

Teaching French pronunciation with phonetics in college-level beginner French course

Jessica Sertling Miller, *University of Wisconsin-Eau Claire*

Abstract

Phonetics is typically used as a pedagogical tool in advanced university foreign language courses. In beginner classes, however, the acquisition of pronunciation is often helped through mere exposure to and imitation of the target language. This study argues that using phonetics, i.e., the visual support of phonetic symbols and the description of how sounds are produced, is as efficient a strategy as others to teach French pronunciation in beginner classes, but has perhaps more merit as it addresses both aural and visual learning styles. To test that claim, qualitative and quantitative data were gathered from college students in pilot experiments exploring the effectiveness of two different teaching techniques. One approach used phonetics by concurrently reinforcing audio stimuli with the International Phonetic Alphabet. A second approach used reference words, i.e., words already familiar to learners, as reference points to compare and contrast sounds, thus establishing connections between spelling and sounds. The participants' oral proficiency was evaluated in recordings, their understanding of spelling-to-sound correspondences assessed in written exams, and their attitude toward French pronunciation and teaching approaches gauged through surveys. The preliminary results showed that both teaching approaches seemed to have an equal effect on the learners' pronunciation. However, the phonetic approach appealed to more students who reported finding it more helpful.

Jessica Sertling Miller (Ph.D., University of Illinois at Urbana-Champaign) is Assistant Professor of French at the University of Wisconsin-Eau Claire. She teaches beginner courses of French as well as French Phonetics and Pronunciation, in addition to conversation courses. She also supervises students in the French Education program. She has published work in French phonology and foreign language pedagogy.

Introduction

Beginning language students seem, from experience, to regard speaking as a difficult aspect of learning a foreign language.

Beginning language students seem, from experience, to regard speaking as a difficult aspect of learning a foreign language. This is understandable since a multitude of skills beyond grammar and vocabulary are necessary to become orally proficient. Such skills include, first, the ability to hear and interpret strings of sounds, map them correctly, and reproduce them (Chung, 2005; Coutsougera, 2007). Second, the speaker needs to physically produce the sounds of the target language with enough accuracy to be understood. Third, he or she has to pay attention to syntax and lexicon, knowing that an interlocutor is waiting to receive the message. This can be a complex and often stressful experience.

Ideally, when learners see a word, they should be able to retrieve its phonological identity as it naturally happens for native speakers (Perfetti & Liu, 2005). However, reaching that point requires much practice in and out of the classroom, which most college learners cannot afford for lack of time. This creates a disconnect between the learners' needs and the information provided to meet those needs (Morgan, 2006; Pardo, 2004). Time constraints and traditional pedagogical approaches tend to overexpose writing to the detriment of speaking, precisely because it is easier and less time-consuming for learners to decipher that code, as English and French share an alphabetical system and many spelling features (Jaffré, 2005). For students to be as comfortable speaking as they are writing, more contact with spoken stimuli and more speaking practice would be required. This is nevertheless difficult for an instructor to monitor and assess in a timely manner, unlike writing.

The present article reflects on ways to help students improve their pronunciation in the target language despite time constraints by comparing teaching strategies. In what follows, two teaching approaches are compared: an explicit instruction strategy that uses phonetics, and a more implicit one that uses orthographic examples only. First, the advantages and drawbacks to the integration of phonetics in French 101 are considered. Next, an experiment designed to gather data on the effects of these two teaching approaches on students' pronunciation and attitudes is described. Finally, appropriate pedagogical approaches are discussed in light of the results of this study.

Integrating phonetics in the classroom: research questions

Phonetics, i.e., "the study of the sounds of speech, their production, combination, description, and representation by written symbols" as Dansereau (1995, p. 639) defines it, is widely utilized in university advanced pronunciation courses as exemplified by textbooks on the market such as her own *Savoir Dire* (2006), Duménil's *Facile à Dire* (2002), or Valdman's *Bien Entendu!* (1993), among others for French. Phonetic transcriptions are also commonly used in dictionaries next to each word entry to indicate proper pronunciation (Harper Collins Robert, Oxford Hachette, Larousse, and many more). In Spanish, Lord (2005) has shown that explicit phonetic instruction in advanced courses helped improve pronunciation. Similar results were demonstrated for English (Aliaga-García, 2007; Lu, 2002) and Arabic (Huthaily, 2008). One can then wonder whether exposing learners to some basic phonetic concepts from the very

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beginning might be helpful. Ideally, correct pronunciation practices can be emphasized right away and errors due to fossilization decreased (Chela-Flores, 2001; DiOrio, 1987). As early as French 101, an approach using the International Phonetic Alphabet (IPA) could provide instructors and students with a common code to quickly discuss French pronunciation. Teachers could therefore help learners become aware of phonemic distinctions and give precise feedback; learners could use dictionaries more efficiently, as well as take more precise notes. Phonetics would serve as a visual reinforcement to a type of instruction that usually relies on auditory cues only.

