In recent years, articles about second language learning strategies and about second language pronunciation instruction have been on the increase. Surprisingly, there appears to be no published study to date that focuses on the relationship between pronunciation and learning strategies. This exploratory study focuses exclusively on documenting and categorizing learning strategies used for pronunciation learning. Diaries and interviews were used with 11 adult learners of Spanish to elicit qualitative data about the pronunciation learning strategies they use. Analyses of the diaries and interview transcripts revealed 21 specific pronunciation learning tactics. These, along with other pronunciation learning tactics gleaned from a literature review, were condensed into 12 basic pronunciation learning strategies and categorized based on Oxford's strategy classification system. This study provides evidence of a wider range of specific pronunciation learning tactics that have been previously documented. Two tables and 42 references are included. (KFT)
Pronunciation Learning Strategies: A First Look

Susan S. Peterson, Ph.D.
Abstract

In recent years, articles about second language learning strategies and about second language pronunciation instruction have been on the increase. But, surprisingly, there appears to be no published study to date whose main focus is the relationship between pronunciation and learning strategies. The present exploratory study focuses exclusively on documenting and categorizing learning strategies used for pronunciation learning. Diaries and interviews were used with 11 adult learners of Spanish to elicit qualitative data about the pronunciation learning strategies they use. Analyses of the diaries and interview transcripts revealed 21 specific pronunciation learning tactics. These, along with other pronunciation learning tactics gleaned from a literature review, were condensed into 12 basic pronunciation learning strategies and categorized based on Oxford's strategy classification system.

Author Notes

This manuscript is based on a portion of my dissertation research completed in 1997 at the Ohio State University. I thank Gil Jarvis, Alan Hirvela, and Terrell Morgan for their guidance in this research project, Susan Sarwark for her feedback regarding strategy names, and several other individuals for their thoughtful advice regarding aspects of this paper.
Introduction

Although the study of foreign accents has always been a fascination for some researchers, the teaching of pronunciation (and oral skills in general) in foreign and second language classrooms has often been low on the list of priorities. In recent years, however, there has been a greater emphasis on teaching competent pronunciation, especially in ESL/EFL classrooms. This is due to the increasing realization that poor pronunciation can cause serious problems for learners, such as communication breakdowns, anxiety, stereotyping, and discrimination (Morley, 1998).

Through the years, researchers interested in pronunciation learning have examined many variables in attempting to explain successful second language pronunciation ability. Studies have not been numerous, but have been productive. Learner factors such as age, personality, cognitive style, hemisphere specialization, and native language phonology—just to name a few—have been shown to influence learners’ pronunciation (e.g., Elliott, 1995; Guiora, Brannon, & Dull, 1972; Major, 1987; Oyama, 1976). But research into one potentially important variable affecting pronunciation has been surprisingly absent from the literature thus far.

This variable is learning strategies. Oxford (1986b) explains that learning strategies are of great importance because they “improve language performance, encourage learner autonomy, are teachable, and expand the role of the teacher in significant ways” (abstract). A literature review appeared to indicate that not a single study whose main focus was strategies for pronunciation learning had been published. Given the recent resurgence of pronunciation instruction and especially of pronunciation instruction that promotes learner strategy awareness (Morley, 1998), more basic knowledge about the relationship between learning strategies and pronunciation is needed now. The present study is an attempt to gain some preliminary insights into the pronunciation learning strategies that help students learn to pronounce a foreign language.
Research background

Language learning strategies

In one of the earliest studies on the subject, Rubin (1975) defined learning strategies as "the techniques or devices which a learner may use to acquire knowledge" (p. 43). More recently, Oxford (1990) advanced a somewhat broader definition: "Learning strategies are steps taken by students to enhance their own learning" (p. 1). Research into language learning strategies has become increasingly popular over recent years, and studies have identified many different strategies used by second language learners. Selective attention, repetition, note-taking, inferencing, and cooperation are but a few examples (Chamot, 1987).

