Chapter 3

LEARNER PERCEPTION AND STRATEGIES FOR PRAGMATIC ACQUISITION: A GLIMPSE INTO ONLINE LEARNING MATERIALS

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ABSTRACT

Research on second language (L2) pragmatics indicates that explicit instruction helps learners improve their pragmatic performance and that interlanguage pragmatic (ILP) development is an important component of communicative competence. A pedagogical model for pragmatics needs to address the true complexity of pragmatic development. Moreover, an informed approach to L2 pragmatic instruction calls for the inclusion of multiple knowledge areas and a strategy-based understanding.

CALL technologies play an increasingly important role in ensuring that pragmatics instruction is comprehensive in nature. Likewise, an inclusive model would incorporate strategies for the learning and performance of pragmatics. The intention is to assist learners in gaining the necessary skills to tackle L2 pragmatic complexities in a variety of contexts. Moreover, innovative technologies have the potential not only to aid in the creation of effective online materials for learning pragmatics, but also to provide a valuable environment for interaction.

At this point, little research has empirically analyzed the use of an online, strategy-based model for learning L2 pragmatics. Even less has specifically targeted learners’ perceptions of this space. In order to arrive at a greater understanding of these issues, this paper compares learner perception data from two research projects which have utilized CALL materials to enhance learners’ strategies for L2 pragmatics. The first study was an in-depth, qualitative research project addressing the use and effectiveness of the first-of-its-kind learner self-access website in L2 Spanish pragmatics with an extensive strategy

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overlay. The second was an extensive study which analyzed the use of the first synthetic immersive environment (a 3-dimensional gaming space designed with a specific educational outcome) used as an instructional space for learning Spanish pragmatics, specifically requests and apologies. This chapter compares learners' perceptions of their own strategy development within these two unique, online contexts, and utilizes patterns found in qualitative interview data to provide insights into how learners view both types of CALL environments for pragmatic development. The overarching goal is to consider potential roles that each of these mediated contexts could play in a strategies-based approach to L2 pragmatics. Future application of the findings to materials design and creation, research, and pedagogy will also be presented.

INTRODUCTION

Research on second language (L2)\textsuperscript{1} pragmatics suggests that explicit instruction helps learners improve their pragmatic performance (e.g., Bardovi-Harlig, 2001; Kasper and Rose, 2002) and that interlanguage pragmatic development is an important component of communicative competence in an L2. Various models have explicitly noted pragmatics as an essential component of communicative competence. For example, in Bachman’s (1997) model, pragmatics is included as both the necessity for illocutionary competence (i.e., the ability to carry out certain functions in a language) and sociolinguistic competence (i.e., knowing when to use which forms and functions). Both branches suggest pragmatic competence is essential to communicative success. Thorne (2005) further advocates the importance of pragmatics in communicative competence by suggesting a re-orientation from a focus on L2 communicative competence to a focus on intercultural competence. This re-orientation emphasizes the critical connection between language and social practice as related to the negotiation of interactional patterns in intercultural communication. In addition, it places L2 pragmatics at the core of language proficiency, a contrast from its current peripheral or equal position.

As suggested in each of these models, pragmatic competence plays a significant role and should be considered an essential component of L2 curricula. A pedagogical model for pragmatics needs to address the true complexity of pragmatic development. Moreover, an informed approach to L2 pragmatic instruction calls for the inclusion of multiple knowledge areas and a strategy-based understanding (Judd, 1999; Cohen, 2005). Despite the established theoretical importance of pragmatics, there is still a large gap between theory and the practical application of pragmatic instruction (e.g., Bardovi-Harlig, 2001; Felix-Brasdefer, 2002; Rose, 2005; LoCastro, 2003). One aim of this paper is to start to bridge the gap between theory and practice through the exploration of learners' perceptions of two online environments for interlanguage pragmatic (ILP) development.\textsuperscript{2}

Computer Assisted Language Learning (CALL) technologies play an increasingly important role in ensuring that pragmatics instruction is comprehensive in nature. Innovative

\textsuperscript{1} For the purposes of this chapter, L2 will serve as a generic label, including both the context where the language is spoken widely and the context where it is not. In principle, pragmatic development in an L2 will be faster in the former context than in the latter, but it depends largely on how the learner makes use of the available resources.

\textsuperscript{2} Defined by Kasper and Schmidt (1996) as “the development and use of strategies for linguistic action by nonnative speakers” (p. 150); ILP development specifically refers to pragmatics in an L2.
technologies have the potential not only to aid in the creation of effective online materials for learning pragmatics (e.g., CLEAR, 2005; Cohen and Ishihara, 2005; Cohen and Sykes, 2006), but also to provide a valuable environment for interaction (Furstenberg and Levet, 2001; Belz, 2002, 2003; Biesenbach-Lucas, 2005; Sykes, 2005; Sykes, Oskoz, and Thorne, 2008). In addition, an online environment offers a ready opportunity to provide a series of strategies that learners could use to enhance their learning and performance of pragmatics. The intention of each of the mediated environments explored in this study is to assist learners in gaining the necessary skills to tackle L2 pragmatic complexities in a variety of contexts.

At this point, little research has empirically analyzed the use of an online, strategy-based model for learning L2 pragmatics. Even less has specifically targeted learner perception of this space. Learner perception is critical due to the impact it can have on, for example, motivation, intake, and willingness to practice in the online environment. In order to arrive at a greater understanding of these issues, this paper compares learner perception data from two research projects which have utilized CALL materials to enhance learners’ strategies for L2 pragmatics. The first study (S1) was an in-depth, qualitative research project addressing the use and effectiveness of the first-of-its-kind learner website in L2 Spanish pragmatics with a comprehensive strategy overlay (Cohen and Sykes, 2007; Sykes and Cohen, 2007). The second (S2) was an extensive study which analyzed the use of the first synthetic immersive environment (a 3-dimensional gaming space designed with a specific educational outcome) used as an instructional space for learning Spanish pragmatics, specifically requests and apologies (Sykes, 2008). This chapter compares learners’ perceptions of their own strategy development within these two unique, online contexts, and draws some conclusions about how learners view CALL environments dealing with pragmatics. We end the chapter by posing questions for future research. The overarching goal of this chapter is to consider the potential roles that each of these mediated contexts could play in a strategies-based approach to L2 pragmatics.

**RELEVANT BACKGROUND INFORMATION**

Prior to a description of the two studies themselves, it is necessary to examine issues associated with this line of investigation. This section starts by describing relevant terminology. We then briefly deal with approaches to the learning of pragmatics and explore the potential role of mediated contexts (i.e., an instructional website and online virtual space) in pragmatic instruction.

**A Definition of Pragmatics**

Due to the wide-variety of contexts in which it is used, it is especially important to delineate what is meant by the term *pragmatics*. For our purposes, pragmatic ability will be explicitly defined as, the various manners (i.e., linguistic and nonlinguistic) in which meaning

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3 A complete review of the role of motivation and perception as related to second language acquisition (SLA) is beyond the scope of this work. See Gass and Selinker (2001, chapter 12) for an overview of these factors as related to SLA.
is communicated and interpreted in interaction, as well as the sociocultural factors (individual and collective) which influence the communicated and interpreted messages (Sykes, 2008, p. 5).

This definition is a combination of three canonical definitions of pragmatics and offers a comprehensive view of the important elements of each. We briefly explore each definition of pragmatics contributing to the current conceptualization. First, Yule (1996) defines pragmatics as the ability to deal with “meaning as communicated by a speaker and interpreted by a listener…and [to be able to interpret] people’s intended meanings, their assumptions, their purposes or goals…” (Yule, 1996, p. 3-4). Yule’s definition is important because it establishes the position meaning carries as a central component of interaction. Furthermore, it introduces the essential roles both expression and interpretation play in the transfer of meaning. Crystal (1997) explicitly states the importance of sociocultural considerations in his definition of pragmatics—“the study of language from the point of view of the users, especially the choices they make, the constraints they encounter in using language in social interaction, and the effects their use of language has on the other participants in the act of communication” (p. 301). Finally, LoCastro (2003) expands Crystal’s definition to include non-linguistic factors within interaction. She notes, “pragmatics is the study of speaker and hearer meaning created in their joint actions that include both linguistic and nonlinguistic signals in the context of socioculturally organized activities” (p. 15). Inclusion of both linguistic and non-linguistic elements within interaction is an important contribution of LoCastro’s definition. From our perspective each element presented in the aforementioned definitions is critical to the development of a comprehensive pragmatic system.

As one can imagine, acquiring the necessary skills encompassed in a comprehensive pragmatic system is quite complex, especially in a second language. Speakers must know what to say, how and when to say it, in relation to whom they are speaking. That is, interlocutors must have a sense of both the pragmalinguistic and sociopragmatic norms of the speech community in order to successfully perform any language function. Pragmalinguistic norms encompass the linguistic forms that are used to carry out language functions. For example, when apologizing, a speaker needs to select from a set of linguistic structures forms that are appropriate for the given context (e.g., a speaker-oriented form, Disculpame, and/or a hearer-oriented form, Lo siento.). In order to be sociopragmatically appropriate, the speaker needs to access knowledge about when, why, and with whom to use the various forms. This involves, for example, considerations of social class, age, gender, role within the interaction, and the cultural assumptions relevant to the interaction. In the case of an apology, for example, this would be the knowledge of when an apology should actually be made. The knowledge and skills needed to successfully perform each of these components can be mind boggling, especially for language learners and their instructors, who are attempting to incorporate pragmatics instruction in the classroom or even during a study abroad stay.

