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Oral Peer Corrective Feedback in an ESL Classroom: Training Francophone Learners in the Pronunciation of *th-*

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A Thesis

In

the Department

of

Education

(TESL Centre)

Presented in Partial Fulfillment of the Requirements
for the Degree of Master of Arts in Applied Linguistics at
Concordia University
Montreal, Quebec, Canada

April 2003

ABSTRACT

Oral Peer Corrective Feedback in an ESL Classroom: Training Quebec Francophone Learners in the Pronunciation of *th-*

Sara Kennedy

How do ESL learners react to training in oral peer corrective feedback? This quasi-experimental study was an exploration of that question. Over 13 weeks, a treatment group of francophone ESL learners was first observed, then trained in oral peer corrective feedback (i.e. the provision of corrective feedback to one learner by another) on the pronunciation of *th-* in English . All group activities were audio-recorded. A control group of francophone ESL learners was also observed and recorded. Both groups were pretested and posttested for accuracy of their pronunciation of *th-*. Additionally, two learners each from the treatment and control groups were followed throughout the study for changes in pronunciation of *th-*. Although oral peer corrective feedback on *th-* occurred in the treatment group, no significant differences between groups in accuracy of pronunciation of *th-* were found. Out of the four learners tracked, one learner from the treatment group and one learner from the control group demonstrated moderate improvement in the pronunciation of *th-* over the 13-week study. Possible reasons are discussed for the pattern and manner of oral peer corrective feedback provided by the treatment group, and the limitations and implications of the results are considered.

Acknowledgements

Heartfelt thanks must first go to my supervisors past and present. Patsy Lightbown and Joanna White gracefully put up with prolonged absences, procrastination, prevarication, emergency requests, and other thesis-related behaviour. Patsy has maintained her support long after her official duties at Concordia University have ended. This thesis is shot through with her influence, though it may not resemble anything she would think to identify with the level of her own research and scholarship. I consider myself very lucky to have been under the supervision of such a consummate researcher, teacher, and mentor. Joanna has gone far, far beyond the call of duty to shepherd in a thesis long past its due-date. Her steady hand has helped greatly. She has kept me focused on what is important and has saved me from myself many times. To the extent to which the final version of this thesis is organized, logical, and clear, it is due to her guidance. She is also quite simply one of the nicest people I have ever met, and I'm glad to call her a friend.

My great thanks also go to the two teachers of the groups of learners. Without their participation and support, this thesis would not exist. I am very grateful for the opportunity they gave me, and I wish them the best in their teaching careers. I thank as well the two groups of CEGEP learners, who cheerfully tolerated the persistent graduate student who was always plunking microphones down in front of them.

The three ESL learners from Concordia University who acted in the training video were patient, enthusiastic, and good-natured even while suffering a first-time director. The staff at the Audio-Visual Depot at Concordia University was always ready with smiles and a stack of tape recorders and mikes. Randall Halter kindly ran the statistical tests and took time out of his busy days to discuss the results. Roy Lyster's spring seminar on corrective feedback both provided much food for thought and gave me the opportunity to narrow the scope of the thesis. Beth Gatbonton set me straight on the workings of the gradual diffusion model for phonetic variability. The second rater for the accuracy scores was long-suffering in training and very diligent in rating. The Concordia-McGill Second-Language Research Group allowed me the opportunity to present both the research proposal and the results, and provided pertinent and useful comments in each instance. My special thanks to those friends and family whose encouragement and interest kept me going throughout the long process.

This thesis is dedicated to my parents, who started me off on the right path.