Ellis (1994) points out that, in the literature, the term learning strategies refers "to both general approaches and specific actions" (p. 532). Oxford and Cohen (1992) lament the confusion engendered by this widespread problem with terminology. The present paper will attempt to differentiate between general approaches and specific actions by referring to them as strategies or tactics, respectively, as Oxford and Cohen recommend. Tactics (e.g., Seliger, 1983) can be thought of as "[specific] tools to achieve the success of [more general] strategies" (Oxford, 1990, p. 7).

Findings. Several tentative conclusions have emerged from the body of language learning strategy research. One of the most consistent findings through years of research was first put forth by Naiman, Frohlich, Stern, and Todesco (1978) when they stated that "good" language learners "develop techniques and strategies appropriate to their individual needs" (p. 25). Conversely, less successful language learners seem to use a smaller range of strategies or ones that may not be appropriate for the task at hand (Abraham & Vann, 1987; Chamot & Kupper, 1989; Hosenfeld, 1979; Mangubhai, 1991; Vann & Abraham, 1990).

In general (but not always), cognitive strategies seem to be the ones used most by learners (Chamot & Kupper, 1989; O’Malley, Chamot, Stewner, Kupper, & Russo, 1985a;
Pronunciation Learning Strategies

Oxford, Park-Oh, Ito, & Sumrall, 1993). There is a good deal of variation, however, in the number of strategies used and the kinds that are most successful, depending on factors like proficiency/grade level or task (Bialystok, 1981; Bialystok & Frohlick, 1981; Chang, 1990; Nyikos & Oxford, 1993; Oxford & Ehrman, 1995; Oxford & Nyikos, 1989; Phillips, 1991; Politzer & McGroarty, 1985; Ramirez, 1986).

Another emerging consensus in language learning strategy research involves strategy training. It is becoming increasingly popular to instruct learners in the use of learning strategies because studies often show that learners can benefit from learning strategy training (e.g., Atkinson, 1975; Cohen & Aphek, 1981; Cohen, Weaver, & Li, 1995; Levin, Pressley, McCormick, Miller, & Shriberg, 1979, O’Malley, Chamot, Stewner-Manzanares, Russo, & Kupper, 1985b; Raugh & Atkinson, 1975). It should be noted, however, that there is an enormous variety of factors involved in strategy training (what strategies are taught, how they are taught, etc.), and that most strategy training studies contain some mixed results due to these factors. While researchers continue to investigate successful versus unsuccessful strategy training, it appears that most students react positively to strategy training experiences (Oxford et al., 1990).

Classification. Ellis (1994) suggests that perhaps the most thoroughly accomplished area of second language learning strategy research is that of classification of learning strategies. The two classification schemes appearing most often in the literature are that of O’Malley and Chamot (e.g., Chamot, 1987) and that of Oxford (e.g., 1990). The O’Malley and Chamot work is especially notable for its attempts to integrate learning strategy research with cognitive theory. Oxford’s (e.g., 1990) is the more detailed of the major classification schemes, and her categorization has been employed in the largest studies of second language learning strategy use (e.g., Oxford, 1986a; Oxford & Nyikos, 1989). In her method of classification, Oxford first divides language learning strategies into two classes and then further into six groups. The first class is that of direct strategies—those that necessitate target language (TL) use—and consists of memory, cognitive, and
compensation strategies. Memory strategies (e.g., using keywords) deal with the storage and retrieval of knowledge, cognitive strategies (e.g., recognizing and using formulas and patterns) help learners with language comprehension and production, and compensation strategies (e.g., using mime or gesture) help with deficiencies in language ability. Oxford's second class of indirect strategies--those that do not necessarily require target language use--are metacognitive, affective, and social strategies. Metacognitive strategies (e.g., organizing) deal with management of the learning process, affective strategies (e.g., rewarding yourself) help learners in areas such as emotions and attitude, and social strategies (e.g., asking for correction) involve learning through interacting with others. Oxford's classification goes on to delineate 19 “sets,” which are broad groups of strategies, and then 62 strategies, each belonging to one of the sets.