The role of phonetics in foreign language pedagogy has been debated for many years. Enthusiastic support for the use of phonetic symbols dates back almost a century (Ballard, 1920; Kirk, 1958; Kockritz, 1965; Robinson, 1948; Tamborra, 1935). Catford and Pisoni (1970) write that “auditory methods are significantly less effective than teaching production by means of systematic application of articulatory phonetic knowledge” (p. 481), and later Catford suggests the need for explicit instruction (1987). Herold (1972) found that students who used a simplified form of the IPA encountered more success in sound discrimination and production than the groups who relied on traditional orthography, emphasizing the validity of symbols as a pedagogical instrument. In today’s competency-focused classroom, this may, however, no longer be true. Examining the role of phonetics and other pronunciation teaching methods within a contextualized pedagogy as well as designing appropriate and efficient teaching activities within that framework is one of my major goals. The present pilot study is a first step toward understanding what methods work best.

More recently, Champagne-Muzar (1998) emphasized the value of teaching the IPA to train learners to predict the correct pronunciation of new words. She adds that teachers can describe how to physically produce the sounds, as long as they do not go beyond simple explanations (pp. 39-40). Dansereau (1995), however, proposes to reserve phonetic symbols for advanced classes. She argues that symbols can add confusion when students are already learning a foreign language. Instead, she recommends teaching “basic rules of sound-symbol association” and demonstrating pronunciation “by the use of orthographic examples” (p. 639), i.e., familiar words to which learners can refer. Berri (2000), on the other hand, suggests that learners can determine the relationship between spelling and sounds on their own (i.e., by osmosis), while conceding that phonetics can be employed sparingly at an early stage.

Dansereau (1995) noted that a “discussion of the acquisition of good pronunciation habits in the beginning and intermediate oral proficiency-oriented classroom” was lacking, despite “the key role played by pronunciation in the early phase of language study” (p. 638). Today, almost two decades later, little experimental research has been conducted on how to teach French pronunciation at an early stage and no consensus has been reached. Even in the general field of Second Language Acquisition (SLA), pronunciation instruction has long been neglected (Derwing & Munro, 2005). It is now beginning to gain attention, notably with the annual Conference on Pronunciation

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in Second Language Learning and Teaching inaugurated in 2009. This preliminary investigation tries to draw attention to this matter, with a specific focus on French as a second language. This article attempts to offer concrete evidence that pronunciation instruction is crucial in beginner courses, and describes ways of incorporating it.

This current quasi-experimental investigation delves into the issue of pronunciation pedagogy by discussing qualitative and quantitative data collected in the foreign language classroom. The hypothesis to be tested in this study, which emerged from personal teaching experiences and from the claims reviewed above, is as follows: select target sounds will be pronounced with greater accuracy by learners who have received instruction with phonetic symbols than by those who have learned those sounds by using reference words, i.e., words with which they are already familiar.

Methods

The experiment testing the above hypothesis compared two different teaching techniques in two sections of a French 101 course at a mid-sized liberal arts university in the Midwest in the spring of 2009. The instructor, also the principal investigator and a native speaker of French, taught both sections. What is henceforth called the phonetic approach involved using the IPA as visual support, as well as explicit instruction on how French sounds are articulated. The other approach, called the orthographic approach, was modeled on Dansereau's claims reviewed earlier. For that, the instructor relied on the Roman alphabet and utilized reference words that were well known to students in order to model target sounds. Both strategies engaged students in choral repetition.

The purpose of teaching pronunciation in an introductory course is not to cover the entire French phonological system in one or two semesters, but to instill a solid base of some fundamental French articulatory principles on which to build at later stages. By doing so the speakers' intelligibility can be enhanced and they can attain more meaningful functionality in the target language. Therefore only a few sets of sounds were selected in this study, chosen according to their communicative benefit for the beginner learner. This investigation can consequently not comment on overall speaking ability after treatment since pronunciation was not tested in the learners' spontaneous speech. French 101 students have minimal conversational skills at the end of the semester anyway, which is one of the reasons why I chose to focus on single word pronunciation for the treatment and assessment.

All students were introduced to the target sounds in four 15-minute lessons. The lessons were based on minimal pairs, as recommended by Kelly (2000) and shown in Table 1 on the next page. Arteaga (2000) also suggested employing familiar example words in the teaching of pronunciation. The present experiment was consequently designed around the discrimination of common minimal pairs that are frequent and that tend to create problems in communication when produced incorrectly. Hendrickson (1979) prioritizes errors that affect intelligibility as the first ones to address, which is why it is important to introduce minimal pairs early in the learning process. I pronounced the pairs while showing their spelling on flashcards. The difference between the two approaches was in the delivery: the phonetic group could see the IPA transcription. In that group, time was also set aside once at the beginning of the treatment to discuss how to efficiently use the IPA (e.g., to take notes or look up pronunciation in a dictionary).