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Chapter 1 - Introduction

1.1. An Overview of Two Different Approaches to Accuracy in Language Teaching

1.1.1. The Audiolingual Method and Corrective Feedback

How important should errors be to the second-language learner and second-language teacher? Conflicting answers to this question have enriched and transformed conceptions of corrective feedback and teaching methodology in the area of second language acquisition (SLA). Forty years ago, the audiolingual method was generally accepted in North America as the means by which learners could best learn to produce a second or foreign language. According to Benseler and Schulz (1980), in the audiolingual approach, language was seen as "a set of habits. These habits [could] be acquired through mimicry and memorization of dialogues" (p. 89). Errors were anathema for both learners' input and output. Error-free input was thought to be available only from a teacher, a text, or very structured and practiced production by other learners. The price of error-free output was eternal vigilance by language teachers, who were encouraged to limit classroom activities to drills and dialogues that learners could practice and produce without errors of any kind. As Lightbown (2000) remembers, "We had been taught that we should not allow students to venture into 'free' use of the language for fear that unstructured language production would inevitably lead to errors, interfering with the establishment of correct habits" (p. 434).

When a learner inevitably did produce an error, a conscientious teacher would immediately require the learner to repair the error before continuing with the rest of the lesson. The ratio of one teacher to many language learners meant that spotting oral errors was easiest for the teacher when only one learner was talking or when the class was simultaneously saying the same thing. Teacher-fronted activities and choral drills and dialogues were thus standard practices in the audiolingual classroom.

1.1.2. Communicative Language Teaching and Corrective Feedback

A growing discontent by teachers and applied linguists with the audiolingual method spawned communicative language teaching (CLT), an approach that emphasized teaching language as a means of communication, not as a system of habits to be acquired (Lightbown, 2000, p. 436). The focus of language teachers had shifted from teaching learners a set of language habits to teaching learners to communicate in the second or foreign language.

Since communication was now the objective and it was permissible for a learner to successfully communicate in another language while producing errors, many CLT teachers reduced their treatment of learners' errors, and some teachers treated only those errors which interfered with comprehension. As Pica (2000) puts it, "A tolerance of learners' grammatical errors [was] frequently preferred over correction thereof, with this latter strategy reserved exclusively for errors in the communication of message meaning" (pp. 4-5).

1.2. Communicative Opportunities and Classroom Organization

The shift to CLT also meant that language teachers tried to provide learners with opportunities in the classroom to communicate in another language. The teacher-learner ratio again became a concern. The teacher who allowed oral communication only between the teacher and the learner would either be forced to resort to teacher-fronted communicative activities done in chorus, which would necessarily be limited in scope and essentially unmotivating, or would have to divide her attention between all the learners, communicating with each individually. This splitting of attention would leave each learner with very little time spent in actual oral communication, but a lot of time spent listening to the teacher communicate with other learners.

In order to provide ample and rich communicative opportunities which were at the same time motivating, teachers organized oral communicative activities with learners organized in small groups or pairs. "The instructional staple of teacher-fronted lessons [were] often substituted with activities involving student role plays and problem solving, which engage the students in communication as they work in groups and pairs" (Pica, 2000, p. 5). The responsibility was now on learners themselves to communicate with each other in the target language.

1.2.1. Communicative Language Teaching and Accuracy

This shift in responsibility allowed learners more control over when and how much oral language they produced, but lessened teachers' control over the nature of the language produced. The decrease in control was of concern to

some teachers and researchers. "If non-native speakers (NNSs) frequently interact with each other in the context of classroom second-language learning where peer-work or group-work is emphasized, [would] the phenomenon of interlanguage as input affect the form of the interlanguage?" (Lightbown, 1985, p. 270). However, some proponents of CLT did not view a possible decrease in learners' accuracy, either in input or output, as a significant problem. "Errors were seen as a natural part of language acquisition, and they were expected to work themselves out eventually, if learners remained motivated and if they continued to have access to sufficient comprehensible input and/or opportunities for communicative interaction" (Lightbown, 1998, p. 190).

1.3. Recommendations for Attention to Form

Nonetheless, some teachers and SLA and language teaching methodology researchers noticed that numerous inaccuracies remained in the oral production of CLT learners, whether in grammar (Florijn, 1995; Lightbown and Spada, 1990; Long, 1991; Loschky and Bley-Vroman, 1993; Swain, 1985; Williams, 1995), pronunciation (Correa Brena, 1999; Pennington, 1989), or sociolinguistic or sociopragmatic features (Celce-Murcia, Dörnyei, and Thurrell, 1997; Lyster, 1994; Swain and Lapkin, 1989). Recommendations were made to integrate an attention to the form of the language in the CLT classroom.