Pronunciation learning strategies

Based on Oxford's (1990) definition of learning strategies, pronunciation learning strategies can be thought of as the steps taken by students to enhance their own pronunciation learning. While there appear to be no published studies that deal solely with pronunciation learning strategies, a few investigations have looked at pronunciation as one of a number of skills associated with learning strategy use. O'Malley et al. (1985a) asked 70 high-school ESL students about the learning strategies they used to help them with nine different oral language tasks, one of which was pronunciation. They stated that students reported using “numerous” learning strategies (p. 40) for pronunciation. But their results were not reported in such a way as to indicate which specific strategies may have been used for pronunciation learning.

Two older studies do, however, document a number of language learning strategies that were used specifically for pronunciation learning. Naiman et al. (1978) conducted interviews with 34 “good” language learners, asking them to describe their language learning experiences. A number of strategies or tactics involved in pronunciation learning emerged, as they did from the diary of Rivers (1979), who recorded her own experiences
learning Spanish, her sixth language, during five weeks abroad. She published her diary without analysis, but several pronunciation learning strategies and tactics are seen clearly at work.

From an examination of these studies, a list of 22 specific pronunciation learning tactics emerged. (These tactics appear in italics in the Table.) A few examples are repeating aloud after a native speaker or teacher, acquiring a general knowledge of phonetics, reading aloud, and having a sense of humor about mispronunciations.

The Study

Purpose

The purpose of this study was to investigate the kinds of learning strategies adult students of Spanish as a foreign language use to learn or improve their pronunciation in Spanish. The principal outcomes expected were to increase the range of documented pronunciation learning tactics used by adult foreign language students and to classify these, along with pronunciation learning tactics from the literature review, into meaningful strategies according to Oxford’s (1990) strategy classification scheme. This study is perhaps the first one to focus solely on learning strategies as they relate to pronunciation learning. The main research question was the following: what strategies are adult foreign language learners using to learn or improve their TL pronunciation?

Subjects

Eleven students from The Ohio State University’s Spanish classes participated either in the first phase or the second phase of this two-part study. The students represented three different levels of classes: three of them were beginners (100-level), five were in the intermediate (200-) level, and three were advanced (600-level). The first six students participated in the diary keeping phase of this study, and then the other five were involved in the interview phase, which took place the following quarter. The students ranged in age from 18 to 36, and 9 of the 11 students were female. All were native
speakers of English who did not come from Spanish-speaking families. Most had begun learning Spanish in junior high school or later; the youngest age at which any of these students had begun studying Spanish was twelve. Five of the eleven students had studied one other foreign language, and two of the most advanced students had spent time studying Spanish abroad. None of the students had taken any special classes in pronunciation or phonetics. All volunteered their participation after solicitation letters were handed out in their classes.

**Methods**

The two data collection procedures used in this study are the retrospective, self-report methods of diary keeping and interviews. Oxford and Burry-Stock (1995) have stated that “most language learners are capable of remembering their strategies and describing them lucidly and in a relatively objective manner” (p. 2). O’Malley and Chamot (1990) point out the importance of using multiple data collection methods in learning strategy research because the methods used impact the kinds of strategies that are reported. The present study’s use of diaries and interviews allowed for responses of more than one type: both written and oral, individual and group, and gradually formulated as well as more spontaneous. In addition, in order to generate the widest possible range of results, the diaries and interviews were used with different groups of students since there is evidence of considerable overlap in the learning strategies reported when these two methods are used with the same subjects (Lennon, 1989).