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4 It is important to point out that numerous conceptualizations of pragmatics exist. The use of the current definition is not meant to ignore additional definitions, but rather establish common ground for understanding the theoretical conceptualization of pragmatics. For additional exploration of this area see LoCastro (2003) and Crystal (1997).

5 Beebe and Waring (2001) and Márquez-Reiter and Placencia (2005) both note the difficulty in separating pragmalinguistic and sociopragmatic aspects of language. The terms are used here to distinguish the various components under consideration and are not meant to indicate mutually exclusive elements.
Approaches to Pragmatic Instruction

Given the complexities associated with ILP pragmatic development, it is essential to utilize a multi-faceted approach to instructional practices. We must consider how learning of pragmatics actually takes place. Memorizing a list of specific linguistic forms based on a dialect or region in isolation is not sufficient for developing pragmatic abilities. Instead, it is advisable to focus on the skills and strategies necessary to be "pragmatically adaptable" in a variety of contexts (e.g., region, age, social class, and setting). One step is to enhance the strategies that learners have for performing L2 pragmatics, providing the learners with examples drawing on the target-language pragmatic system. This approach is especially valuable in promoting the acquisition of sociopragmatic skills. In an exploration of contextual knowledge as related to language study, Kramsch and McConnell-Ginet (1992) note the complexity which "context of interaction" entails:

Sociocultural contexts cannot be reduced to an inventory to be "mastered"...they are not only too rich and various but also in constant flux as people reshape them through speaking and other forms of social interaction. Yet students can come to understand the centrality of context to linguistic communication and can develop some ethnographic skills to help them better understand the relevant contexts for their own uses of the target language. (p. 5)

Kramsch and McConnell-Ginet advocate the instruction of a set of ethnographic skills to deal with the constantly dynamic variable of context, a critical component of ILP development. The advantage of this type of approach is that it prepares learners for a wide variety of encounters. This also brings us closer to Thorne's (2005) conceptualization of intercultural competence which "ideally moves learners from simulated classroom-based contexts toward actual interaction with expert speakers of the language they are studying" (p. 3). Furthermore, development of these skills would afford learners the ability to deal with contextual differences when talking with NSs.

In the area of pragmatic instruction, two researchers have proposed models for addressing a set of pragmatic skills. First of all, Judd (1999) presents an approach to teaching pragmatics in the classroom which entails teacher analysis of the speech act, heightening of cognitive awareness skills, determining if students have the receptive skills to recognize speech act within different contexts, encouraging controlled production of the speech acts in different types of activities, and free integrated practice. Cognitive awareness raising is "designed to make learners consciously aware of differences between the native and target language speech acts" (p. 154). Learners' speech act production is elicited through different types of written and oral activities (e.g., cloze passages, role-plays, simulations) designed to help learners "actually incorporate the patterns into their own speech production" (Judd, 1999, p. 158). The various skills proposed could be used in combination, or separately, as a way to isolate specific pragmalinguistic and sociopragmatic aspects of the speech act under investigation. While Judd's approach tends to overemphasize pragmalinguistic skills, the model could also apply to sociopragmatic awareness. Most importantly, it emphasizes the notion of the need to develop a comprehensive set of pragmatic skills.

Another recent approach to learning pragmatics central to this study is a strategies-based approach, introduced by co-author Cohen (2005). Distinct from teacher strategies used for instructional purposes as well as learners' general website-use strategies, Cohen offers a
taxonomy of strategies intended specifically for the learning and performance of L2 pragmatics. This taxonomy includes three types of strategies; these serve as the focus of this analysis. Table 1 lists all strategies from the taxonomy.

Table 1. Taxonomy of Strategies for Learning Speech Acts, Adapted from Cohen (2005)

| Speech Act Learning Strategies | L1: Access published material dealing with speech acts.  
|                              | L2: Ask native speakers to model performance of the speech act.  
|                              | L3: Identify the second language speech acts learners want/need to focus on.  
|                              | L4: Gather information (through observation, interviews, written materials, movies, radio) on how the speech acts are performed.  
|                              | L5: Conduct one's own "cross-cultural" analysis (e.g., identify norms and semantic formulae, determine similarities and differences).  
|                              | L6: Observe what native speakers do by noting what they say, how they say it, and their non-verbal behavior.  |
| Communicative Act Use Strategies | U1: Remain true to one's own identity and subjectivity while still being aware of appropriate performance of the speech act.  
|                              | U2: Use communication strategies to get the message across (e.g., "I'm not sure how to say this right", repair when necessary, attempt to follow native speaker examples).  
|                              | U3: Ask native speakers for feedback.  
|                              | U4: Practice! (role plays, imaginary situations, conversations with native speakers)  
|                              | U5: Devise and utilize a memory aid for retrieving the speech act material that has already been learned.  
|                              | U6: Learners determine their learning style preferences and try approaches that are consistent with their individual style.  |
| Metapragmatic Considerations | M1: Be conscious of the necessity for pre-planning.  
|                              | M2: Decide on a focus. Performance? Comprehension? Both?  
|                              | M3: Monitor various elements of the communicative act (e.g., level of directness, terms of address, timing, organization, sociocultural factors).  |

The combination of these strategies recognizes learning pragmatics as the development of a skill set necessary for effective communication that moves beyond a specific speech act or appropriate semantic formulae used in realizing a language function. By developing the strategies necessary for dealing with various language functions in communication, learners will be prepared to handle a wide variety of contextual situations, as opposed to being restricted just to those they have encountered previously.

Empirical research is still needed to confirm if this approach is effective and helpful for ILP development; however, a consideration of this type of approach is warranted. In order to

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6 *Semantic formulae* refer to the speech act-specific strategies which alone or in combination with other strategies serve to constitute the speech act (e.g., the strategies of "acknowledging responsibility" or "offering a repair" in the speech act of apologizing).
begin investigation into a strategy-based approach to ILP development, the design of the instructional materials used in the current analysis drew extensively on the taxonomy proposed by Cohen (2005). By looking at how learners interacted with these materials, as well as through surveys tracking their perceptions, it was possible to analyze what they learned, their application of the strategies targeted through instruction, and their attitudes towards this process. This work focuses on the learner perception piece of the puzzle.

The Role of CALL in ILP Development

Addressing ILP development in formal instructional settings can present a number of difficulties, many of which likely contribute to the lack of pragmatics instruction in the L2 classroom. Some of these barriers include a lack of theoretical support in course design and competency considerations (Bardovi-Harlig, 2001; Felix-Brasdefer, 2002; Rose, 2005; LoCastro, 2003), a lack of authentic curricular materials and appropriate input (Bardovi-Harlig, 2001; Félix-Brasdefer, 2002; LoCastro, 2003, a lack of instructor expertise (LoCastro, 2003), a focus on “micro-level” features instead of “macro-level” competence (Bardovi-Harlig and Dörnyei, 1998), limited time and attention in FL classroom (Kasper and Schmidt, 1996), perceptions and behavior unique to each individual learner (Kasper, 1997, Bardovi-Harlig, 2001), assessment and feedback challenges (Roever, 2004; Cohen, 2004; Salaberry and Cohen, 2006), and immense variation (dialect, social, individual) (Marquez-Reiter and Placencia, 2005). However, the emergence of innovative technologies allows us to overcome many of these barriers in order to make learning pragmatics a reality.

Computer Assisted Language Learning (CALL) technologies play an increasingly important role in ensuring that pragmatics instruction is comprehensive in nature. Innovative technologies have the potential not only to aid in the creation of effective online materials for learning pragmatics (e.g., CLEAR, 2005; Cohen and Ishihara, 2005; Cohen and Sykes, 2006), but also to provide a valuable environment for interaction (Furstenberg and Levet, 2001; Belz, 2002, 2003; Biesenbach-Lucas, 2005; Sykes, 2005). In addition, an online environment offers a ready opportunity to provide a series of strategies that learners could use to enhance their learning and performance of pragmatics.

Furthermore, online interactive environments offer features which make them an accessible vehicle for presenting information on pragmatics, and for dealing with issues associated with ILP development such as emotional sensitivity unique to individual learners, feedback and assessment difficulties, and the phenomenon of individual, social, and dialectal variation. Some of these features include: (a) opportunities to focus on different/multiple aspects of the language including discourse functions and syntactic complexity (e.g., Abrams, 2006; Furstenberg, et. al., 2001; Payne and Whitney, 2002; Sotillo, 2000; Sykes, 2005; Vandergriff, 2006), (b) effective, multi-level feedback with minimal instructor interference (e.g., Godwin-Jones, 2004; Linden and Rochon, 2003; Sotillo, 2005), (c) low risk practice situations with high emotional connection (e.g., De Freitas, 2006; Gee, 2003, 2005; Mistral, 2007; Wilcox et. al., 2006), and (d) paced, individualized interaction (e.g., De Freitas, 2006; Gee, 2003a, 2005). While a detailed exploration of each of these features is not possible
within the scope of this work, their mention is warranted here due to mediated environments analyzed for the current work (to be described in detail in the following section).