These recommendations have taken many shapes, from form-focussed instruction (Hayashi, 1995; Lightbown and Spada, 1990, 1994; Long and Crookes, 1992; Norris and Ortega 2000) to input floods and/or enhancement of grammatical features in the input (Lim, 2001; J. White, 1998; L. White, Spada,

Lightbown, and Ranta, 1991) to exploration of metalinguistic principles by learners (Fotos, 1993, 1994; Kowal and Swain, 1994; Swain, 2001; Swain and Lapkin, 1995, 1998). All of these recommendations encourage a return to greater monitoring by the teacher at some point in the lesson of the language that learners produce orally.

Two possible problems arise with increased monitoring by the language teacher. One problem is that during a small-group communicative activity, the teacher will be able to monitor the accuracy of only one or two learners. A possible solution is for the teacher to increase the amount of teacher-fronted activities in order to better monitor the oral language that learners are producing. The drawback to this solution, and the second possible problem, is that with more classroom activities directed by the teacher, the learners will have less opportunity to engage in oral communication because of the teacher/learner ratio mentioned above.

1.4. Oral Peer Corrective Feedback

One potential way of resolving the dilemma of boosting the monitoring of learners' language while maintaining ample opportunities for their oral communication is for learners to monitor and provide corrective feedback to each other in small groups. This oral peer corrective feedback (OPCF) has numerous potential benefits: a teacher does not have to be everywhere at once while trying to monitor learners for accuracy, learners are encouraged to notice when language is not accurate and to self-monitor more consistently, and the increased amount of communication resulting from small-group activities can be

maintained. Some potential drawbacks to OPCF are that learners may not be able or willing to monitor their peers' speech for errors, the corrective feedback may be inappropriate, and learners may not react well to receiving OPCF from their peers.

1.5. The Research Study

The phenomenon of OPCF has been noted, described, and measured, but rarely have researchers investigated a purposeful attempt to train learners in OPCF in a second-language classroom. This quasi-experimental thesis study is an investigation into the effects of training young adult second-language learners in OPCF for one particular language feature.

Chapter Two describes previous research related to OPCF and interaction between native speakers (NSs) and non-native speakers (NNSs) and between NNSs and NNSs. In Chapter Three, the research design and methodology are outlined, and Chapter Four presents the results of the study. Chapter Five contains a discussion of the results; the chapter then concludes with the limitations and implications of the research.

Chapter 2 – Literature Review

2.1. Research on Oral Peer Corrective Feedback

The topic of corrective feedback has often been a source of controversy in research on second language acquisition (SLA). There is no consensus on whether, when, to whom, and how to provide corrective feedback. Opinions can vary from teacher to teacher and from researcher to researcher on the most effective way for teachers to bring about more accurate use of linguistic forms (Chaudron, 1977; Doughty & Varela, 1998; Lyster & Ranta, 1997; Mackey & Philp, 1998; Nobuyoshi & Ellis, 1993). Peer corrective feedback, when learners (here used as equivalent to "nonnative speakers" or "NNSs") give each other corrective feedback, is one manner of feedback being studied more and more by researchers. Most studies have examined written peer corrective feedback (e.g., Jacobs, 1987; Witbeck, 1976); little work has been done on peer corrective feedback given orally. The following section explores some of the research relating to oral peer corrective feedback (OPCF).

2.1.1. Negotiated Interaction

Research in negotiated interaction was one of the sources from which work on peer corrective feedback developed. Negotiated interaction in second-language learning has been described as

> the modification and restructuring of interaction that occurs when learners and their interlocutors anticipate, perceive, or experience difficulties in message comprehensibility. (Pica, 1994, p. 494).