**Diaries.** Of the six students who kept diaries, two were beginners (100-level), two were in the intermediate (200-) level, and two were in advanced (600-level) classes. Each of the six subjects was provided with a notebook and was instructed to keep a diary for two to three weeks of the strategies they found themselves using to learn or improve their pronunciation in Spanish. (Only the familiar term strategies—not tactics—was used in the instructions to the students.) Subjects were given a definition of pronunciation learning strategies, including a few example tactics from the literature review, and were told to
write down any pronunciation learning strategies they noticed themselves using or any pronunciation learning strategies they could recall having used at any time in the past. The subjects were given reminder calls about once a week, and they could also ask any questions at that time. At the end of the two to three week period, the subjects handed in their diaries and were briefly interviewed (not the same as the interview phase of this study) for the purpose of obtaining verbal clarification of anything that was unclear in their writing. Any clarification notes were written in the diaries’ margins at that time.

The diaries were then typed and coded. First, the transcripts were read, and every mention of a possible pronunciation learning tactic was noted. The goal of the transcript evaluation was to produce a list of all the pronunciation learning tactics mentioned by the subjects, and this was done. Later, a peer reviewer re-read the transcripts, making sure that no pronunciation learning tactics from the diaries had been left off the tactic list.

Interviews. During the following school quarter, and after the diaries were analyzed, three interviews were conducted: one with one beginning (100-level) student, one with three intermediate (200-level) students, and one with one advanced (600-level) student. At the beginning of the interviews, the students were given a definition and a few examples of pronunciation learning strategies. Then one basic interview question was posed to them: What pronunciation learning strategies do you use or have you ever used in learning or improving your Spanish pronunciation? The entire list of known pronunciation learning tactics (gleaned from the literature review and the diary transcripts) was on hand, and many of these tactics were used as interview prompts in the same way that O’Malley et al. (1985a) used their prompts: “to clarify a definition” and to “suggest optional strategies when the interview production was sparse” (p. 30).

The interviews, which had been tape recorded, were then transcribed and coded. As with the diaries, every pronunciation learning tactic was noted and compiled into a list. A peer reviewer re-read the transcripts, making sure all tactics were included in the list.
Results

This study uncovered 21 specific tactics that had perhaps never before been documented as pertaining specifically to pronunciation learning. This basically doubles the number of pronunciation learning tactics documented in previous literature. Although further research will probably reveal additional pronunciation learning tactics, it is nonetheless important at this point to make an initial attempt at categorizing the existing list of documented pronunciation learning tactics into a useful breakdown of strategies. The Table presents this categorization, which relies heavily on Oxford (1990) and has as its starting point her six strategy groups.

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As the Table indicates, 12 pronunciation learning strategies emerged out of the overall list of 43 tactics: representing sounds in memory, practicing naturalistically, formally practicing with sounds, analyzing the sound system, using proximal articulations, finding out about TL pronunciation, setting goals and objectives, planning for a language task, self-evaluating, using humor to lower anxiety, asking for help, and cooperating with peers. For each broad strategy, the Table also shows all of the specific tactics that pertain to it; the new tactics documented in this study appear first, followed by tactics from the literature review (in italics).

As stated, there were 21 pronunciation learning tactics revealed in the diaries and interviews that were not found in the literature (as pertaining specifically to pronunciation). These will be listed below, according to the pronunciation learning strategies to which they pertain. In addition, specific examples, quoted directly from the diary or interview transcripts, follow several of the tactics in parentheses.

This study revealed one tactic for the strategy of representing sounds in memory: making up songs or rhythms to remember how to pronounce words.
For the strategy of practicing naturalistically this study found eight specific tactics that had not been reported in the literature: trying to recall how a teacher pronounced something, trying to recall and imitate a teacher's mouth movements, listening to tapes/television/movies/music, concentrating intensely on pronunciation while speaking ("When I come to these particular letters I stop and concentrate on the pronunciation rather than just rattling it off."), speaking slowly to get the pronunciation right, noticing or trying out different TL dialects ("I dated a guy from Puerto Rico and when I was with him and his friends I noticed the difference in their dialect than of that in Mexico. I thought it sounded good so I tried to change what I had learned in Mexico so I could sound more like a Puerto Rican."), mentally rehearsing how to say something before speaking, and talking with others in the TL ("I know my pronunciation isn't the best, but it has become a lot better because of talking with a friend.").