The goal of the two studies to be reported on below was to provide learners with two novel online environments to assist them in gaining the necessary skills to tackle L2 pragmatic complexities in different contexts. At this point, little research has empirically analyzed the use of an online, strategy-based model for learning L2 pragmatics. Even less research has specifically targeted learner perceptions about such online environments. In order to arrive at a greater understanding of how learners perceive each of the mediated contexts, this paper compares learner perception data from two research projects which have utilized CALL materials to enhance learners’ strategies for L2 pragmatics. In doing so, it sought to answer two research questions.

**Research Questions**

1. How do learners perceive their own strategy development for Spanish pragmatics through the use of two distinct CALL environments, a self-access website and a synthetic immersive environment?
2. What are learners’ perceptions of learning Spanish pragmatics in each of these two CALL environments?

**Methodology**

Both a self-access website and a synthetic immersive environment were included in this study in order to better understand learner perception about CALL materials. Both contexts were created with the aim of improving learners’ strategic abilities in pragmatics. The two studies utilized similar research methods in order to analyze learners’ perceptions. Moreover, both studies addressed the same speech acts and had a specific focus on learner strategies for learning and performing pragmatics, eliminating the effect that the content being taught would have on differences in learner perception. The first data set is taken from an in-depth, qualitative research project (S1) addressing the use and effectiveness of the first-of-its-kind learner website in L2 Spanish pragmatics with an explicit strategy overlay (Cohen and Sykes, 2007; Sykes and Cohen, 2008). The second is a subset of data taken from an extensive study (S2) analyzing the use of the first synthetic immersive environment (a 3-dimensional gaming space designed with a specific educational outcome) used as an instructional space for learning Spanish pragmatics, specifically requests and apologies (Sykes, 2007). The participant groups and methods employed for each of the studies are presented below followed by an explanation of their use for the current analysis.
Participants

The participants in Study 1 (S1) consisted of a group of ten volunteers (N=10) who were the first to express interest in the study. The participant group in Study 2 (S2) includes a subset of volunteers (N=25) who agreed to participate in one-on-one interviews and entrance and exit surveys in addition to their work in the virtual space as part of the advanced Spanish course they were taking. This group (S2) represents approximately 50% of the participants in the full-scale study (N=53). The demographic composition of both the S1 and S2 groups is fairly similar and, therefore, allows for comparison of the two data sets. In addition, both represent the typical composition of advanced Spanish classes and the large, mid-Western university where both studies took place. Table 2 below presents the demographic compilation of each of the participant groups.

<table>
<thead>
<tr>
<th>Table 2. Demographic Information about the Participant Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participant Group 1 (S1)</strong></td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Female (N=5)</td>
</tr>
<tr>
<td>Male (N=5)</td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>Range 19-37</td>
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<tr>
<td>Average Age: 22.6</td>
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<tr>
<td>Native Language</td>
</tr>
<tr>
<td>English</td>
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<tr>
<td>Dominant Language</td>
</tr>
<tr>
<td>English</td>
</tr>
<tr>
<td>Experience Learning</td>
</tr>
<tr>
<td>High school and university</td>
</tr>
<tr>
<td>Spanish</td>
</tr>
<tr>
<td>classroom; 40% (N=4) study abroad</td>
</tr>
<tr>
<td>Study Abroad</td>
</tr>
<tr>
<td>Length of stay: 1 month-1 year</td>
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As can be seen in Table 2, the participants represented learners of Spanish from ages 19 to 37. While the S1 group was balanced in terms of gender, the S2 group was predominantly female. This difference can be attributed to the subject recruitment method. The participants in S1 were recruited outside of the classroom context, allowing for the creation of a balanced group. On the other hand, S2 was made up of student volunteers from a research project studying classroom activities. In the classes used for the study, the majority of the enrolled students were female. Therefore, it is to be expected that the subset of volunteers was also predominantly female. Both groups S1 and S2 came from a variety of language learning contexts. Some began their studies earlier than others (high school vs. university), yet, all were enrolled in upper-division Spanish courses at a large mid-Western university. While class placement alone is not a strong indicator of proficiency level, it can be determined that all learners in both participant groups were at least at a minimum level of proficiency. In order to be enrolled in these courses, students were required to pass a university-administered, language proficiency exam (LPE) indicating that they were at or above the intermediate-mid

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9 Approximately 50 students volunteered for the study, indicating a strong interest in the subject matter as well as the project. The group was limited to 10 due to budget constraints.
level on the ACTFL proficiency scale.\textsuperscript{10} Therefore, it was expected that all participants were at least at the Intermediate-High level for Reading and Listening and an Intermediate-Mid level for Speaking and Writing.\textsuperscript{11} All participants in both groups were native speakers of English, and had fairly high average GPAs in Spanish (S1 = 3.63; S2 = 3.625). While very few participants (S1: 30%; S2: 16%) in either group spoke languages other than Spanish, some participants did report having studied French (S1: N=1, S2: N=2), Mandarin (S1: N=1), German (S2: N=1), Hindi (S2: N=1), and Portuguese (S1: N=1). It is important to bear in mind that both learner groups accessing the CALL materials for learning Spanish pragmatics were relatively diverse. This allows for a more comprehensive glimpse into how a variety of different types of learners perceive the CALL materials for developing a strategic approach to ILP development.

**Data Collection Procedures and Instrumentation**

Each of the studies employed in this analysis consisted of an entrance survey, pretest, treatment period, post test(s), exit survey, and one-on-one interview with the researcher. The data collection procedures and instrumentation for each study are presented below. Detailed descriptions of the outcome measures (pre- and posttests) are included for informational purposes; however, the results of the outcome data are not reported as a component of the current analysis in this chapter.\textsuperscript{12}

**Study 1 (S1)**

In this study (Cohen and Sykes, 2007; Sykes and Cohen, 2008), all subjects attended a general descriptive session about the project and then completed a paper-and-pencil entrance survey. This survey was designed to obtain important demographic information about each of the participants as well as to collect data concerning the types of learning and performance strategies learners perceived themselves to already be using (based on Cohen, 2005). Information from this initial survey was important in establishing a baseline of perceptive strategy use. Approximately one week after completing the entrance survey, participants completed a pretest designed to evaluate their level of pragmatic knowledge. The pretest took approximately one hour and consisted of two parts—(1) a written multiple-rejoinder *discourse completion task* (DCT),\textsuperscript{13} with five situations based on material from the instructional website, *Dancing with Words: Strategies for Learning Pragmatics in Spanish*, calling for two requests, two apologies, and a service encounter, and (2) a three-part role-play in a synthetic immersive environment assessment (SIEA) area: a request to borrow their host

\textsuperscript{10} While pragmatics tends to be considered primarily part of oral communication (i.e., speaking and listening), it is essential to examine reading and writing as well, since much of the communication takes place in a multimodal environment that requires the use of written text as well.

\textsuperscript{11} For a detailed explanation of these proficiency levels as indicated by ACTFL, see www.ACTFL.org.

\textsuperscript{12} See Sykes and Cohen (2008) and Sykes (2008) for an analysis of the outcome data for each study.

\textsuperscript{13} A DCT is a paper-and-pencil task in which participants receive a context and then one, or more, turns of the conversation. They are then asked to fill in what they would say in each of the blanks. Different formats (e.g., open-ended vs. close-ended, multiple rejoinder possibilities) have been designed with the intention of eliciting data more like natural speech.
sister's course notes, a service encounter with a street vendor (buying souvenirs), and apologizing to their sister for spilling Coke on the notes in their backpack and ruining them.

Given the use of DCTs in this study, it is important to note concerns raised as to their validity for data collection in pragmatics (e.g., Golato, 2003; Roever, 2004; Garces-Conejos Blitvitch, 2006). It has been claimed, for instance, that the use of DCTs produces data that are not representative of language use, but rather reflect speaker intuitions or perceptions. Other commonly asserted limitations of the DCT include the lack of genuine interaction in responding to DCT vignettes, the limited contextual information (making it difficult for participants to put themselves in the situation), the use scenarios that are too complex making them inaccessible to learners (or even NSs), the over-reliance on the intuition of the speaker, and the disconnect between what they say they would do and what they actually do (Félix-Brasdefer, 2003; Golato, 2003; Roever, 2004). Nevertheless, these limitations should not be taken as grounds for ruling out the use of the DCT for pragmatics research. In fact, as confirmed by Kasper and Rose (2002), when used correctly, elicited data (e.g., through a DCT) can be quite useful. “Contrary to the popular perception that “inauthentic” equals “invalid,” interactions arranged for research purposes can be most useful sources of data if used judiciously” (Kasper and Rose, 2002, p. 80). DCTs actually present a number of important benefits. In this case, the use of a DCT allowed the researchers to access what the learners know about each of the speech acts, as well as to isolate the specific semantic formulae utilized.