The results of studies in second-language (L2) negotiated interaction were sometimes conflicting; however, when comparing native speaker (NS) and NNS feedback (whether corrective or non-corrective) in negotiated interaction with a NNS, researchers found that the type, accuracy, and distribution of feedback provided by NSs was usually different than that provided by NNSs (Brock, Crookes, Day, & Long, 1986; Pica, Lincoln-Porter, Paninos, & Linnel, 1996; Porter, 1986). Nonetheless, both NSs and NNSs provided quite small amounts of corrective feedback overall for their NNS interlocutors (Pica & Doughty, 1985a, 1985b; Porter, 1986).

2.1.2. NNS Response to NS Feedback

Negotiated interaction research also investigated NNS responses to NS feedback. Some studies found that NNSs modified their utterances depending on whether the NS provided a recast, a clarification request, or another type of feedback (Long, 1996; Lyster, 1998; Lyster & Ranta, 1997; Pica, 1993; Pica, Holliday, Lewis & Morgenthaler, 1989; Mackey, Gass, & McDonough, 2000). For descriptions of these feedback moves, see section 3.4.2. However, one study found no difference in NNS responses to different types of NS feedback (Brock, et al., 1986). The type of interactive task also influenced the number and type of learners' modified utterances in response to NS feedback (Gass & Varonis, 1986; Pica, 1991; Pica, et al., 1989). For example, Pica et al. (1989) found that when NNSs and NSs engaged in either an information-gap task, a jig-saw task, or a discussion, the information-gap task provided more opportunities than the other two tasks for NNSs to modify their utterances.

2.2. Salience of Linguistic Forms in Negotiated Interaction

Even if feedback were generally available, learners would need to take note of it at some level in order to use it. Gass and Varonis (1994), Pica (1993), and Pica, Young, and Doughty (1987) suggested that when interaction contains redundant, repetitious input and is focused on a certain goal, the interaction focuses learners' attention on problems in the discourse and assists in making certain input and linguistic forms salient, or noticeable, to NNSs.

However, many researchers (Lin & Hedgcock, 1996; Pica, 1991; Pica & Doughty, 1985b; Pica, et al., 1989; Pica, Kanagy, & Falodun, 1993; Schmidt & Frota, 1986) have noted that negotiated interaction with NSs does not seem to help learners "access L2 grammatical morphology and move toward accurate production of L2 morphosyntax" (Pica, 1994, p. 494). For instance, Sato (1986) studied two young Vietnamese brothers learning English naturalistically and found that they used very few morphological markers of past time reference, instead relying greatly on their interlocutor to infer or establish this reference. Sato concluded that the boys did not find the inflections of regular past forms salient, or noticeable. She also suggested that there was little communicative pressure on them to use past time reference, because they could be understood to be talking about the past without actually using any markers.

The boys may have had what Nobuyoshi and Ellis (1993) call a "functional orientation". These NNSs are usually more concerned with communicating their message than producing accurate speech. Some NNSs may not even be able to expand their focus of attention to language form because the cognitive

processing that underlies their successful communication in the second language is not yet automatic (McLaughlin & Heredia, 1996, p. 214). When NNSs are able to communicate without certain target-language forms, they do not need to notice and acquire those forms, and so negotiate almost entirely over problems in comprehension. "If I can be understood without it, I don't need to worry about it," might be an appropriate motto for NNSs with this orientation.

2.2.1. The Output Hypothesis

Responding to the inaccurate speech they noticed in French immersion students during communicative activities, Swain and her colleagues (Kowal & Swain, 1994; Swain, 1985, 1993, 1995, 1998; Swain & Lapkin, 1995, 1998) formulated and tested the output hypothesis, which essentially holds that "through producing language, either spoken or written, language acquisition/learning may occur" (Swain, 1993, p. 159). When learners produce language, they may come to see gaps in their knowledge of the language. They may ignore the gap, try to circumvent it, or depend on other interlocutors to "fill in the gaps" of the conversation, but Swain and her colleagues suggested that learners be "pushed" in their output, that they be called on to use the knowledge that they already have to "fill the gap". Swain suggested collaborative learning as one means of creating situations where learners are pushed. She especially recommended activities where learners discuss the language as an object and reflect on their own output. Activities such as these not only demand that learners produce the language, but also may promote noticing of a linguistic problem, either because of external feedback from a collaborative partner or

internal feedback based on the learner's own knowledge of the language. Learners may respond to the feedback by finding a solution based on their current knowledge, or, failing that, may pay closer attention to input in hopes of finding the solution. Either way, the linguistic problem is not simply being ignored, but is worked on in some way (Swain & Lapkin, 1995, p. 386).