The strategy of formally practicing with sounds claims four tactics coming from the present study: pronouncing a difficult word over and over, practicing words using flash cards, practicing saying words slowly at first and then faster ("I found myself saying all of the big words out loud trying to see if I could pronounce them like a somewhat native speaker. First I would sound them out syllable by syllable very slow and each time pronouncing them a little faster."), and memorizing and practicing TL phrases.

In the strategy of analyzing the sound system, this study documented two new tactics: forming and using hypotheses about pronunciation rules ("Keep mouth tight when forming words, particularly around the lips.") and noticing contrasts between native and TL pronunciation.

The strategy of using proximal articulations is reported on the basis of evidence apart from this study or the literature review (S. Sarwark, personal communication, March 4, 1999). In this strategy, a learner who finds it difficult to produce a certain TL sound (e.g., the Spanish alveolar trill [r]) opts for pronouncing another sound (e.g., the Spanish alveolar slit fricative [ɾ]) that may be, in his or her opinion, the next best thing. Since this
strategy is known to exist, it is expected that specific examples of this type will be documented without difficulty in future studies. For the strategy of finding out about TL pronunciation, the students in this study did not report using any additional tactics beyond the two found in the literature review.

The strategy of setting goals and objectives contains two tactics that had not been documented previously: deciding to focus one’s learning on particular sounds (“I concentrated on the vowel sounds rather than the consonants.”) and deciding to memorize the sounds (or the alphabet) right away.

This study documented one rather specific tactic belonging to the strategy of planning for a language task: preparing for an oral presentation by writing difficult-to-pronounce words very large in one’s notes.

Another strategy that had not emerged from the literature review is that of self evaluating, with its specific tactic of recording oneself to listen to one’s pronunciation (“... by saying words into a tape recorder. After I said a few words I would play back the tape and listen to myself.”).

The only specific example of using humor to lower anxiety came from the literature review. Likewise, the two tactics pertaining to the strategy of asking for help were initially found in the literature review.

The final pronunciation learning strategy of cooperating with peers has two tactics, both of which emerged from the present study: studying with someone else and teaching or tutoring someone else (“I tutored someone else, and that’s when I really learned it.”).

A statistical comparison of results by proficiency level (beginning, intermediate, or advanced) was not planned due to the small number of subjects in the study. Nonetheless, the strategy use by level is worth reporting. The beginning-level students (N=3) and intermediate students (N=5) reported using a very similar number of pronunciation learning tactics on average—15 and 14.5, respectively. Advanced students (N=3) reported using more tactics at an average of 20.5. As far as variety of different pronunciation
learning tactics, the results were similar; the beginning students, collectively, reported using a total of 26 different pronunciation learning tactics, and the intermediate students 25. A slightly wider variety was reported by the advanced students, who used a total of 31 different tactics.

As evident in the Table, the largest number of specific tactics belongs to the cognitive group—in particular to the strategies of practicing naturalistically and formally practicing with sounds. In fact, it is these two pronunciation learning strategies that the students in this study reported using the most; they were favored far more than any other of the strategies. Strategies from the memory, compensation, and affective groups were the least popular among students in this study. No compensation strategies were reported by any student; the memory strategies were reported only by advanced level students, and the affective strategy was reported only at the beginning level.

The tactics of listening to tapes/television/movies/music and talking with others in the TL—both cognitive—were the only two that were reported by students in both the diaries and the interviews at all three proficiency levels. Talking aloud to oneself, using flash cards, and doing exercises/practicing to acquire TL sounds were reported almost as commonly. Only four of the tactics (which came from the literature review) were not reported to be used by any student in this study: trying to avoid producing inappropriate native language sounds, practicing sounds first in isolation and then in context, listening to pronunciation errors made by TL speakers speaking one's native language, and acquiring a general knowledge of phonetics.