In addition, the DCTs were utilized in conjunction with the virtual role-play scenarios in order to triangulate the assessment data. The synthetic immersive environment assessment (SIEA) is an important contribution of this project because it allowed for authentic interaction to occur between a native speaker and the participants in a realistic and three-dimensional interactive space. Utilizing much of the content from the instructional materials, we created a virtual online environment for the purpose of assessing Spanish pragmatics. This new virtual space allows for assessment of both speech act performance as well as students’ use of the resources within the virtual space for successful interaction. It builds on experiences over the last decade with synchronous computer-mediated communication (SCMC) (Payne and Whitney 2002; Belz 2003, 2005; Payne and Ross 2005; Sykes 2005) as well as current educational gaming research (e.g., Gee, 2003, 2005; DeFreitas, 2006).14

The SIEA tool was an adaptation of one component of an online virtual world named Croquelandia that was developed by Sykes and a team of programmers as part of a larger project at the University of Minnesota. Croquelandia the learning environment used in S2. The graphics in the space were created utilizing photos taken by Sykes in the Spanish-speaking world. The photos were then adapted and redesigned into the space by the graphic design and programming team. In the SIEA, learners were able to move their avatar15 throughout the environment, interact with built-in content and non-player characters (NPCs), and talk with a native speaker. See Figure 1 for images of the SIE assessment space based on Croquelandia. The creation of this SIEA space provided a low-risk, yet authentic, space for interaction and shows promising possibilities for future pragmatics research and instruction.

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14 See Sykes (2007) for further discussion of the relationship between SCMC and SIEs as related to learning L2 pragmatics.

15 An avatar is the virtual representation of one’s character in the online virtual space. One’s avatar is controlled by the user and can interact with the digital space.
Figure 1. Sample Virtual Settings in SIEA Space.

After completing the pretest, participants then participated in a content orientation session which consisted of a one-hour introduction to pragmatics and to the strategies taxonomy (Cohen, 2005). Following the content orientation session, participants then completed online modules from Dancing with Words: Strategies for Learning Pragmatics in Spanish. The Dancing with Words website is a content site (http://www.carla.umn.edu/speechacts; Cohen
and Sykes 2006), developed over eleven months that was launched in August of 2006. It consists of an introductory module as well as eight additional modules – (1) Compliments, (2) Gratitude and Leave Taking, (3) Requests, (4) Apologies, (5) Invitations, (6) Service Encounters, (7) Advice, Suggestions, Disagreements, Complaints, and Reprisals, and (8) Considerations for Pragmatic Performance. It includes unscripted video interchanges between natives of various regional varieties of Spanish and utilizes scaffolding for the purpose of addressing the learners’ varying levels of language/pragmatic ability. Speech acts are dealt with sequentially: first as a core, then in interaction, and then as a naturally occurring sequence. As previously mentioned, one important feature of this site that makes it especially useful for this project is the extensive strategies overlay that goes along with the materials (Cohen, 2005).  

The three modules completed for this project were requests, service encounters, and apologies. It took participants approximately 1-2 hours to complete each of the modules, for a total of between 3-6 hours of self-access content time with the website. All online activity was recorded using Camtasia Screen Capture (http://www.techsmith.com/camtasia.asp) software. The screen recordings allowed for observation and analysis of the participants’ interaction with the website as well as the responses given to each of the interactive activities.

After the completion of their final module, all participants took part in a reflective interview with one of the researchers. Each interview lasted approximately fifteen minutes and was recorded and transcribed for future analysis. No more than 48 hours after completing the last module, participants completed an immediate posttest, similar to the pretest, but with varied situations and contexts in the SIEA. The students had to make a request to borrow money from their host sister, who only had a large croquedo bill which they needed to get changed and return the change. The service encounter was the same, but the apology was for losing the rest of the money. There was also a delayed posttest, which was the same as the pretest. The data set used from this study for the current analysis included the survey results for the entrance and exit surveys as well as the interview data.

**Study 2 (S2)**

In this study (Sykes, 2008), participants completed two modules in a 3-dimensional, immersive environment as part of their course in Spanish. All students enrolled in the course participated in the instructional activities which were also recorded and observed for research purposes. In addition, a subset of volunteers (S2) also participated in additional research-oriented activities outside of their classroom activities. Since the focus of this article were the perceptions as reported by a subset of 25 participants, the following section describes the nature of their participation in the study.

First, all the student subjects participated in a general introduction to the project and completed an entrance questionnaire administered online. Much like Study 1, the entrance survey in this study was designed to glean important demographic and experiential information from each of the learners prior to beginning the instructional activities in order to establish a baseline for their perceptions as to strategy use. One section of this survey was parallel to the strategies section used in Study 1. As was previously mentioned, this set of

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16 For additional background information on the website see http://www.carla.umn.edu/speechacts/sp pragmatics/for_researchers.html
questions was used to collect data concerning the types of learning and performance strategies learners perceived themselves to already be using (based on Cohen, 2005).  

During Week 3 of the semester, learners participated in two class sessions dedicated to pragmatics and the course project. Class Session 1 a theoretical introduction to pragmatics was presented, based on what the students read for homework, and a pretest DCT was included as part of the classroom activities. This class session was taught by the researcher, an experienced instructor, in all five class sections to maintain consistency throughout the groups. Prior to arriving in class, learners were assigned two introductory readings, chapter 1 from LoCastro’s (2003) textbook, and chapter 7 from Koike and Klee (2003). These readings provided the theoretical basis for the in-class discussions on pragmatics and introduced a number of important concepts in pragmatics with which learners needed to familiarize themselves, including a strategies-based approach. Class Session 1 was a typical class session dedicated to an introduction of pragmatics. The class session consisted of an interactive PowerPoint presentation and discussion of important concepts related to the assigned reading. Between Class Sessions 1 and 2, all participants were encouraged to review the articles and project description.

During Class Session 2, participants had the opportunity to practice in the synthetic immersive environment (SIE), watch a number of online tutorials introducing them to the technology, and ask any questions they might have had. The tutorials were available for consultation throughout the course of the project.

During Weeks 3-7 of the semester, learners were given the opportunity to work in groups of 4 in the online SIE to improve their skills in Apologies and Requests. Participants worked in the SIE in order to learn everything they could about the designated speech acts and compile a 5-7 minute presentation summarizing what they learned. Part 1 (Weeks 4-5) addressed either Requests or Apologies and Part 2 (Weeks 5-7) addressed the speech act not covered in Part 1. The order and distribution of the environment assignments and speech acts varied by group in order to eliminate any task affect on the results. Consequently, the treatment occurred in two different sequences. Half of the group followed Sequence 1 (i.e., Part 1 working on apologies; Part 2 working on requests) and the other half followed Sequence 2 (i.e., Part 1 working on requests; Part 2 working on apologies). All interaction occurring in the online collaborative environments was recorded and archived for analysis using a database built-in to the SIE.

In between Parts 1 and 2, all participants took part in a mid-point, one-on-one interview with the researcher. This interview focused on learners’ initial perceptions of the space as well as suggestions for what they would like to see in the future. In addition, the questions focused specifically on learners’ experience with the module they had recently finished, either requests or apologies. Each interview lasted between 15-30 minutes. All responses were recorded and transcribed for future analysis.

Before continuing with a description of the study itself, it is important to further describe the SIE environment. The SIE used in this study was an online virtual world named Croquelandia that was designed by Sykes and a team of system architects at the University of Minnesota as part of a larger project, specifically for learning and practicing Spanish.

\[17\] The items in each survey for S1 and S2 were quite similar. However, some minor differences did occur. These included one additional item on the survey in S1. Therefore, the pre-post test design was critical in making the results comparable.
pragmatics. The Spanish model is the first environment of its kind designed for language
learners and is designed to serve as a model for similar SIEs in other languages. The space
was developed utilizing five guidelines for the creation and use of CALL materials to aid in
interlanguage pragmatic development. These are:\(^\text{18}\)

*Design*

1. Objectives should be co-operative, dynamic, and socially-constructed in order to
allow for authentic and realistic pragmatic practice.
2. Educational outcomes of the activities should be explicitly defined and supported
with accurate content.

*Task Creation and Administration*

3. Tasks should reflect the determined objectives and outcomes through multiple
involvement opportunities, realistic contexts, and varied participant roles.
4. The platform should be user-friendly and supported by initial training and ongoing
support.

*Feedback and Assessment*

5. Instructors should play a passive, yet interested, role during tasks. Feedback should
be reserved for follow-up and processing.

It is important to note that the SIEA space used in Study 1, represents one component of
the larger *Croquelandia* project. As was mentioned previously, all of the graphical content in
the space was created utilizing photos taken by Sykes in the Spanish-speaking world. Sound
recordings of street noises were also made using an iPod and iMic. The photos and sounds
were then adapted and redesigned into the space by the graphic design and programming
team. In the space itself, learners can collaborate and interact in three primary areas – their
host family’s house, a central plaza and market place, and the university. Learners could
move seamlessly between the three spaces using an interactive map in which they could click
on the area to which they wanted to travel (see Figure 2).