2.3. A Few Words About Noticing

When learning a second or foreign language, learners often do not cognitively take in all that is available to them in the linguistic input (Sharwood Smith, 1994, p. 166). Schmidt (1990) and Schmidt and Frota (1986) attributed this selective intake to the learner noticing some linguistic features, but not others. Noticing is here described as "focal awareness" (Schmidt, 1990, p. 132), an awareness of something perceived that is distinct from all the other stimuli that are perceived. Schmidt cited the example of reading a text and noticing the content, not the font or any background noise. We may notice these other stimuli, though, if we choose to widen our focus of attention. Schmidt cautioned that noticing does not necessarily lead to learning, as demonstrated by situations described in Schmidt and Frota (1986) where Schmidt used certain grammatical forms immediately after receiving them as input, but never used them again.

Schmidt (1990) cited several factors that affect the occurrence of noticing and how or whether attention is paid to a given linguistic feature. These factors are: a) innate language universals and "expectancies based on both the native and target language" (p. 143), as well as the possibility that instruction may ready the learner to notice something,

b) the frequency with which a language feature appears in the input,

c) the perceptual salience of a feature,

d) the learner's skill level, which includes the degree to which performance of the skill can be processed automatically, and

e) the demands of the task to be carried out.

When learners notice a linguistic feature that they do not currently use in their interlanguage, or that they use differently, their interlanguage systems are primed for a restructuring (McLaughlin, 1990; Schmidt, 1986; Sharwood Smith, 1991, 1994) and subsequent change in their interlanguage.

2.3.1 Uptake of Different Types of Feedback

Some SLA researchers have suggested that certain types of feedback may be more difficult to notice than others. Corrective feedback that recasts the original learner utterance does not seem to be often "taken up" by learners and incorporated into repairs (Chaudron, 1977; Lyster & Ranta, 1997); However, some research has shown that if recasts were isolated or made salient through other means (Chaudron, 1977; Doughty & Varela, 1998), or if they targeted phonological errors (Lyster, 1998; Mackey, Gass, & McDonough, 2000), they were incorporated more frequently into the learners' response. Lyster and Ranta (1997, p. 76) suggested that some types of corrective feedback, such as elicitation and clarification requests, are more salient to learners and also allow the opportunity for self-repair, which is not possible when the form has been modelled (as a recast).

2.4. Oral Corrective Feedback, Communicative Activities, and Learning

More and more researchers are investigating the effects on learners of particular types of feedback in particular communicative activities. Muranoi (2000) contrasted the effects of recasts and clarification requests versus only meaning-based feedback in strategic role-plays in an EFL classroom. Two groups of Japanese learners received what Muranoi called 'interaction enhancement': as a participant in the role-play, Muranoi responded with clarification requests and recasts whenever the learner/partner in the role play made an error in use of the indefinite article in English. The third group received only meaning-based feedback and negotiation from Muranoi. Of the two groups receiving interaction enhancement, one group also received explicit form-focused instruction, 'formal debriefing', on article use following each role-play period. The other group and the non-interaction enhancement group received only 'meaning-focused debriefing' that explored how successful learners were in performing the intended communication and all the speech acts related to that communication. After a three-week training period, Muranoi found that, on almost all elicitation tasks used for the post-tests, the groups receiving interaction enhancement used articles more accurately than the non-interaction enhancement group. However, the extent of the difference between the treatment groups and control groups varied from task to task. Of the two treatment groups, the one receiving formal debriefing performed better in the post-tests than the meaning-focused debriefing group. Also, the learners in the treatment groups who did not take part in the role play but only observed the interaction enhancement showed as much

improvement in article use on the post-test as those learners who had participated in the role play. Muranoi concluded that "L2 instruction in which form-focused treatments are integrated into meaning-oriented interactive tasks in a timely fashion facilitates L2 learning" (p. 633).