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Students in that group additionally received explanations concerning the articulation of the target sounds. For example, the instructor explained that both [y] (<u>) and [u] (<ou>) are produced with rounded lips, but the tongue is placed forward in the former and pushed back in the latter. Lessons in both approaches concluded with an exercise in which students matched new words with either the given reference words in the orthographic approach (Appendix A), or the new phonetic symbols in the phonetic approach (Appendix B). All groups then repeated those words. Table 1 below shows the phonetic and orthographic transcriptions of the sounds selected for this study. It contains the minimal pairs used as examples for the phonetic approach, as well as the reference words selected for the reference approach. The ability to distinguish those sounds help learners clarify meanings in many everyday situations, but each group targets a specific grammatical function as well. That function is also provided in Table 1.

Table 1. Pronunciation lessons and functions.

	PHONEMES	GRAPHEMES	MINIMAL PAIRS	FUNCTION
LESSON 1	[ɛ̃] vs. [ɑ̃] vs. [ô]	in, ein, ain, un im, eim, aim, um an, en, am, em on, om	<i>vent, vingt</i> <i>vent, vont</i> <i>vingt, vont</i> [wind, twenty, go]	To distinguish pronouns and articles such as <i>un</i> [a], <i>on</i> [we], and <i>en</i> [some]
LESSON 2	[s] vs. [z]	ss s (between two vowels and in liaison)	<i>poisson, poison</i> [fish, poison]	To work on liaison and distinguish between <i>ils ont</i> [they have] and <i>ils sont</i> [they are]
LESSON 3	[y] vs. [u]	u, ou	<i>tu, tout</i> [you, all]	To clarify meaning in descriptions, as in <i>russe</i> [Russian] and <i>rousse</i> [red-haired]
LESSON 4	[ə] vs. [e]	e	<i>le, les</i> [the singular and plural]	To distinguish singular and plural in articles and prepositions, as in “ <i>de</i> ” [of the singular] and “ <i>des</i> ” [of the plural]

Because of the small number of students, this study has methodological limitations. One of them is the lack of control group, due to the institution's offering only two sections of French 101 each semester. To maximize the small number of volunteers (28 in all) and receive feedback from everyone regarding both teaching strategies, as well as to avoid the influence of external factors such as time of instruction, level, and motivation of learners that could bias the results, a counterbalance experimental design was adopted: for the first half of the semester, section one (16 student volunteers) studied the discrete topics of the first two lessons using the phonetic approach (Lesson 1 and Lesson 2 in Table 1 above), while section two (12 student volunteers) studied the same material with the orthographic approach. After the middle of the semester, the groups were switched: the orthographic approach was employed in section one for Lesson 3 and Lesson 4, whereas section two covered those same topics with the phonetic approach.

In addition, colleagues' workloads and schedule conflicts prevented me from asking other instructors to carry out the experimental treatment in their classes. Because of the interactive nature of pronunciation instruction, using pre-recorded videos was also excluded. In this pilot study, I was therefore the researcher as well as the pronunciation rater. While objectivity was a priority, it is difficult to conceal personal teaching preferences, which students' scores can potentially reflect. Finally, no pre-test was carried out in this study on the assumption that students in French 101 have no solid knowledge of the target language and are enrolled either because they are real beginners or because a placement test determined that they have not yet reached the French 102 level. Despite these limitations, the present exploratory study offers the opportunity to reflect on possible improvements to pronunciation instruction and can lead to a more comprehensive investigation in the future.

The students' accuracy in the pronunciation of the target sounds at play in this study was evaluated and graded. Testing was built into the course requirements, which gave students an incentive to perform their best on oral exams. At the end of the semester, final oral exams were given as part of the course. All students were tested, but only the scores of volunteer participants who gave their informed consent were selected for the study. Students read aloud a randomized list of 40 unfamiliar words eliciting specific sounds, 10 words for each of the four pronunciation lessons (Appendix C). I listened to each student during individual interviews and marked a score of 1 if the speaker had produced the phoneme inaccurately, and 0 if there was no error. One might argue that reading a list is a decontextualized task in a setting far from being authentic. It is true. While it is less conducive to learning, this was a test situation. The described set-up was needed to correctly determine whether or not a learner is accurately pronouncing foreign language sounds. Evaluating beginner students' pronunciation on selected target phonemes in a spontaneous speech context, while ideal, is impossible as the researcher would neither be able to control the words being pronounced nor elicit the phonemes needed from a learner with very little oral proficiency skill. Without a script, the researcher might think a word is pronounced correctly (e.g., *mon frère a douze ans* [My brother is twelve]), when the participant was trying to convey a different meaning (e.g., *mon frère a deux ans* [My brother is two]), misinterpreted because of one phoneme ([u] in *douze* but [ø] in *deux*).

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The oral evaluations provided quantitative data that measured the performance of the participants after they had received the experimental treatment. Responses to two written surveys (Appendix D and E), one before and one after the treatment, supplemented this research with qualitative data gauging the participants' attitude towards the teaching and learning of French pronunciation. In both of them the students were asked to comment on what they felt was important to learn in a first-year French course. In the second survey, an open-ended question was added to give participants the opportunity to comment on their preferred approach for teaching pronunciation, though none was identified in order to avoid leading them. Since all sections had, by that time, been exposed to both pedagogical approaches, they were able to compare different techniques, which enriched the data.