In addition, the participants were able collaborate with their group members using voice
or written chat and could interact with the environment by clicking on different items,
walking around the space, and ‘talking’ with non-player characters (computer-generated
avatars present in each of the spaces). Figure 3 shows the main square and marketplace in
*Croquelandia*.

All NPC interactions were created from roleplay conversations with a variety of native
speakers. See Figure 4 for an example of this type of interaction. All native speakers were
given a context and then asked to react to the other person in the conversation (the
researcher). Three or four conversations were recorded for each conversation with different
semantic formulae carrying different pragmatic meanings. These conversations were then
parsed and used to create a “choose your own adventure” conversation tree for the learner to

\(^{18}\) For a detailed description of each of these guidelines see Sykes (2008).
choose from. The NPC in the virtual space reacts based on what the native speaker actually did in the "real world" conversation.

Figure 2. Navigation Map in Croquelandia.

Figure 3. Sample of Market in Croquelandia.
In *Croquelandia*, learners were also able to create their own content and leave messages for their group members using an asynchronous bulletin board feature. See Figure 5 for a detailed description of the interactive features of the user interface.

After completing all activities in the SIE, the participants worked as a group to present their findings about Apologies and Requests in Spanish. The class assignment required participants to create a two-part presentation in Spanish and was worth 10% of the students’ grade in the course. Following the presentations an in-class discussion was used to summarize the content learned. The group presentations and the discussion were videotaped for future analysis. It should be noted that the post test DCT occurred prior to the class presentations in order to ensure that any changes could be attributed to work done in the SIE. Finally, after completing the group presentations and all other activities, the participants completed an exit
survey similar to the entrance survey as well as a final one-on-one interview. Each interview lasted between 10-15 minutes and addressed overall perceptions of the project and experience in the SIE. All responses were recorded and transcribed for analysis.

**Current Project**

As can be seen from the detailed descriptions above, each of the studies was complex. However, the similarities between components of the two data sets allows for logical comparisons to be made using the measures each has in common.

Figure 6. Data Collection Procedures for Studies 1 and 2

Therefore, the goal of this research project was not to compare all data from both studies, but rather to utilize data from three specific measures to better understand the learners’ perceptions regarding strategic development in each of the two environments. This chapter
compares the entrance and exit survey data specifically addressing learners’ perceptions of the strategies used for learning and performing pragmatics. It also considers the one-on-one interview data from both studies. Figure 6 below provides a graphical comparison of each study. The data being utilized for the current analysis are noted with an asterisk (*).

**Procedures for Data Analysis**

Survey and interview data from each of the aforementioned studies were used in order to answer the proposed research questions. First, entrance and exit survey data from both studies were analyzed to examine learner perception of strategy use before and after completing the online activities (Research Question 1). In each of the surveys, the participants reported their use of each strategy from Cohen’s (2005) taxonomy prior to the treatment activities and after completion of the instructional materials. In the case of strategy U6 (learning style), the group in Study 1 (S1) was queried using one survey item whereas, in Study 2 (S2), two items were used to examine individual style (i.e., cognitive style and personality). In this case, the two items in S2 were averaged for the purposes of this comparison. The survey responses indicated perceived strategy use in each of the three areas reported by Cohen as being important for strategic development in pragmatics—(1) Learning Strategies, (2) Use Strategies, and (3) Metapragmatic Strategies. For further explanation of each of these areas of strategic development see the *Relevant Background Information* section of this chapter.

In each survey, the respondents evaluated their own strategy use on an ordinal scale with five categories and a sixth “Don’t know” option. For analysis purposes, the mean of all responses was calculated by assigning a numerical value to each response and then calculating the average response value and standard deviation. The numerical values corresponding to each qualitative response are as follows: Seldom/Never=1, Somewhat Likely/Sometimes=2, Likely/Often=3, Very Likely/Very Often=4, Almost Always=5, and Don’t Know=0. Based on this scale of numerical assignment, a higher mean points to a higher perception of that strategy being used by the learners themselves.

In order to compare the two data sets, the change between the entrance and exit means was calculated for each strategy. An analysis of the change rate based on the entrance and exit responses for each group helps eliminate overall differences in perceived strategy use between the two groups and maintain a consistent value for comparison. The change rate of perceived strategy use was calculated by subtracting the entrance score from the exit score. Thus, a positive change rate indicates increased perceived usage whereas a negative number shows a decrease in perceived usage on the part of the learners. For the purposes of this analysis, a change rate of less than .5 was considered as no change. A change rate between .5 and 1 in either direction was considered noteworthy and indicative of a minor increase or decrease. A change rate greater than 1 in either direction was considered as indicative of a moderate change. After calculating the values, rates of change for each type of pragmatic strategy (learning, use, and metapragmatic) were compared for both studies. Due to small sample size and different group of learners in each study, the results could not be verified through calculations of statistical significance. Nevertheless, some change patterns worthy of discussion did emerge. These will be presented in the following section.

For research question 2, patterns in the interview data were found through qualitative categorization of each set of interviews. The themes found common to each and relevant for
the comparison of learner perception of each of the spaces are reported in the Findings section.

**FINDINGS**

The survey and interview data from both Studies 1 and 2 provided material for responding, at least in a preliminary fashion, to each of the research questions addressed in this study. The goal of this analysis is to explore findings that can then be used as a starting point for additional empirical research in this area. This section presents results and interpretations for each research question, as well as the limitations of the present study.

**Research Question 1**

How did learners perceive their own strategy development for Spanish pragmatics through the use of two distinct CALL environments, a self-access website and a synthetic immersive environment?

**Results**

In order to answer the first research question, learners' perceptions of strategy use were measured using the entrance and exit survey data from both studies. In this section, we report the results of the comparison of the survey data for each of the three categories of pragmatic strategies.

First, in the learning strategies category, we see one strategy (L5=.1) in S1 and four strategies (L1=.3; L2=-.045; L3=.295; L5=.375) in S2 that we consider as no change. As can be seen in Table 3, the strategies which exhibited minor changes in perceived use by the learners are strategies L4 (S1=.65; S2=.53) and L6 (S1=.7; S2=.5). Each exhibited fairly equivalent rates of change in both studies. In addition, we also see a minor change in strategy L1 (.6) in S1. Finally, in S1, both strategies L2 (1.1) and L3 (1.63) showed moderate changes. Both of the strategies that had a moderate change rate in S1 exhibited no change in S2.

Overall, results for the learning strategies category suggest an increased perceived use of learning strategies after having participated in the online website activities (S1). However, in the SIE (S2), there was some evidence of an increase in perceived strategy use in 2 of the 6 strategies and no change in the others. The larger increase in perceived strategy use is confirmed in that the average rate of change for this category in S1 was .79 (minor change) and for S2 was .32 (no change). Figure 7 summarizes the results of this category in graphical format.
<table>
<thead>
<tr>
<th>Strategy</th>
<th>Study 1 (S1)</th>
<th>Study 2 (S2)</th>
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<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>L1: I will refer to published material (e.g., articles, websites)</td>
<td>2.00</td>
<td>.94</td>
<td>2.60</td>
<td>.84</td>
<td>1.45</td>
<td>.71</td>
<td>1.75</td>
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<tr>
<td>dealing with communicative acts.</td>
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<td></td>
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</tr>
<tr>
<td>L2: I will ask native speakers to model how they perform the communicative act.</td>
<td>2.40</td>
<td>1.17</td>
<td>3.50</td>
<td>.87</td>
<td>1.625</td>
<td>.71</td>
<td>1.58</td>
</tr>
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<td></td>
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<tr>
<td>L3: I will identify the communicative acts (i.e., requests, apologies, compliments)</td>
<td>2.20</td>
<td>1.54</td>
<td>3.83</td>
<td>1.06</td>
<td>2.58</td>
<td>1.43</td>
<td>2.875</td>
</tr>
<tr>
<td>that I want/need to focus on.</td>
<td></td>
<td></td>
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<tr>
<td>L4: I will gather information (through observation, interviews, written materials, movies, radio) on how the communicative acts are performed.</td>
<td>2.90</td>
<td>1.28</td>
<td>3.55</td>
<td>1.30</td>
<td>2.625</td>
<td>1.36</td>
<td>3.16</td>
</tr>
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<td></td>
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<tr>
<td>L5: I will conduct my own cross-cultural analysis (e.g., identify norms and strategies specific to a given communicative act like “requesting,” determine the similarities and differences between my first language and Spanish).</td>
<td>3.20</td>
<td>.91</td>
<td>3.30</td>
<td>1.05</td>
<td>2.625</td>
<td>1.51</td>
<td>3.00</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>L6: I will pay attention to what native speakers do by noting what they say, how they say it, and their non-verbal behavior.</td>
<td>3.40</td>
<td>1.26</td>
<td>4.10</td>
<td>.87</td>
<td>3.125</td>
<td>1.65</td>
<td>3.625</td>
</tr>
</tbody>
</table>
Reported Average of Learning Strategies in S1 & S2

![Bar Chart]

In terms of the use strategies category, a similar picture emerges. Once again, we see an increase in perceived use for more strategies in S1 (4/6) than in S2 (2/6). Table 4 reports the means, standard deviation, and change for each individual strategy in the entrance and exit surveys for both studies.