Discussion

Range and categorization of strategies

Given the lack of research into pronunciation learning strategies to date, it is not at all surprising that several new tactics were uncovered during this investigation. There is every reason to suspect, too, that additional research will reveal even more pronunciation
learning tactics and strategies—especially as different populations, proficiency levels, and languages are involved. This line of inquiry promises to be fruitful in expanding both the understanding of language learning strategies in general and of pronunciation learning in particular. At this point, the most needed studies are probably those that seek to document as wide a range of pronunciation learning tactics and strategies as possible.

A long list of very specific learning tactics, such as the 43 listed in the Table, is of limited value to learners, teachers, and researchers until the tactics are somehow grouped meaningfully. Ellis (1994) states that Oxford’s (e.g., 1990) grouping is “perhaps the most comprehensive classification of learning strategies to date” (p. 539). In addition, her classification has served as the foundation for many published studies on second language learning strategies, involving thousands of learners. The most widely cited aspect of Oxford’s classification scheme seems to be her six strategy groups, which are included in the Table. Despite their somewhat tentative and overlapping nature—a characterization that Oxford herself points out (Oxford & Ehrman, 1995)—the six strategy groups have helped researchers in numerous studies to consider which strategies may work in combination to facilitate learning. For these reasons, Oxford’s groups play an important role in classifying the pronunciation learning strategies reported in this study.

As the Table shows, the largest number of pronunciation learning tactics belongs to the cognitive group, and this has generally been true also in the broader field of general language learning strategy research. The breadth of the cognitive group, and of other groups as well, is one of the reasons why another level of categorization, that of strategies, is desirable. Another reason is the extreme specificity, or even idiosyncrasy, of some of the tactics (e.g., preparing for an oral presentation by writing difficult-to-pronounce words very large in one’s notes). Too great a focus on very specific tactics in teaching or research could obscure the big picture of strategy usage. Oxford and Cohen (1992) emphasize the need to distinguish hierarchically between broader strategies and the more
specific tactics related to them. They assert that this distinction is critical in order to have "conceptual clarity" (p. 7) and efficiency in learning strategy research and training.

Twelve pronunciation learning strategies are identified in the Table. These strategies were identified by logically grouping specific pronunciation learning tactics together. Where possible, these strategies were given names that were either exactly the same as or very similar to strategies in Oxford's (1990) classification system. For example, practicing naturalistically and cooperating with peers are names Oxford has used, while the strategy of finding out about TL pronunciation is closely based on Oxford's strategy of finding out about language learning.

Almost every one of the pronunciation learning strategies and tactics fits extremely well into Oxford's framework and could be said to be equivalent to or encompassed by one of her 62 strategies. Some specific tactics mentioned in the present study, such as forming and using hypotheses about pronunciation rules, are unique to pronunciation. Interestingly, it is this particular tactic to which most of the student comments involving specific sounds refer (e.g., "Punch out the consonants like 'c,' 'd,' 'v,' etc. Make it sharp and short when you pronounce."). But despite the strong pronunciation flavor of certain tactics, almost all of these still fit perfectly within one of Oxford's strategies. For example, forming and using hypotheses about pronunciation rules, the tactic just mentioned, is well represented by the Oxford strategy of analyzing the sound system. Other pronunciation learning tactics, such as talking with others in the TL, are not at all unique to pronunciation learning, and help learners with many other aspects of language learning. The Oxford strategy of practicing naturalistically is a perfect fit for a tactic such as this one.

Only one pronunciation learning strategy--using proximal articulations--does not seem to be perfectly represented by one of the 62 Oxford strategies. The closest to it is probably Oxford's strategy of using a circumlocution or synonym, and this deals with vocabulary, not pronunciation. Oxford does have another broader level of abstraction (her
19 sets) in her categorization, however, and at this broader level her set called overcoming limitations in speaking and writing certainly encompasses the proximal articulations strategy.