Results: quantitative data

The scores presented below reflect the number of mistakes observed in the reading of the 40 words (10 words in each of the four categories): in other words, the fewer mistakes, the lower the mark. The best score would be 0, and the worst 10. The means and standard deviations of the scores obtained by each section for each of the four categories are provided in Table 2 below. It includes the mean and standard deviation for the scores of each group according to the teaching approach.

Table 2. Mean and standard deviation for groups on reading task.

	SECTION & TEACHING APPROACH	<i>M</i>	<i>SD</i>
LESSON 1 Nasal vowels	1 (phonetic)	2.62	1.89
	2 (reference)	2.17	1.40
LESSON 2 [s] vs. [z]	1 (phonetic)	3.81	0.75
	2 (reference)	3.42	0.90
LESSON 3 [y] vs. [u]	1 (reference)	2.31	1.74
	2 (phonetic)	2.75	0.87
LESSON 4 [ə] vs. [e]	1 (reference)	1.69	1.25
	2 (phonetic)	1.42	0.79

The means for each group are very close to each other for all categories. On average, all students made two mistakes on nasal vowels, three on the [s] vs. [z] distinction, two for [y] and [u], and one in the production of [ə] vs. [e]. The standard deviations are interesting. Except for the first lesson of the semester, the standard deviation is larger in the section that received instruction with the orthographic approach. The students' performances therefore varied greatly from one another within the groups that were taught pronunciation with reference words, and without phonetics; some students in that group performed well while others did poorly. In the group that received instruction with phonetics, the pronunciation abilities were not better, but more homogeneous. The implications of this finding will be discussed later.

The scores earned by each section in all four categories were analyzed with Independent Samples t-tests. The goal of this statistical analysis was to locate significant differences between the performance of students in section one and section two for every pronunciation lesson in order to learn whether or not one teaching approach could be connected to higher reading scores. A Levene’s test showed that the groups had approximately equal variance on the dependent variable in all but one category: ([y] vs. [u]). The results of the t tests, taking into account equal and unequal variances, however revealed no meaningful differences between the groups. Therefore, from a strictly quantitative and statistical perspective, it can be concluded that neither teaching approach stands out as being more effective on the pronunciation of end-of-term French 101 students in an oral reading test environment. Both approaches seem to have an equal effect on pronunciation accuracy. The results are summarized in Table 3 below.

Table 3. Independent Samples t test results.

TARGET SOUNDS	LEVENE’S TEST	T TEST REPORT
Nasal vowels	.151	$t(26) = .71, p = .49$
[s] vs. [z]	.247	$t(26) = 1.27, p = .22$
[y] vs. [u]	.007 (= equal variances not assumed)	$t(26) = -.80, p = .39$
[ə] vs. [e]	.266	$t(26) = .66, p = .51$

Additional data were gathered through surveys. Participants were asked in a background questionnaire filled out at the beginning of the semester to rate how important, on a Likert scale from 1 to 5, they feel the following components are in a beginner French class: culture, grammar, pronunciation, and vocabulary. Pronunciation was selected as “very important” by 93% of the respondents as shown in Table 4 on the next page, the most of all options. When collapsing together the results for “somewhat important” and “very important” category, pronunciation and vocabulary are viewed as important for 100% of students.

The same question was asked in a survey at the end of the semester. The attitudes did not change for pronunciation, as shown in Table 5 on the next page. It remains the component to be rated as “very important” most of the time, and the only one to not receive a single “neutral” rating. That could of course be attributed to the teacher’s enthusiasm for pronunciation instruction, and this survey would perhaps deserve to be distributed elsewhere to verify.

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Table 4. Attitudes towards components of a language course at the beginning of the semester.

	Not Important	Rather Unimportant	Neutral	Somewhat Important	Very Important
Learning culture	4%	4%	11%	39%	43%
Learning grammar			4%	21%	75%
Learning pronunciation				7%	93%
Learning vocabulary				14%	86%

Table 5. Attitudes towards components of a language course at the end of the semester.

	Not Important	Rather Unimportant	Neutral	Somewhat Important	Very Important
Learning culture		11%	14%	46%	29%
Learning grammar			4%	18%	79%
Learning pronunciation				7%	93%
Learning vocabulary			7%	14%	79%

These data are interesting because they suggest that students in introductory French classes expect time to be devoted to pronunciation, as they consider it essential. Yet textbooks and instructors typically focus much more on other aspects. This is consistent with Morin's (2007) recent findings that a misalignment exists between the perceived importance of pronunciation for instructors and for students. Intermediate-level learners ranked pronunciation as their fifth most important learning goal, while teachers ranked it tenth out of 14. Morin also found that students ranked pronunciation instruction as their third preferred activity to reach their goals, while teachers ranked it thirteenth out of 19. Instructors and students do not place the same significance on pronunciation.

