longer, and sentences were 9 words longer and more complex in terms of subordination compared to their written production before the beginning of the first semester (S1 in the table).

Although the genres of the three texts were different (an opinion essay, a narrative report, and an argumentative essay), thus possibly having an effect on the comparison, the lexical, grammatical and discourse measures indicate a relevant progression towards management of academic registers in writing. At the end point of the data collection, learners were able to utilize a larger, more advanced vocabulary, produce more complex sentences, and manage a more sophisticated rhetorical organization. These results seem to indicate that the new curriculum has achieved some of its main objectives.

Future Directions

The two studies discussed here are intended to serve as an initial exploration of the knowledge and management of different types of strategies by SHLLs, and their effects on students’ language development after been implemented in the curriculum. A number of limitations were found in these pilot studies, which will guide future research. First of all, the number of participants in the experimental group was too limited to allow a generalization of results. Further research based on responses from a larger poll of participants will give us the ability to draw more robust conclusions on the effects of the teaching innovations described here.

A second limitation was time. The implementation of the new curriculum described was completed during the summer, over two semesters that lasted five weeks each. Due to this intensive and demanding program, it is possible that the time was not sufficient for students to process and internalize what they had been taught, thus affecting some of the results.

A third limitation was the questionnaire design; overall, students needed to answer a large number of questions in different formats, and the combination of items regarding metacognitive and linguistic strategies seemed to confuse some students, who repeated answers in several
items or left those in blank. In addition, the disconnection between the quantitative and qualitative answers (a high percentage of students overestimated or underestimated their strategy usage) indicates the effect of biased self-assessment: Research shows that learners whose skills or knowledge bases are weak in a particular area tend to overestimate their ability in that area (Kruger & Dunning, 1999). In contrast, learners whose knowledge or skills are strong may underestimate their ability. These high-ability learners do not recognize the extent of their knowledge or skills. (Anderson, 2002, p. 4)

Future research will utilize a revised version of this questionnaire, reducing the number of questions to better capture learners’ perceptions. Observations of on-task work will also be included in the data collection to measure declarative and procedural use of strategies.

Finally, in order to attribute students’ progress to the implementation of the new curriculum, it would be revealing to compare language gains of the experimental group to language gains of a control group that completed similar courses taught with a more traditional curriculum. Current efforts are focusing on expanding the pool of participants and analyzing written samples of a control group in order to quantify and be able to compare students’ language gains across curricula.

Concluding remarks

In this article we presented a curriculum redesign of a Spanish for Heritage Language Learners course sequence and results of two complementary studies that measured students’ progress in self-regulatory strategies development and expansion, literacy skills development, and management of academic registers.

Considering the first research question—What metacognitive strategies do SHL use while developing their competence in the heritage language?—the results of the initial questionnaire indicate that most students report having some grasp of metacognitive and linguistic strategies. For students, planning, monitoring, and evaluating their own learning processes is difficult, and many are not familiar with basic language and cognitive strategies such as resources management or inference reading. The inclusion of the ‘strategy workshops’ into the new curriculum allowed reviewing, practicing, and evaluating diverse metacognitive and linguistic strategies; these, we believe, provided a strong foundation to continuous language development, and more important, supported self-reliance for independent learning.

Our second research question—What are the effects of implementing this curricular redesign on SHL writing development after two semesters?—can be answered as highly positive. The new implementation supported the development of advanced writing competence in the three measured areas: lexical and grammatical expansion, and a more mature access to rhetorical devices, as Table 11 summarizes.

<table>
<thead>
<tr>
<th>Table 11</th>
<th>Overall progress of students’ language gains.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beginning of first semester</td>
</tr>
<tr>
<td>Lexical development</td>
<td></td>
</tr>
<tr>
<td>lexical variation</td>
<td>7.9</td>
</tr>
<tr>
<td>lexical range</td>
<td>6%</td>
</tr>
<tr>
<td>lexical density</td>
<td>45%</td>
</tr>
</tbody>
</table>
These results clearly show that the curricular redesign and implementation were highly successful, since throughout the two-semester program students were able to further develop their literacy skills while also expanding and reinforcing their control of academic registers.

Implementing a metacognitive and metalinguistic approach in the Spanish for Heritage Learners course sequence had a very positive impact on students’ language gains, and on their access to internal resources to maintain their heritage language. The initial questionnaire showed that participants report strong motivational attitudes towards Spanish, and they highly appreciate the impact of knowing Spanish in the personal and professional spheres. This positive attitude should work as the foundation to build any instructional practice, and it certainly guided this redesign process. The new curriculum empowered students by reinforcing strategy management and leveraging their previous knowledge. The individual projects allowed learners to expand their understanding of the Hispanic experience in the US, and to critically analyze issues affecting Spanish-speaking communities in the US and abroad. We strongly agree with Carrasco and Riegelhaupt that the vitality of Spanish in the context of the United States depends on “connect[ing] students to the rich cultural and linguistic heritage of their own Hispanic families and communities, while also providing them with the necessary linguistic skills to interact with the Spanish-speaking communities through the United States and the world” (2003, p. 193). A curriculum approach that integrates language, culture, strategies, and learners’ goals for learning Spanish certainly provides SHLLs with the foundations to maintain and expand their heritage language while fostering their agency as language users beyond the classroom walls.
Works Cited