Utilizing the comparison of entrance and exit survey data for both studies, we see that for strategy U2 there was very little change in either study (S1=.2; S2=0). Furthermore, no change is found for strategy U5 (.45) in S1 and strategies U3 (.04), U4 (.035), and U6 (-0.105) in S2.

In terms of minor change, Strategy U1 (S1=.06; S2=.62) exhibits equivalent rates of change in both studies and, in S1, strategies U4 (.85) and U6 (.5) also present evidence of a minor increase in perceived use.

In the use category, the only strategy which exhibits a moderate change is U3 (1.05) in S1. As is the case with the learning strategies, there are no instances of moderate change in S2.

Overall, results for the use strategies category indicated a tendency for increased perceived deployment of use strategies after having participated in the online website activities (S1) and little change in perceived strategy deployment upon participation in the SIE (S2). In general, participation in the website resulted in a minor change rate in the use category in S1 (.60) and no overall change in S2 (.18). Figure 8 summarizes these results of this category in graphical format.

The final category of strategies to be analyzed is that of metapragnmatic strategies. In this category, a slightly different pattern emerges than that found in the learning and use categories.
Table 4. Reported Average of Use Strategies in S1 and S2

<table>
<thead>
<tr>
<th>Strategy</th>
<th>S1 Entrance</th>
<th>S1 Exit</th>
<th>Change</th>
<th>S2 Entrance</th>
<th>S2 Exit</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>U1: I will remain true to my own cultural identity and personal values while still being aware of the cultural expectations of native speakers.</td>
<td>3.5</td>
<td>.97</td>
<td>4.1</td>
<td>.87</td>
<td>0.6</td>
<td>3.29</td>
</tr>
<tr>
<td>U2: I use communication strategies to get the message across (e.g., &quot;I'm not sure how to say this right,&quot; repair when necessary, attempt to follow native speaker examples).</td>
<td>3.6</td>
<td>.84</td>
<td>3.8</td>
<td>.91</td>
<td>0.2</td>
<td>3.16</td>
</tr>
<tr>
<td>U3: I ask native speakers for feedback on my pragmatic abilities.</td>
<td>2.75</td>
<td>.92</td>
<td>3.8</td>
<td>1.03</td>
<td>1.05</td>
<td>1.54</td>
</tr>
<tr>
<td>U4: I practice (e.g., role-plays, imaginary situations, conversations with native speakers) in order to improve my pragmatic skills.</td>
<td>2.75</td>
<td>1.31</td>
<td>3.6</td>
<td>1.17</td>
<td>0.85</td>
<td>1.875</td>
</tr>
<tr>
<td>U5: I will devise and utilize memory strategies for retrieving the communicative act materials that has already been learned.</td>
<td>2.6</td>
<td>.69</td>
<td>3.05</td>
<td>1.30</td>
<td>0.45</td>
<td>2.29</td>
</tr>
<tr>
<td>U6: I will determine my style preference as a learner and try approaches that are consistent with my individual style.*</td>
<td>3.1</td>
<td>.99</td>
<td>3.6</td>
<td>1.07</td>
<td>0.5</td>
<td>3.395</td>
</tr>
</tbody>
</table>
Table 5 reports the mean, standard deviation, and change for the metapragmatic strategies category. In this case, 2 of the 3 strategies in S1 exhibit no change (M2=-0.2; M3=.45) and only one strategy in S2 shows no change (M3=.46). For both M1, a minor perceived rate of change was found in both studies (S1=.5; S2=.79). Strategy M2 is interesting in that it is the only strategy in which we see a minor change in S2 (.66) and no change in S1. There are no moderate changes in this category. Overall, results suggest that participation in the synthetic immersive environment (S2) most likely had a higher impact on learners’ perceived use of metapragmatic strategies than the website (S1), albeit the change was minor in S2. This was the only category in which the S2 group indicated a higher overall rate of change. The overall average strategies for Studies 1 and 2 in this category were .25 (no change) and .63 (minor change), respectively. Figure 9 is a graphical representation of the data from the metapragmatic strategies category.
Table 5. Reported Average of Metapragmatic Strategies in S1 and S2

<table>
<thead>
<tr>
<th>Strategy</th>
<th>S1 Entrance</th>
<th>S1 Exit</th>
<th>S2 Entrance</th>
<th>S2 Exit</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>M1: I will be conscious of the necessity for pre-planning.</td>
<td>3.0</td>
<td>0.81</td>
<td>3.5</td>
<td>1.35</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>2.91</td>
<td>1.22</td>
<td>3.7</td>
<td>1.08</td>
<td>0.79</td>
</tr>
<tr>
<td>M2: I will decide what my focus is. Performance? Comprehension? Both?</td>
<td>3.3</td>
<td>1.15</td>
<td>3.1</td>
<td>1.19</td>
<td>-0.2</td>
</tr>
<tr>
<td></td>
<td>2.25</td>
<td>1.40</td>
<td>2.91</td>
<td>1.24</td>
<td>0.66</td>
</tr>
<tr>
<td>M3: I will monitor my performance of communicative acts (e.g., level of directness, terms of address, timing, organization, sociocultural factors).</td>
<td>2.6</td>
<td>1.07</td>
<td>3.05</td>
<td>1.21</td>
<td>0.45</td>
</tr>
<tr>
<td></td>
<td>2.33</td>
<td>1.41</td>
<td>2.79</td>
<td>1.25</td>
<td>0.46</td>
</tr>
</tbody>
</table>

In general, these data suggest that the website had a minor impact on S1 learners’ perceived use of learning and use strategies. In the case of strategies L2, L3, and U3 we see a moderate increase in perceived use. S1 demonstrates no effect on learners’ metapragmatic strategies. The opposite appears to be true for S2. In S2, the data exhibits no change in the learning and use categories overall (with a few exceptions indicating minor changes at the strategy level) and a minor increase in perceived use of metapragmatic strategies. In all cases (S1 and S2) where there is evidence of minor or moderate change, there is always an increase in perceived use, not a decrease. The following section addresses some implications of these results.

Discussion

The previous comparison of perceived strategy use data are a sign that participation in different types of mediated contexts (i.e., a self-access website and an immersive space) may have had a minor impact on perceived strategy use. In looking at all three categories, it can be preliminarily concluded, based on the scale used in this study, that the users of the self-access website in S1 reported a moderate increase in the use of learning and use strategies for pragmatic development with no change in their use of metapragmatic strategies. However, the users of the synthetic immersive environment in S2 indicated a minor increase in the perceived use of metapragmatic strategies for pragmatic development and no change in the learning and use categories.

In analyzing possible explanations for the preliminary differences found between S1 and S2, it is important to first examine the emerging differences at the category level. We will then identify unique findings for some of the specific strategies themselves. First of all, the category-level difference between S1 and S2 should be understood as emerging patterns worthy of future attention, and not as conclusive results. The minor increase in learning and use strategies in S1 and no evidence of change in S2 could be attributed to the type of strategies-based instruction each group of learners received through the website and SIE. In
the website, explicit identification and exploration of each of the strategies was included as part of the instructional activities. In the SIE, the strategies-based approach entailed experiential learning. That is, instead of explaining to the learners how they might use a specific strategy to improve their pragmatic abilities (the case of the website), the SIE quests and activities required that learners implement each of the strategies through practice and use. Both received introductions to a strategic approach to pragmatics; however, the distinct delivery method of instruction may explain the differences found in the learning and use strategies categories.

At the same time, delivery method does not explain why there is no evidence of change in S1 and a minor change in S2 in the metapragmatic category. If context of instruction were the only factor, it would be expected that learners in S1 would also exhibit an increase in perceived use of metapragmatic strategies since they received explicit instruction similar to that of the learning and use categories. Therefore, other possible explanations should be explored. First of all, we do not deny that the differences between S1 and S2 could be explained by inherent distinctions in each group of participants since they represent two different groups of learners. In other words, it could be that the participants in S1 were naturally drawn to learning and use strategies while those in S2 leaned towards metapragmatic differences. However, since both groups exhibit similar characteristics including age, proficiency level, learning context, and study abroad experience, we are assuming, for the purposes of this analysis, that they are comparable groups. Taking this into consideration, there are more than likely additional interpretations of the data.

One plausible explanation for the difference is that metapragmatic strategies were more often employed and practiced by the participants in S2 as they worked in the immersive space. For example, in order to complete a quest successfully, learners had to select who they were going to talk to (M1, M2) and decide what they were going to work on before beginning (M1, M2). In addition, monitoring one's own pragmatic behavior (M3) was a central component of the SIE experience and was built into the immersive space itself. These findings are congruent with those from current educational gaming research demonstrating the positive impact that engagement\(^1\) (i.e., the complex, immersive, emotional experience of participating in an activity) can have on cognitive processing of certain skills (Gee, 2003; Johnson, 2005; Prensky, 2001; Taylor, 2006). Therefore, it could be the case that the SIE is especially useful for developing metapragmatic strategies and that learners were more aware of their importance based on their experience in the virtual world.