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Results: qualitative data

The quantitative data analyzed above will help interpret the qualitative data presented below. The responses to the following open-ended question are examined now: "Among the teaching techniques used by your instructor this semester, describe one or more that you feel helped improve your pronunciation of French and explain

how it helped.” A content analysis was conducted in which the written comments were examined multiple times until recurring themes emerged from the students’ responses. Then they were looked at again and encoded according to the themes previously identified. Those themes, which relate to pedagogical techniques, along with the number of times they appeared in the survey, are summarized in Table 6 that also includes the number of students who identified those strategies as helpful. Participants only commented on the approaches that they liked, so there are no data regarding the strategies that they disliked.

Table 6. Students’ preferred pedagogical approaches.

CONTENT ANALYSIS THEME	% OF STUDENTS WHO LIKED IT
Explicit instruction	75%
Visual input	68%
Aural input	29%
Implicit teaching	25%
Being assessed	18 %

Students gave numerous examples explaining why visual input seemed to improve their pronunciation: they cited spelling words, using phonetic symbols, showing mouth movements, and visually grouping words with similar sounds. Within this category, the phonetic approach was mentioned the most frequently (53% of the responses). One participant even used phonetic symbols to illustrate, clarify, and justify her answer. She wrote: “Learning and comparing how to make the different sound like [ə] and [e] at the same time. It’s easier to learn that there is a difference and how to tell if a word would be pronounced one way or another.” This shows a French 101 student’s ability to use the IPA to fulfill a communicative need. The orthographic approach was, in comparison, cited in 32% of the responses. Students enjoy seeing words clustered together when they contain the same sound (*famille* [family] and *taille* [size] were given as examples by a participant). They also benefit from contrasting minimal pairs on the board or with flashcards (*poisson* [fish] and *poison* [poison] were also quoted).

Only 29% of the surveyed students mentioned that aural input (i.e., hearing and/or speaking) helped them. This low percentage can perhaps be explained by the fact that such an approach seems obviously effective, and for that reason the learners did not think of mentioning it. In this category, 50% described repeating after the teacher as beneficial. Interestingly, they explained using that approach to check for the accuracy of their own pronunciation, not as a primary source of acquiring articulatory skills:

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“When we learned a new word (the instructor) says it and we pronounced after her; that helped me (...) as a guide.” In addition, 25% said that reading aloud with a partner contributed to improvement. Practicing speech with an audience in a communicative context, even from a script, therefore seems to be motivating in that it stresses the importance of being understood.

A majority of respondents (75%) mentioned a need to have their attention drawn to matters of pronunciation. In other words, they prefer explicit instruction. They said that they would not notice rules or practice pronunciation otherwise. They also liked understanding the reason for those rules: “Writing different words on the board along with their phonetic symbols and comparing them was helpful. It helped me understand *why* they were pronounced differently” (their emphasis). This suggests that adult learners might not find it sufficient to acquire pronunciation through osmosis, as supported by Berri (2000). Time has to be set aside, as proposed by one informant, to practice pronunciation. Furthermore, 43% cite the IPA and showing articulation movements as an efficient way to teach explicitly. Another 43% mention comparing and contrasting words, and 24% express the need to work on individual sounds. Their descriptions suggest a preference for the phonetic approach over the orthographic approach.

“Writing different words on the board along with their phonetic symbols and comparing them was helpful. It helped me understand *why* they were pronounced differently.”

Discussion

Regardless of the approach used, it seems that the formal study of pronunciation made a positive impact on learners. The comments gathered emphasize that learners value correct pronunciation from the beginning, and motivation as well as attention to pronunciation issues are enhanced when instructors give them explicit means to make improvements. It is not to suggest that those aspects are not important as well and should not be emphasized, nor that students necessarily know what is in their learning interest. Rather, a proposition based on those comments is to perhaps accentuate or formalize the study of pronunciation, without investing large amounts of time, and to recycle the material across chapters. If teachers do not draw attention to a certain topic (whether grammar, vocabulary, culture, or pronunciation) students will likely infer that it has little value. Kendrick’s study (1997) brings further evidence in support of the claim that explicit pronunciation instruction has positive effects on the learners. She reports that student participants “gave high ratings to exercises in discrimination and production of segments, and learning how sounds are made” (p. 552), supporting the idea that when given a chance to study pronunciation, students welcome the opportunity.

For example, phonetic transcriptions could be included with new vocabulary as it is in dictionaries. Comments that draw the learners’ attention to pronunciation could also be inserted during or after a grammar lesson. This technique does not seem to be current standard practice from what can be observed in textbooks. In the study’s questionnaire, some students mentioned needing additional time to internalize the concepts linked to pronunciation. According to Ellis (2008) “learners experience difficulty in producing L2 phonology forms in the early stages, becoming more target-

like only very gradually” (p. 103). His observation is a good reminder that recycling basic pronunciation material in introductory courses by combining it with other types of activities, such as vocabulary drills (animals, food, body parts) or grammar review (articles, pronouns, conjugation) can help students stay focused on the importance of accurate pronunciation, and thus provide more opportunities to assimilate the phonological system of the target language while allowing for short but frequent lessons on the topic. Mompean (2005) suggests using phonetics in games such as Hangman, which would serve as vocabulary review at the same time.