To summarize, both the strategies and the tactics for pronunciation learning mentioned in this study can be categorized effectively within Oxford’s framework. There does not seem to be any particular qualitative difference between pronunciation learning strategies and other language learning strategies, except that they aid specifically with pronunciation. Indeed, several of the pronunciation learning strategies are identical to general language learning strategies. At this point, it does not appear that an entirely novel means of categorizing pronunciation learning strategies would be warranted or desirable. Pronunciation learning strategies may be regarded as a subset of language learning strategies.

Diary and interview methods

Both the diaries and the interviews were able to document about the same number and type of pronunciation learning tactics as each other. This study did not, however, propose to statistically compare the two data collection methods due to the nature of the interview prompts and the small number of subjects. During the interviews, subjects were supplied with many prompts (examples of actual pronunciation learning tactics from the literature review and the diaries) to stimulate conversation and jog their memories. For this reason, the two methods cannot be compared as to their ability to document new tactics. But in other areas, a few comments on the advantages and disadvantages of the two methods are in order.

In general, the diaries seemed to be an excellent method for collecting data about learning strategies. They were effective at bringing to light a number of new pronunciation learning tactics (16) for the first time, and appeared to be quite a positive experience for the participating students. Several of these students commented that they had enjoyed the opportunity to think in depth about the way they learn Spanish, and that
they expected to remain more conscious of their pronunciation learning strategy usage in the future. If there was a downside to the diary-keeping method, it was the presence of some extraneous comments in the diaries. These were hardly problematic, however, especially because the brief follow-up interviews allowed for clarification of any confusing points in the diaries. In general, this study lends additional support to Howell-Richardson and Parkinson’s (1988) view that diary keeping is very useful for conducting basic research about learning strategies.

The interviews also proved to be a successful method of documenting tactics used for pronunciation learning, though they may have been somewhat less effective at revealing new tactics. One advantage they did have over the diaries was that the interviewer was able to negotiate, probe further, and clear up any confusion immediately. They also remained very focused, without much extraneous discussion. On the other hand, a possible weakness of the interview method, as employed, was that the students did not have very much time to think about the topic of pronunciation learning strategies. Unlike the period of two to three weeks for the diary students, the interview students had only an hour or less to think about and recall all their pronunciation learning strategy use. Some of the students also appeared to depend heavily on the prompting in order to consciously remember their pronunciation learning strategies. It is possible that the interviews would have been much less productive without the prompts, a number of which resulted directly from the diary study.

Conclusion

One result of this study was that it provided evidence of a wider range of specific pronunciation learning tactics than had been previously documented, basically doubling the number. This is the kind of information that needs to be gathered most as the study of pronunciation learning strategies gets underway. Additional studies of this type will likely be able to document even more tactics and strategies.
In addition, the list of known pronunciation learning tactics—taken from the literature and from the present study—was categorized based on Oxford’s (1990) system. Twelve pronunciation learning strategies were identified from an analysis of the list of 43 specific tactics. Categories of strategies are often much more useful to learners, teachers, and researchers than are long lists of isolated strategies or tactics. The reliance on Oxford’s system should make it possible for pronunciation learning strategy research to advance within a much used framework, instead of in isolation. Nonetheless, future studies should re-examine the categorization of pronunciation learning strategies in light of new strategies revealed by research. The ultimate goal of investigating pronunciation learning strategies is to understand the way they may relate to successful pronunciation learning and to improve pronunciation instruction. Certainly, future studies will want to support these purposes.

Much more needs to be learned about the possible relationship between pronunciation learning strategies and successful pronunciation before we should require students to employ any particular tactic or imply that certain tactics or strategies are guaranteed to help them. But it would be appropriate even at this early stage to help students become aware of the pronunciation learning strategies they use and of other pronunciation learning strategies or tactics they might consider trying. Instructors of second language pronunciation or phonetics classes, in particular, might want to consider exposing their students to the concept of pronunciation learning strategies, since these kinds of classes typically do not incorporate learning strategy instruction to the degree that many beginning-level language classes do. There are various means available for exposing students to pronunciation learning strategies, ranging from handouts to class discussions to diary keeping.