2.5. Training Learners in Strategies for Processing Feedback

A study done by Corbeil (1992) also explored the uses to which learners put teacher feedback. In a previous study in 1990, she had noticed that more successful learners of French used more elaborate strategies than less successful learners to process input that the teacher had intended as corrective feedback. In her second study, Corbeil taught one of her classes a range of strategies, derived from the 1990 study, for cognitively processing corrective feedback. She ranked these strategies on a scale of least constructive to most constructive. This scale was based on the level of attention to the corrective feedback required for a given strategy. For instance, a learner who simply repeated a recast used a less elaborate and less constructive strategy which required less attention than the learner who attempted to identify which elements in the recast had been changed. Corbeil found that, compared to a control class, the trained experimental class cognitively processed feedback at the higher levels on the scale and increased in linguistic accuracy to a greater extent. Corbeil noted as well that when learners modelled responses for each other which showed various strategies for cognitively processing corrective feedback, the modelling was very effective in overcoming gaps in learners' understanding of the strategies.

2.6. Oral Peer Corrective Feedback

If classroom peers could help other learners understand possible strategies to cognitively process corrective feedback, perhaps learners could help provide useful and effective feedback as well. A few researchers have examined oral peer corrective feedback and its effect on NNS morphosyntax. Bruton and Samuda (1980) discovered that when adult NNSs undertook group problem-solving tasks in a classroom, a large number of errors went untreated. Nonetheless, NNSs did treat lexical and syntactic errors, as well as errors of understanding. The errors were treated with a clarification request, an explicit correction, possible alternatives to the error, or a metalinguistic explanation (see section 3.4.2 for descriptions of these feedback moves). The authors did not tabulate the exact number or nature of errors treated and repaired. However, they noted that lexical errors were treated the most, and usually only errors of understanding brought on a clarification request. Interestingly, the authors stated that some NNSs seemed to self-repair some persistent errors over time through "peer influence", even though no overt corrective feedback was directed at those particular errors. Gass and Varonis (1989) noted the same phenomenon with two NNSs given the task of asking directions in the street, which one NNS performed grammatically and one ungrammatically. The NNS speaking ungrammatically eventually repaired her ungrammatical speech without prompting from her peer. Bruton and Samuda (1980) stated that this phenomenon did not work in reverse. The NNS didn't seem to take up many non-target-language forms from their peers. The authors suggested that L2

learners should slowly be allowed to assume error-treatment duties for "minor errors", while the teacher focuses on more complex errors which cause communication breakdowns.

2.6.1 Accuracy and Corrective Feedback in NNS-NNS and NS-NNS Interaction

Porter (1986) compared NSs and NNSs interacting with each other in dyads during task-centred discussions. Each NNS spoke with one NS, one advanced-level NNS, and one intermediate-level NNS. Native speakers had 1/3 the errors and false starts of the NNSs while speaking. This lower level of accuracy on the part of NNSs was mirrored in the findings of Pica and Doughty (1985a, 1985b) and Pica, et al. (1996). In Porter's study, NNSs corrected each others' errors 1.5% of the time, a lower rate than the NSs, who corrected about 8% of NNS errors.

However, Porter found that NNSs at both levels could provide useful practice for NNS interlocutors in production of morphosyntax. The two levels of learners used more inaccurate speech when speaking to someone at the same level than when speaking to someone at a level above or below, so mixed-level dyads may provide more accurate input, whether the NNS is advanced or intermediate. There was no significant difference between the two levels of learners in the rates of corrective feedback provided. NNSs spoke more to other NNSs than to NSs, but were not noticeably more accurate when speaking to NSs, even when attempting to repair their own speech. This was also found by Pica, et al. (1996). Furthermore, there was no difference for an NNSs' grammatical accuracy

between speaking to an advanced or intermediate NNS. Porter concluded that although learners did not hear completely accurate speech from interaction with NNSs, they were able to negotiate to a more target-like production.