In fact, meaningful, contextualized tasks can be easily designed around minimal pairs targeting the phonemes identified in this investigation. Those activities would require correct pronunciation for the speakers to communicate successfully. For example, beginner learners could engage in short conversations describing their tastes. They would be asked to form sentences such as *j'aime le poisson* with [s] [I like fish], and be sure not to say *j'aime le poison* with [z] [I like poison]. This would help them practice both pronunciation and vocabulary, with other minimal pairs inserted as *dessert* [dessert] and *désert* [desert]. This can be done with other phonemes in different lessons depending on the topic, e.g., [u] and [y]: *j'aime les poules* [I like chickens] as opposed to *j'aime les pulls* [I like sweaters]. Another meaningful task illustrating the importance of a single phoneme is to have students pronounce minimal pairs and have their partners draw what they hear to get immediate feedback on whether they pronounced them right: is it a wheel or a street (*roue* [wheel] with [u] or *rue* [street] with [y])? A red-haired girl or a Russian girl (*rousse* [red-haired girl] or *Russe* [Russian])? A body or a heart (*corps* [body] or *cœur* [heart])? Learners can also describe their favorite animals, either in a friendly way or on their plate: by changing the pronunciation of the article, they might inadvertently say that they enjoy eating an animal. Thus, *j'aime les poissons* with [e] in the article means “I like fish (in general)” whereas *j'aime le poisson* with [ə] in the article implies “I like to eat fish.” Emphasizing unintended meanings caused by the mispronunciation of one segment is often humorous, and many drawn from personal experience will highlight the importance of one single sound in a communicative setting. Using phonetic symbols may help visual learners internalize those pronunciation concepts and enable them to take accurate notes for further review and memorization.

This research project on pronunciation pedagogy brings to light important, albeit

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preliminary, observations. Both phonetic and orthographic pedagogical approaches are valid, which explains why the debate between supporters of each approach has not been settled. However, the phonetic strategy seems to have an advantage. This exploratory investigation showed that for the last three lessons the groups exposed to phonetics demonstrated more homogeneity in their production of the target phonemes than the groups taught with the orthographic approach, as demonstrated by a smaller standard deviation. This observation remained true even after the groups were switched at the mid-semester point, which indicates that factors such as learners' ability and motivation did not affect

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this result. Consequently, the phonetic approach may have a homogenizing effect on the articulatory skills of learners. This correlation should be further explored in a future study focusing on intra- and inter-group homogeneity and consistency. This can perhaps be explained by the fact that the phonetic approach caters to more learning styles than the orthographic approach: it enhances audio input with a shared visual code, it gives IPA users a tool to discuss pronunciation in precise terms, it adds explicit instruction from which many adult learners seem to benefit, and it allows instructors to quickly check with transcription exercises if learners have assimilated spelling-to-sound correspondences.

Moreover, the data revealed that a vast majority of participants in this class preferred explicit instruction. In the case of college-aged learners, this finding demonstrates that leaving learners to acquire pronunciation by osmosis may be insufficient to meet their needs. As we know, there are major differences in the way children and older learners acquire a second language. Ellis (1985) states: "Children do not have the capacity to learn specific rules about linguistics and grammar; however, adolescents and adults can understand these rules and use them to communicate their ideas" (p. 108). Providing university learners with articulatory or phonetic descriptions of sounds would probably be advantageous, then. An opposite view is that of Krashen and Terrell (1983). To them, "language is best taught when it is being used to transmit messages, not when it is explicitly taught for conscious learning" (p. 55). The evidence available in the present exploratory study however suggests that adult learners do find explicit teaching beneficial as it helps them understand the mechanics of a language; this understanding likely contributes to better retention.

Next, visual input was believed to be essential in the acquisition of pronunciation by the students involved in the present study. The phonetic approach was found to be an efficient way to increase exposure to visual stimuli. Indeed, the IPA provides a written code to communicate unambiguously about pronunciation questions. Being familiar with articulatory concepts also enables students to see what happens when the target sounds are produced. Time for quiet, individual practice can also be set aside outside of class for transcription, which could accelerate the assimilation of spelling-to-sound correspondences. Thanks to the written mode, feedback from the instructor is facilitated. For instance, an exercise involving the IPA was included in every test of this class and easily corrected. Evaluating the learners' conceptual knowledge would be simplified, and thus could be done more often to benefit the learning experience.

The phonetic approach was found to be an efficient way to increase exposure to visual stimuli. Indeed, the IPA provides a written code to communicate unambiguously about pronunciation questions.