As the study and teaching of pronunciation continues to return to a place of prominence in second language education, an examination of the role of learning strategies should prove to be very helpful. Very little about the connection between pronunciation
and learning strategies is known so far. As additional knowledge comes about as a result of new research, the topic of pronunciation learning strategies may be able to play an important role in pronunciation instruction.
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<td>*practicing saying words slowly at first and then faster</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*memorizing and practicing TL phrases</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*repeating aloud after a native speaker or teacher</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*repeating aloud after tapes</td>
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<tr>
<td></td>
<td></td>
<td>*repeating aloud after television or a movie</td>
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<td></td>
<td></td>
<td>*repeating silently</td>
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<td></td>
<td></td>
<td>*reading aloud</td>
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<tr>
<td></td>
<td></td>
<td>*doing exercises/practicing to acquire TL sounds</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*practicing sounds first in isolation and then in context</td>
</tr>
<tr>
<td>Analyzing the sound system</td>
<td></td>
<td>*forming and using hypotheses about pronunciation rules</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*noticing contrasts between native and TL pronunciation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*listening to pronunciation errors made by TL speakers speaking one’s native language</td>
</tr>
</tbody>
</table>

(table continues)
<table>
<thead>
<tr>
<th>Oxford’s Pronunciation Learning Strategies Group</th>
<th>Metacognitive Learning Strategies</th>
<th>Compensation Learning Strategies</th>
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<tr>
<td><em>acquiring a general knowledge of phonetics</em></td>
<td><em>acquiring a general knowledge of phonetics</em></td>
<td><em>acquiring a general knowledge of phonetics</em></td>
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<td><em>reading reference materials about TL rules</em></td>
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<td><em>reading reference materials about TL rules</em></td>
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<td><em>deciding to focus one’s learning on particular sounds</em></td>
<td><em>deciding to focus one’s learning on particular sounds</em></td>
<td><em>deciding to focus one’s learning on particular sounds</em></td>
</tr>
<tr>
<td><em>deciding to memorize the sounds (or the alphabet) right away</em></td>
<td><em>deciding to memorize the sounds (or the alphabet) right away</em></td>
<td><em>deciding to memorize the sounds (or the alphabet) right away</em></td>
</tr>
<tr>
<td><em>deciding to focus one’s listening on particular sounds</em></td>
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<td><em>deciding to focus one’s listening on particular sounds</em></td>
</tr>
<tr>
<td><em>preparing for an oral presentation by writing difficult-to-pronounce words very large in one’s notes</em></td>
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<td><em>preparing for an oral presentation by writing difficult-to-pronounce words very large in one’s notes</em></td>
</tr>
<tr>
<td><em>recording oneself to listen to one’s pronunciation</em></td>
<td><em>recording oneself to listen to one’s pronunciation</em></td>
<td><em>recording oneself to listen to one’s pronunciation</em></td>
</tr>
<tr>
<td><em>having a sense of humor about mispronunciations</em></td>
<td><em>having a sense of humor about mispronunciations</em></td>
<td><em>having a sense of humor about mispronunciations</em></td>
</tr>
<tr>
<td><em>asking someone else to correct one’s pronunciation</em></td>
<td><em>asking someone else to correct one’s pronunciation</em></td>
<td><em>asking someone else to correct one’s pronunciation</em></td>
</tr>
<tr>
<td><em>asking someone else to pronounce something</em></td>
<td><em>asking someone else to pronounce something</em></td>
<td><em>asking someone else to pronounce something</em></td>
</tr>
<tr>
<td><em>studying with someone else</em></td>
<td><em>studying with someone else</em></td>
<td><em>studying with someone else</em></td>
</tr>
<tr>
<td><em>teaching or tutoring someone else</em></td>
<td><em>teaching or tutoring someone else</em></td>
<td><em>teaching or tutoring someone else</em></td>
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*No specific examples of this strategy were documented in this study or in the literature review.*
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