2.6.2. Uptake and Repair of Corrective Feedback by NNSs

Gass and Varonis (1989) also studied NNS-NNS negotiated interaction with Japanese ESL learners in dyads. They found that NNSs gave each other an unspecified amount of corrective feedback on phonology, morphosyntax, and lexis, but only nine repairs were incorporated by the interlocutors in the entire corpus of five hours of interaction. Eight of the nine repairs were in the direction of the target language. NNSs offered very little inaccurate corrective feedback (four instances) and **no** inaccurate feedback was incorporated by the other NNS. This low figure of peer miscorrections mirrored Jacob's 1989 study on peer corective feedback in writing, and Porter's 1986 study, where only 3% of NNSs' errors were miscorrected by their partners. Kasanga (1996) also reported only one recorded instance of inaccurate corrective feedback out of almost 20 hours of recorded data of oral interaction between Zairean NNSs of English.

Gass and Varonis suggested that learners' susceptibility to corrective feedback was decided by the strength or weakness of learners' knowledge representation of linguistic forms. If learners' knowledge representation of a certain form, whether a target- or interlanguage form, is strong, then external feedback will seldom affect that representation or the use of the form.

In order to heighten French immersion students' awareness of and proficiency with conditional verb structures, Day and Shapson (1991) created a curriculum

unit which integrated both analytic and communicative approaches. One of the techniques used in the unit was to appoint a "monitor of French" during each group activity, who wrote down each time other students used the conditional and used English during the activities. In evaluating the pedagogical effects of the unit, the researchers expressed the belief that the monitor helped to encourage an overall grammatical consciousness; however, the technique was not extremely useful for promoting the use of the conditional in the more communicative speaking activities. The authors do not mention how the technique affected the use of the conditional in more analytic activities.

2.6.3. Factors Affecting Frequency of NNS Negotiation and Corrective Feedback

2.6.3.1. Proficiency Level

In an observational study of learner-generated attention to form, Williams (1999) noted that the distribution of instances of unsolicited peer corrective feedback, or, as she referred to it, "other correction", increased with the proficiency level of the learners. Most of the other correction occurred in activities where forms were focussed on to a large extent, such as correcting homework and structured textbook exercises where most of the language was already provided. In addition, over half the other correction episodes focussed on grammar, as opposed to vocabulary.

Kasanga (1996) reported that Zairean EFL learners who were at a higher proficiency level produced significantly more interactional modifications than their lower-proficiency partners. A finer-grained analysis showed that this was true for self-repair, confirmation checks, clarification requests, and other-repair.

2.6.3.2. Gender

Gender differences also played a role in the kind of negotiation taking place in the Japanese NNS-NNS dyads studied by Gass and Varonis (1986). The researchers discovered that both male and female participants both used and initiated more negotiation in mixed-gender dyads than in same-gender dyads

2.6.3.3. Learner's Role

The learner's role in the activity affects the nature of the NNS-NNS interaction as well. Gass and Varonis (1985) found that in picture-description tasks, the drawer of the picture negotiated more than the describer. Yule and MacDonald (1990) noted that when higher-proficiency learners were in a dominant role in the activity, that is, when they controlled the information, little negotiation took place. When those same learners were in a non-dominant role, there was much more negotiation and the activity was two times as long as when the high-proficiency learners were in a dominant role.

Conversely, Kasanga (1996) found that, in convergent (e.g. information-gap) tasks, higher-proficiency learners "both intiated[d] and achieve[d]" more interactional modification when they were in the speaker position as opposed to the listener position (p. 623). When neither learner was in a privileged position with respect to information needed to complete the task (e.g. a discussion activity), significantly less interactional modification took place. Kasanga suggested that high-proficiency learners were better able to monitor the language being produced on both sides and could take steps to ensure that the messages

were being communicated and understood accurately. Presumably, accurate communication was viewed by these learners as more important in the jigsaw task than the discussion task.