One advantage of the phonetic approach is indeed that familiarizing learners with the IPA frees them from relying on their personal interpretation of sounds, generally skewed by their own phonological system. Thanks to an accurate written code that captures phonemic differences in a way for which spelling is not suited, students can take precise notes, discuss issues with a teacher by showing sounds on paper, as well as use dictionaries to their fullest extent. A pronunciation task similar to in-class activities shown in the appendices was included on all written exams for this course. Students

were asked to match short written words to either (1) the phonetic symbol that they contained or (2) the reference word that sounded like them. After the mid-semester mark, when both groups had been exposed to the IPA, a vast majority of students spontaneously matched the items to phonetic symbols rather than to familiar reference words, even when they personally had learned the tested target sound through the orthographic approach. This suggests that, given a choice, learners in this course found the IPA more efficient at expressing their thoughts, and were able to use that code to communicate their conceptual knowledge of the subject, even when they had not received instruction on that topic in that way.

Conclusion

This study, although limited in its scope and methods, suggests that teaching pronunciation with the phonetic approach or the orthographic approach produces statistically comparable performances in learners' production of phonemes in these two sections of French 101. All strategies being equal, including the phonetic technique in beginner courses would give learners a head start in preparation for advanced classes, and for those who do not wish to pursue French later it would at a minimum help them avoid the fossilization of mistakes created by skewed interpretation of target sounds and spelling-to-sound correspondences. Learners are aware of this advantage. One student who received phonetic instruction in French 101 from the researcher, and as part of her topical minor program later enrolled in the 300-level phonetics and pronunciation class taught by the researcher, candidly remarked in class that she had kept all her phonetics worksheets from her beginner course as she found them useful. She was asked to elaborate and replied: "When I started French courses, I really appreciated the phonetic transcriptions because having previously learned Spanish, the pronunciation was vastly different. The transcriptions and pronunciation helped immensely as I progressed in my French courses as I was able to see the differences in pronunciation from letters that I thought had the same pronunciation such as the letter <e> for example in the words *mer* and *que*." Her explanation illustrates how phonetics directly contributed to her understanding of French pronunciation and gave her the ongoing ability to identify differences between varied phonological systems on her own.

It seems clear that students who are introduced to phonetics possess a tool that gives them an edge, and therefore this approach is worth pursuing. Even those who take

It seems clear that students who are introduced to phonetics possess a tool that gives them an edge, and therefore this approach is worth pursuing.

French only briefly will gain confidence as they can rely on a lasting, failsafe technique to know that they are pronouncing the language accurately. An approach using systematic symbols might also appeal to scientifically minded students often enrolled in foreign language courses simply to fulfill a university requirement. This study shows that there are no negative effects to adopting this teaching technique, and that most learners find phonetics to be an enjoyable approach to pronunciation teaching and learning in French 101.

In the long term, depending on one's teaching goals, student population, and curricular program, the phonetic approach may be more

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appropriate than the orthographic technique. The IPA enables motivated learners to use phonemes in original ways: symbols can be combined to make words with which a learner may not be yet familiar, but could guess the spelling and meaning. In contrast, having to rely on the same reference words appears limiting as it leaves little room for vocabulary expansion. This may be why some students spontaneously chose to use phonetic symbols on their written tests. When they become comfortable with this system and are able to use it, this code becomes a powerful device with important, lasting ramifications.

Teaching with the phonetic alphabet is one of several ways to focus on pronunciation in the foreign language classroom for beginners. This study shows that it works as well as other approaches in this particular case, but it is important to acknowledge that a teaching approach is most efficient when it matches the learning and teaching styles of a given class. I encourage teachers to think of creative ways to introduce pronunciation instruction in their lower level classes, so that it is not “relegated to the ‘if-we-have-time’ status,” as Hardison writes in her look at current trends in teaching pronunciation (2010, p. 3). Our field needs to address the issues that she points out such as instructors’ lack of confidence or lack of training in pronunciation pedagogy as noted by Derwing (2010). Designing contextualized, meaningful tasks that deal with pronunciation and sharing them with colleagues is the next important step if we want to help second language learners become better communicators.

Acknowledgements

The author wishes to acknowledge the support from student differential tuition funds through the University of Wisconsin-Eau Claire Summer Research Experiences for Undergraduates Program, as well as the University of Wisconsin-Eau Claire Center for Excellence in Teaching and Learning, the University of Wisconsin-Eau Claire Office of Research and Sponsored Programs, the University of Wisconsin System Leadership Site for the Scholarship of Teaching and Learning, and the University of Wisconsin System Office of Professional and Instructional Development. The author also wishes to thank the University of Wisconsin-Eau Claire Department of Foreign Languages, and in particular her research assistant Caryn Drewiske, the student participants in this study, as well as her colleagues for their encouragement and the anonymous reviewers for their insight.

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Appendices

Appendix A: sample worksheet for a lesson with the orthographic approach.

The pronunciation of ‘u’ and ‘ou’

1. Theory

In the spelling of the words *tu* and *tout*, what indicates that they are pronounced differently?