In addition to category-level comparisons, some differences warranting consideration also emerge at the strategy level. First of all, in the learning and use strategies categories, strategies L2 (i.e. Ask native speakers to model how they perform the communicative act.), L3 (i.e., Identify the second language speech acts learners want/need to focus on.), and U3 (i.e., Ask native speakers for feedback on your pragmatic abilities.) are especially noteworthy because we find a moderate increase in perceived use from the participants in S1 and no change in S2. One feasible explanation for the distinction may be the emphasis on the use of a native speaker (NS) as a resource for pragmatic learning in the website itself. In the activities on the website, learners utilize models and examples in improving their abilities. However

\(^1\) In discussing digital game-based learning, Prensky (2001) defines twelve reasons why games are especially engaging. These include fun, play, rules, goals, interactivity, outcomes and feedback, adaptive capabilities winning, conflict and challenge, problem solving, interaction, and representation and story (p. 106).
for additional information they would need to talk with NSs in the real world and, as a result, are instructed to do so. In the case of the SIE, learners have the ability to "talk" with virtual NSs throughout their experience and repeat their own observation of behavior as many times as they wish. Therefore, participants in S2 may not perceive explicitly asking for help of NSs as a necessary resource for pragmatic development, we do not intend to imply that learners should always try to emulate NS behavior. Strategy U6 (i.e., *Determine your style preference as a learner and try approaches that are consistent with that individual style.*) also warrants special attention. Once again, in S1 there is an increase in perceived usage (.05) and no change (-0.105) in S2. As mentioned in the Procedures for Data Analysis section, this discrepancy could be due to the measure itself in that the queries used were distinct in each survey.

Overall, a comparison of perceived strategy use show a minor increase in perceived use in the S1 group for learning and use strategies and no change for metapragmatic categories. The opposite was true in S2 where there was no overall change in the learning and use categories and a minor change in the metapragmatic category. This provides preliminary indications that online environments may be effective for increased awareness in strategy use and that the type of mediated context may have an impact on the type of perceived strategy use (i.e., whether strategies for learning pragmatics, for use or material already learned, or for metapragmatic evaluation of performance). In considering these results, it is critical to remember that the findings are based on learners' perceptions, and not on actual use. Learners reported which strategies they would use for improving their pragmatic abilities based on their experience in each of the environments. With preliminary empirical indication of perceived change rates (i.e., none, minor, and moderate), the next step, to be discussed in detail shortly, is to critically validate, first, that the use of these strategies does indeed enhance pragmatic abilities and, second, that learners are actually using the strategies they say they use.

**Research Question 2**

What were learners' perceptions of learning Spanish pragmatics in each of these two CALL environments?

**Results**

A qualitative analysis of the interview data from both studies reveal notable patterns that should be considered for future research and development in this area. This section highlights some of the most salient patterns from the one-on-one interviews in each study and compares some of the differences found between participants who accessed the learning material in the website and those who utilized the SIE for learning. The three most salient findings from the interviews were:

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2 Although not appropriate for discussion in this work, the notion of the 'native speaker' can be problematic, especially when dealing with pragmatic development. See, for example, Kramsch and McConnell-Ginet (1992), Kramsch(1997), and Thorne (2003), among others.
(1) There was strong motivation and interest in learning pragmatic content and developing ILP competency. This motivation appears to be enhanced through participation in the SIE.

(2) In most cases, more was better. Learners wanted a variety of activities, contexts, and practice spaces. For the best experience for all learners, online pragmatics materials should be delivered in a variety of ways.

(3) Learners were high-demand consumers of technology; however, some leniency was given for new and innovative initiatives.

First of all, in both studies, participants reported a strong interest in the content material and motivation to continue their own ILP development. It can be concluded that interaction with the strategies-based materials produced positive results and was well-perceived by the participants in each of the studies. Extracts (1) and (2) both provide notable indications of this positive experience. Extract (1) is from S1 and Extract (2) is from S2.

(1)

...what you are getting at with the program is really, really positive because I really don’t think there is enough emphasis on real world application...what I am always super, super frustrated with is you always end up with a class full of people who can write A+ papers and perfect grammar, and they can’t speak it to save their lives...the fact that you’re emphasizing a lot more on real world situations than on grammar is something that the Spanish curriculum desperately needs. – Paco, S1

(2)

The best [aspect of the project] is we’ve never talked about pragmatics at all before and I’ve always taken Spanish and never [learned about pragmatics]. The only thing I really knew is because one of my best friends is from Spain. She lived with my family for a little bit. She never said sorry for anything. That was how I knew that. So... that was actually neat learning about it in a classroom setting. It’s a really cool idea. I liked the whole program being able to do that. – Roxy, Interview 2, S2

In each of these studies we see positive motivation and interest in the content itself. This suggests that both mediated contexts presented a useful and motivating approach for learners to improve their pragmatic abilities. Furthermore, a strategies-based approach appeared to be interesting to the learners and something they were willing to address as part of their pragmatic repertoire. Of all participants interviewed for both studies, none indicated a lack of interest in the pragmatic content.

An additional aspect of learner perception of the SIE activities in S2 was the “Wow factor” associated with the innovative use of a virtual immersive space for learning. While work in this area is growing, Croquelandia is the first 3-dimensional immersive space for learning pragmatics. The participant in Extract (3) provides a noteworthy and common, reflection noted by participants of S2.
I just think it is so cool that I've probably talked to tons of friends, I'm playing a video game for my Spanish class right now, and like no one understands it's not like a real video game but I just think it's like such a neat idea. I can see it working for you know, becoming a part of a curriculum of a class, especially a class, like I took a colloquial class, and integrating something like this into that could be very useful and it is a way to get people excited rather than reading like this is what you say for this and this is what you say for this...last Thursday, I think, I came home and my friends were going out and I said I'm going home and play the video game for awhile, I want to see what happens, like if I can find Ana, so I think it's really the idea of it I have never even considered that there was this was such an option ...

– Lisa, Interview 1, S2

When asked what their favorite aspect of the project was, 17 of the 25 participants in S2 pointed to a feature unique to the SIE itself, in addition to the content being learned. Features of the SIE that were noted by learners included the immersive aspects, the quest and quest completion, interaction with simulated characters within the immersive space, and the ability to “get involved” in what was happening.

The second common pattern found in both sets of interviews was an indication that more content and activities with a variety of choices was better than limited, structured content. Learners expressed a desire for a variety of activities, contexts, and practice spaces. Moreover, for the best experience for all learners, this material should be delivered in a variety of means. Among the participants in both studies, it was evident that different types of materials are needed, and essential, to an effective self-access learning module. Learners have varied reactions to the same activities and find different mediated contexts useful for different types of activities. As can be seen in Extract (4), the participants in S1 had very different responses to the same activity.

[The website] kind of puts into written order what you kind of hear on your own, but you don't really know how to order it...it helps to have it all written down and put together.

– Susana, S1

I'm kind of a fan of interactive things like if they were drop-down boxes. – Henry, S1

I don't need like fancy stuff to help me learn, I guess. – Abril, S1

This varied approach supports the inclusion of a variety of types of feedback and activities. Similar evidence for the inclusion of varied approaches can be found in the interviews from S2 as well. In Extract (5), from S2, we also see very different reactions to the same activities.

I mean it's just a fun way to do it. I think the whole game thing. Just because we are so absorbed in technology. I think it is a good way to do it and... I don't know, I'm kind of a
nerd and I like to learn things like that, so I don't know that was just fun...kind of fun for me because I feel like I learned a lot from it. –McKenna, Interview 2, S2

Personally, I would just prefer to do talking with people in class like actually being able to talk not having it as kind of a pseudo-conversation. I don't know. I prefer not to do it like online because I really don't like using computers that much. –Roxy, Interview 2, S2

McKenna really enjoyed the type of learning experience that was possible in the SIE as well as the in-class group presentation; whereas Roxy preferred not to use the online virtual environment. This is worth noting because the same participant expressed strong motivation for learning pragmatics (See Extract 2). This would suggest that although there was a preference for a different type of learning, the use of the virtual space did not inhibit her interest in the content. The addition of varied content and activities in mediated spaces affords learners the opportunity to choose what they would like to complete, as well as the features with which they would like to interact.

The final pattern emerging from the interviews to be discussed here is that learners are high-demand consumers of technology and expect online activities to work in accordance with their expectations. At the same time, some leniency was afforded new and innovative content or activity types. In both studies, learners expressed some frustration with the technology. For example, in Study 1, learners were frustrated with the sometimes choppy video clips and the appearance of too many pop-up windows; nevertheless, all indicated an interest in and an enjoyment of the topic being studied. Excerpt 6 is an example of the type of comments made.