Appendix A

Metaknowledge and Language Strategies Questionnaire

Part B – Strategies questionnaire

Please read carefully each question and select the answer that best describes your most frequent behavior by checking the corresponding number. Then, try to give a real example to explain your answer. 5 = Always 4 = Often 3 = Sometimes 2 = Rarely 1 = Never

Example. “Do you prefer to read newspapers in Spanish rather than English? Can you give an example?” 5 ___ 4 ___ 3 ___ X ___ 2 ___ 1 ___ I sometimes read newspapers in Spanish (El Mundo) and English (The Dallas Morning news).

1. Do you determine and set your own learning goals when you start a language course?
   5 = Always 4 = Often 3 = Sometimes 2 = Rarely 1 = Never
   Can you give an example?

2. When you are presented with a language task, do you look through it to get an idea of the content, extension, or difficulty?
   5 = Always 4 = Often 3 = Sometimes 2 = Rarely 1 = Never
   Can you give an example?

3. When you are presented with a language task, do you prepare yourself beforehand starting by reviewing what you know or consulting resources?
   5 = Always 4 = Often 3 = Sometimes 2 = Rarely 1 = Never
   Can you give an example?

4. When you are presented with a language task, do you identify the purpose of completing the task?
   5 = Always 4 = Often 3 = Sometimes 2 = Rarely 1 = Never
   Can you give an example?

5. When you are working on a language task, can you point out a difficult aspect or recognize you are having problems to complete it?
   5 = Always 4 = Often 3 = Sometimes 2 = Rarely 1 = Never
   Can you give an example?

6. When you are working on a language task, do you pay more attention to certain aspects or content of the task?
   5 = Always 4 = Often 3 = Sometimes 2 = Rarely 1 = Never
   Can you give an example?

7. When you are working on a language task, do you seek help if you are having problems to complete it?
   5 = Always 4 = Often 3 = Sometimes 2 = Rarely 1 = Never
   Can you give an example?

8. In your opinion, is it better to work individually or in groups when learning Spanish?
   5 = Always 4 = Often 3 = Sometimes 2 = Rarely 1 = Never
Can you give an example?

9. How often do you work with your classmates to complete an Spanish activity or assignment?
   5= Always 4=Often 3=Sometimes 2=Rarely 1=Never
   Can you give an example?

10. When you are having difficulties with a task or concept, do you ask your classmates for help?
    5= Always 4=Often 3=Sometimes 2=Rarely 1=Never
    Can you give an example?

11. When someone is having difficulties with a task or concept, do you offer assistance or try to explain it?
    5= Always 4=Often 3=Sometimes 2=Rarely 1=Never
    Can you give an example?

12. Do you feel learning Spanish is a challenge?
    5= Always 4=Often 3=Sometimes 2=Rarely 1=Never
    Can you give an example?

13. Do you feel learning Spanish is relevant in your personal life?
    5= Always 4=Often 3=Sometimes 2=Rarely 1=Never
    Can you give an example?

14. When you are reading a text or listening to someone speaking Spanish, do you rely on the context in which a new word appears to understand its meaning?
    5= Always 4=Often 3=Sometimes 2=Rarely 1=Never
    Can you give an example?

15. When you read or hear someone say a word that you don't know, do you try to relate it to other words you know?
    5= Always 4=Often 3=Sometimes 2=Rarely 1=Never
    Can you give an example?

16. When you are having difficulties understanding what someone is saying, do you rely on your previous knowledge of the person and the topic to make sense of the conversation?
    5= Always 4=Often 3=Sometimes 2=Rarely 1=Never
    Can you give an example?

17. When you are about to read a text, listen to someone talking, or watch a movie in Spanish, do you use your previous knowledge to make predictions about the content?
    5= Always 4=Often 3=Sometimes 2=Rarely 1=Never
    Can you give an example?

18. Do you make plans about how to approach a comprehension task (reading/listening) in order to improve your chances of understanding its content?
    5= Always 4=Often 3=Sometimes 2=Rarely 1=Never
    Can you give an example?

19. Do you plan what to say/write and how you are going to say/write it before starting a communicative task in Spanish?
21. Are you aware of the resources available to help you produce written and oral texts in Spanish?
   5= Always 4=Often 3=Sometimes 2=Rarely 1=Never
   Can you give an example?
20. Do you access/use available resources which can help you understand written and oral Spanish?
   5= Always 4=Often 3=Sometimes 2=Rarely 1=Never
   Can you give an example?
22. When you cannot think of the right word in Spanish, do you use other words in order to continue communicating?
   5= Always 4=Often 3=Sometimes 2=Rarely 1=Never
   Can you give an example?