2. Exercise

Sort the words below according to their pronunciation: say if they are pronounced like *tu* ou *tout*.

lu	pur	doux
pour	loup	brune

Tu	Tout

Appendix B: sample worksheet for a lesson with the phonetic approach.

[u] vs. [y]

1. Theory

In the spelling of the words *tout* and *tu*, what indicates that they are pronounced differently?

How is tongue and lip placement different for [u] and [y]?

Exercise

Write the phonetic symbol ([u] or [y]) that you use to pronounce the following words.

lu	pur	doux
pour	loup	brune

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Appendix C: list of 40 words read by participants at the end of the term.

ton	tonne	lundi	lisez
chez	menu	cousine	casser
vous	le	vend	vingt
refaire	posséder	poule	flâner
route	désert	philosophie	lissez
préféré	flan	dessert	ils sont
caser	bouche	ils ont	te
vont	pour	pull	les
demain	télé	vu	tes
cousin	pur	préfère	utile

Appendix D: Survey distributed at the beginning of the semester (Note: not all responses were analyzed for this study).

Name: _____ Age: _____ Gender: M F

1. Have you taken any French before this French 101 course? Y N
2. If so, how many years/semesters? _____ years before college
_____ semesters in college

3. Why are you taking this French 101 course?

4. Have you traveled to a French-speaking country? Y N
5. If so, where, when, and for how long? country: _____
year: _____
duration: _____

6. Have you been exposed to phonetic transcription before? Y N
7. If so, in what manner (class, personal reading)? _____

8. How would you rate the following components of a French course?

	Not important	Rather unimportant	Neutral	Somewhat important	Very important
Learning culture	1	2	3	4	5
Learning grammar	1	2	3	4	5
Learning pronunciation	1	2	3	4	5
Learning vocabulary	1	2	3	4	5

9. How comfortable do you feel in your pronunciation when reading French material that you understand out loud?

- 1 = not at all comfortable
- 2 = not very comfortable
- 3 = it varies
- 4 = relatively comfortable
- 5 = very comfortable

10. How comfortable do you feel in your pronunciation when reading French material that you do not understand out loud?

- 1 = not at all comfortable
- 2 = not very comfortable
- 3 = it varies
- 4 = relatively comfortable
- 5 = very comfortable

11. To what extent do you use the following methods to pronounce an unfamiliar word?

	Never	Rarely	Sometimes	Often	Always
a. I look up the phonetic transcription.	1	2	3	4	5
b. I pronounce it like English.	1	2	3	4	5
c. I refer to how it is spelled.	1	2	3	4	5
d. I refer to how the teacher pronounces similar words.	1	2	3	4	5
e. I take a chance based on my intuition.	1	2	3	4	5
f. I don't attempt to pronounce unfamiliar words.	1	2	3	4	5

12. To what extent are the following difficulties true for you when pronouncing an unfamiliar word in French?

	Never	Rarely	Sometimes	Often	Always
a. overcoming the fear to sound "silly" when speaking French	1	2	3	4	5
b. producing the actual sound correctly (ex.: the French "R")	1	2	3	4	5
c. Understanding spelling to pronunciation correspondences	1	2	3	4	5

13. If you have any comments or questions, please write them below.

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Appendix E: survey distributed at the end of the semester (note: not all responses were analyzed for this study).

1. How would you rate the following components of a French course?

	Not important	Rather unimportant	Neutral	Somewhat important	Very important
Learning culture	1	2	3	4	5
Learning grammar	1	2	3	4	5
Learning pronunciation	1	2	3	4	5
Learning vocabulary	1	2	3	4	5

2. How comfortable do you feel in your pronunciation when reading French material that you understand out loud?

- 1 = not at all comfortable
 2 = not very comfortable
 3 = it varies
 4 = relatively comfortable
 5 = very comfortable

3. How comfortable do you feel in your pronunciation when reading French material that you do not understand out loud?

- 1 = not at all comfortable
 2 = not very comfortable
 3 = it varies
 4 = relatively comfortable
 5 = very comfortable

	Never	Rarely	Sometimes	Often	Always
a. I look up the phonetic transcription.	1	2	3	4	5
b. I pronounce it like English.	1	2	3	4	5
c. I refer to how it is spelled.	1	2	3	4	5
d. I refer to how the teacher pronounces similar words.	1	2	3	4	5
e. I take a chance based on my intuition.	1	2	3	4	5
f. I don't attempt to pronounce unfamiliar words.	1	2	3	4	5

4. To what extent do you use the following methods to pronounce an unfamiliar word?

5. To what extent are the following difficulties true for you when pronouncing an unfamiliar word in French?

	Never	Rarely	Sometimes	Often	Always
a. overcoming the fear to sound “silly” when speaking French	1	2	3	4	5
b. producing the actual sound correctly (ex.: the French “R”)	1	2	3	4	5
c. Understanding spelling to pronunciation correspondences	1	2	3	4	5

6. Among the teaching techniques used by your instructor this semester, describe one or more that you feel helped improve your pronunciation of French and explain how it helped.
7. Please indicate any comments or questions you may have about our study.