(6)

the audio was really clunky especially in the...apologies section like it was hard to keep paying attention 'cause you're like (ugh) the audio is bothering me... But other than that it was pretty good. –Javier, S1

The distinction between technological expectations and innovative learning spaces and content was especially evident in S2, where learners were the first group of students to use the SIE in the classroom. Of the 25 participants interviewed, all reported some frustration with the space "crashing" or not being able to access the SIE; yet, the majority were quick to clarify that they understood technical difficulties were part of a new process and were willing to be patient because the activity was especially engaging and interesting. Many also made explicit distinctions between the technological component and the pragmatic content. Excerpt (7) is an example of this type of comment.

(7)

About the whole experience the best thing was having fun with something new and learning something new ... I mean it was a fun, it was a fun experience. Having it, having a new experience on a whole was really good...The two worst things [about the experience], probably, and this isn't anything that... I mean, we all understood that it was a new program and stuff, but just technical errors. I mean that was sort of a bummer that it froze up my computer all the time but I can't really think of anything else. –John, Interview 2, S2
Interestingly, despite a number of problems logging on and using the SIE at the beginning of the project, this participant was especially enthusiastic about the project. She was willing to overlook the technical issues. This was the case for the majority of participants in S2. When asked if the project should be repeated as part of the course, 18 of 25 reported that it should be repeated at the same level (a 6th semester Spanish course). Of the seven who said it should not be repeated, 4 of those said that it should be used again, but at a lower level. Only three of the 25 were hesitant in using it again and all three did note that if the technology were more consistent, the activity should be repeated.

Discussion

The patterns found in the interview data suggest directions for future research, as well as directions for pedagogy. These include a strong motivation and interest in learning pragmatics, a desire for variety and complexity, and a flexible acceptance of technology. In this section we briefly discuss these common themes.

First of all, as noted above, the interviews in S1 and S2 revealed strong motivation and interest in learning pragmatic content and developing ILP competency. Future research and curriculum development should harness this motivation and interest in the topic whenever possible. Research has shown that pragmatics is teachable (e.g., Bardovi-Harlig, 2001; Judd, 1999; Kasper and Rose, 2002) and that CALL environments are a feasible way to make instructional materials accessible to learners (Furstenberg and Levet, 2001; Belz, 2002, 2003; Biesenbach-Lucas, 2005; Sykes, 2005; Sykes, Ossoz, and Thorne, 2008). In this case, both the interactive website and synthetic immersive environment show promising possibilities. In addition, the motivation for pragmatic development appears to be enhanced through participation in the SIE. These results are congruent with educational gaming research indicating a higher level of engagement with different types of immersive spaces (e.g., DeFreitas, 2005; Dror, 2007; Gee, 2003; Prensky, 2001). Learners' positive perception of the SIE used in S2 serves as a strong indicator for continued research and development in the use of massively multiplayer online games (MMOGs), virtual social spaces (e.g., Second Life, Active Worlds), and SIEs (e.g., CroqueLandia) for the development of pragmatic skills.3

Furthermore, these results suggest that, in most cases, more is better. Learners want a variety of activities, contexts, and practice spaces. For the best experience for all learners, online pragmatics materials should be delivered in a variety of ways. This could be in the form of multiple approaches (Judd, 1999) and strategies (Cohen, 2005) as well as varied types of activities within the mediated environments themselves. Based on the preliminary results of research question 1, one might even suggest that various types of mediated spaces be utilized simultaneously.

Finally, in each of these studies we see that learners are high-demand consumers of technology; however, some leniency is given for new and innovative initiatives. This pattern indicates that researchers and practitioners should not be afraid to take educated risks with innovative educational technologies. We are not advocating uninformed implementation and use, but rather emphasizing the need to try new approaches without fear of learner

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3 See Sykes, Ossoz, and Thorne (2008) for a continued discussion of the use of emerging digital technologies in L2 development, including pragmatics.
repercussion. If the materials are research-based, tested, and well-explained to the learners, it is likely that the learners will appreciate the effort and availability of the pragmatics material, and will be more patient if technological problems arise.

Limitations

As is often the case with studies that are exploratory in nature, this study presents a number of limitations. In this section we present the limitations unique to each study as well as considerations relevant to the current analysis.

First, in S1, the small sample size makes statistical comparisons impractical and inhibits the feasibility of generalizing the results on a larger scale. While the ten participants were most likely representative of learners in advanced courses, a larger sample size would be needed to confirm the findings of this study. Participants in this study were also paid for their participation; consequently, there may have been an above-normal desire to do well and participate. At the same time, since participants were participating during their personal time, there may have been a tendency to rush through the measures or mark responses at random in order to finish more quickly.

Likewise, the subjects in S2 represented volunteers who agreed to participate in the survey and interview activities outside the framework of their normal coursework. Thus, they may have represented a highly-motivated subset of the students studying Spanish at the institution. While the sample size was larger, it was unbalanced in terms of gender and still may not have been entirely indicative of the perceptions of students on a more general scale. In this case, the survey was administered online. While it is not expected this caused any difficulties for the participants, there is no way of confirming any discrepancies in responses.

It is also important to address some of the limitations of the analysis itself, which were true of both studies. First of all, it is critical to note that in strategies research, self-report data is not always accurate and not necessarily indicative of how the strategies are actually used (Cohen, 2005). In other words, intuition and action do not always correspond and self-reporting is not always the most accurate means of data collection. In this case, learners’ perceptions of strategies in the learning and performance of pragmatics were targeted. However, future research should also utilize other measures for confirming actual strategy use to complement the self-reported perception data used in this analysis, which would suggest an increased awareness of learning, use, and metapragmatic strategies for pragmatics justifying the value of future research. An additional consideration was the use of two distinct sets of students to compare the perceived strategy use of each of the mediated contexts. Future studies should consider perceived strategy development in each of the mediated contexts by the same learners.

Finally, this chapter does not offer an in-depth analysis of all data from both studies nor a complete analysis of the attributes inherent to each of the online environments. While this is beyond the scope of the chapter, additional considerations of the nature of online spaces should also be considered prior to generalizing these results to all CALL materials (See, for example, Thorne and Payne, 2005, Sykes, Oskoz, and Thorne, 2008).
SUGGESTIONS FOR FUTURE RESEARCH

While the results presented here can only be suggestive of what might happen, many of the issues raised in this study signal important catalysts for large-scale empirical research in the area of ILP development. Furthermore, they would suggest that a strategies-based approach to learning pragmatics be explored further in future work. Research in this area would likely find a wealth of information in further examining the use of strategy instruction for learning pragmatics as well as content delivery in an online, self-access format as well as in SIEs. Some questions to consider include, but are not limited to, the following:

- How do learner perceptions and actual strategy use compare when considering pragmatic development? To what extent do learners use different strategies in mediated and non-mediated contexts?
- To what extent is there an impact of strategy development on actual pragmatic abilities? If so, in what ways is ILP development impacted? Where should emphasis on strategy development be placed? At what levels?
- What is the impact of various digital environments on the instruction and use of learning, use, and metapragmatic strategies? If deemed relevant, how can the power of various mediated contexts be used to enhance and encourage strategy development?
- How do various mediated contexts (i.e., websites, SIEs, MMOGs, wikis) impact strategy use and perception? What is the impact of these spaces on ILP abilities?

Future projects should examine perception, effectiveness, and use of a strategy-based approach to ILP development and explore further use of CALL technologies for pragmatic development.

CONCLUSION

Despite the aforementioned limitations, results from these two studies carry preliminary implications for further exploration of the development and use of CALL materials to aid in learning pragmatics. The results of this chapter are not meant to suggest the only way of learning these pragmatic skills or that all CALL materials are necessarily superior just because of their existence online. Rather, we suggest they are a viable option and a practical means for introducing pragmatics instruction in L2 classrooms, especially in cases where face-to-face time may be limited. In a general discussion of Digital Game-Based Learning, Prensky (2001) states, "Learning is a big job. No one method works alone or by itself for everything. Digital Game-Based Learning is great in that it motivates and teaches in ways that other methods seldom do. But it is neither the unique solution to all training [learning] problems nor a panacea" (p. 7). In the same vein, CALL materials are clearly not the only answer; nevertheless, mediated contexts are a possibility for the future of pragmatics instruction, especially from the point of view of the learners. They show an initial impact on learners' perceived strategy use.
In terms of pedagogy and content development, results from both studies show that there was motivation to improve ILP abilities on the part of the learners who participated in this study. While it remains to be seen how these findings are applicable to all learners, there are preliminary indications of interest and strategy development. The inclusion of pragmatics materials in curricula and learning materials is highly beneficial, and alternative means for learning should be considered further. In addition, in cases where there is not sufficient time for a complete exploration of all information in the classroom setting, self-access materials, such as the Dancing with Words site or online collaborative spaces such as Croquelandia will also likely prove to be beneficial. It is our recommendation, based on this preliminary work, that learners be encouraged to explore materials dealing with L2 pragmatics on their own and be given resources (CALL-related or others) to do so. Empirical research efforts, informed risk-taking, and practical implementation are critical to making this happen.

REFERENCES