23. Please answer this question in Spanish. ¿Qué recomendaciones le darías a un estudiante bilingüe de escuela secundaria que quiere mejorar su español? Responde desarrollando tus ideas con ejemplos de técnicas o métodos relevantes.

24. Please answer this question in Spanish. ¿Qué importancia tiene el español en tu vida personal y en tu vida profesional? Responde desarrollando tus ideas con ejemplos de cuándo usas el español o anécdotas relevantes.
## Appendix B

### Ficha de lectura

<table>
<thead>
<tr>
<th>Título, autor y página/s del texto.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Palabras o expresiones nuevas (mínimo 10)</td>
<td></td>
</tr>
<tr>
<td>Definición de las nuevas palabras/ expresiones.</td>
<td></td>
</tr>
<tr>
<td>Clasificación de las palabras (verbo, adjetivo, etc.)</td>
<td></td>
</tr>
<tr>
<td>Sinónimos en español.</td>
<td></td>
</tr>
<tr>
<td>Estructuras gramaticales nuevas (mínimo 3)</td>
<td></td>
</tr>
<tr>
<td>Estructuras gramaticales nuevas: traducir al inglés.</td>
<td></td>
</tr>
<tr>
<td>Resumen de las ideas principales del texto</td>
<td></td>
</tr>
<tr>
<td>¿Qué es lo que más interesante del texto?</td>
<td></td>
</tr>
<tr>
<td>Valoración personal (justificada)</td>
<td></td>
</tr>
<tr>
<td>Preguntas sobre o a partir del texto (mínimo 2)</td>
<td></td>
</tr>
</tbody>
</table>
### Ficha de estrategia

#### ANTES DE COMPLETAR LA TAREA

1. ¿Qué tipo de actividad voy a realizar? (descripción de la tarea y materiales)

   

2. ¿Qué objetivo/s de aprendizaje quiero lograr con esta actividad?

   

#### DESPUÉS DE COMPLETAR LA TAREA

3. ¿Qué estrategia/s y técnicas de aprendizaje he utilizado?

   

4. ¿He logrado el/los objetivo/s de aprendizaje? Explicar detalladamente.

   

#### PARA COMENTAR

5. ¿Qué estrategia ha funcionado bien? ¿Qué estrategia no fue efectiva? Justificar.

   

6. Para la próxima vez sería recomendable…

   

---

## Appendix D

### Sample evaluation rubric

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Content</strong></td>
<td>Clear evidence of content knowledge; information is specific, current and accurate. Content is appropriate to fulfill communicative goals.</td>
<td>Evidence of content knowledge; information is mostly current and accurate. Content is appropriate to fulfill communicative goals.</td>
<td>Some evidence of content knowledge although some information is vague or inaccurate. Content is insufficient to fulfill communicative goals.</td>
<td>Insufficient content knowledge; information is simplistic, general or inaccurate. Content does not serve to fulfill communicative goals.</td>
<td></td>
</tr>
<tr>
<td><strong>Organization</strong></td>
<td>Well-structured; information is logically presented. Transitions among sections are clear.</td>
<td>Good structure, information is logically presented. Some transitions included.</td>
<td>Some organization although structure is unclear; some sections are missing or incomplete.</td>
<td>Disorganized content or incomplete sequences; transitions are missing.</td>
<td></td>
</tr>
<tr>
<td><strong>Language use</strong></td>
<td>Appropriate use of academic Spanish register. Excellent use of expositive structures and thematic vocabulary.</td>
<td>Use of academic Spanish register. Some use of expositive structures and thematic vocabulary.</td>
<td>Ineffective use of academic Spanish register. Few expositive structures; general vocabulary.</td>
<td>Weak use of academic Spanish register. Expositive structures are missing. Simple and repetitive vocabulary.</td>
<td></td>
</tr>
<tr>
<td><strong>Resources</strong></td>
<td>Accurate and strategic use of resources to fulfill communicative goals and support content: definitions, examples, comparisons and quotes.</td>
<td>Use of some resources to support content; includes main definitions, examples and quotes.</td>
<td>Few resources to support content are included; some resources are unrelated or inaccurate.</td>
<td>No use of resources or resource selection is inappropriate.</td>
<td></td>
</tr>
<tr>
<td><strong>Media (audio, video, images)</strong></td>
<td>Appropriate selection of media to complement &amp; support content; audio, video and images are well balanced.</td>
<td>Some use of media, mostly effective. Audio and images are balanced.</td>
<td>Limited use of media; some is unrelated or does not complement content.</td>
<td>Weak media selection; media is unrelated or distracting.</td>
<td></td>
</tr>
</tbody>
</table>