2.6.4. Group Dynamics and Oral Peer Corrective Feedback

The effect of role on the interlocutor raises the consideration of group dynamics. Effective negotiated interaction (and peer feedback) cannot take place if the interlocutors do not agree on, and agree with, what they are meant to achieve by the interaction. "Negotiation is favored when there is mutual recognition and concern for each other's objectives among interlocutors" (Pica, 1993, p. 454). However, this recognition of objectives is not always shared.

In a qualitative analysis of three NNS-NNS dyadic oral interactions, Morris and Tarone (in press) found that lower-proficiency learners interpreted the corrective feedback they received from higher-proficiency peers "as criticism and even mockery" (Morris & Tarone, in press, p. 1). The authors suggest that this interpretation of corrective feedback affected whether learners noticed the feedback and then acquired the accurate form. The three dyads analysed were Spanish as a foreign language learners who completed a jigsaw task on daily routines. Learners were tested before and after the task for their production of third person singular verbs in the present. The corrective feedback provided during the task was spontaneous recasts (the learners had not been told to provide feedback). In the three dyads, the higher-proficiency (HP) learners recasted some errors produced by the lower-proficiency (LP) learners. Some of these recasts were neutral and some critical in tone. The LP learners reacted

negatively to some recasts and did not take up these corrected forms. In stimulated recall sessions, the LP learners reported that they had not realized that the recasts were meant as feedback, but had interpreted the recasts as attacks on their (the learners') competence and as a means of reminding the learners that they were not 'members' of the HP part of the class. The researchers analysed LP learners' posttest production of those verb forms which the learners had inaccurately produced in the pretest and which had received negatively-viewed recasts in the task. These verb forms were not accurately produced in the posttest. The authors conclude that "the expectations [learners] had based on their social relationships with...peers" may have affected how the learners perceived and interpreted oral peer corrective feedback. Those learners who expected to be criticized on their production or lack of competence did not consider that the recasts could be interpreted as aids for the accuracy of their own production.

If interlocutors do not share the same level of proficiency, they must at least agree on the objective of addressing linguistic difficulties in the interaction, whether in their speech or in another's. In a paper on group dynamics, Dörnyei and Malderez (1997) stressed that group cohesiveness is influenced by the extent to which group members know about each other and the extent to which group norms are shared and supported. The cooperative effort to produce comprehensible and/or accurate speech makes use of not only the speaker's linguistic knowledge, but her interlocutors' as well (Pica, 1987, p. 7), so all the interlocutors must jointly resolve to share their knowledge with each other. They

must have in common the goal of producing comprehensible and/or accurate speech within the group. The more the interlocutors identify with their group, stated Dörnyei and Malderez (p. 69, p. 73), the more cohesive they become and the more likely they are to follow norms and goals held by the group.

2.7. Cooperative Learning, Group Dynamics, and Motivation

The success of any attempts to encourage intentional peer corrective feedback in the L2 classroom must take into account the link between cooperative learning (CL), group dynamics, and motivation. Dörnyei (1997) considered the interaction of the three elements and "the specific factors that contribute to the promotion of learning gains" (p. 482). Dörnyei identified three main components of cooperative learning: a substantial amount of class time is spent working in small groups; learning is structured to motivate learners to help their peers attain the goal of instruction; the group's achievement is considered to be as or more important than individual achievement.

Various researchers on cooperative learning have put forth different suggestions for motivating learners to cooperate with each other. Olsen and Kagan (cited in Dörnyei) recommended five ways to design a CL framework in the classroom. They suggested:

1. structuring the goal (the work of the group is created and evaluated as a single team product).
2. structuring the rewards (a team score is calculated for the production of the entire group, besides calculating individual scores).

3. structuring student roles (each group member has a specific role with specific responsibilities).

4. structuring materials (the resources provided must be shared among the group or must be somehow connected together to achieve the goal).

5. structuring rules (rules for the group must stress that all members are responsible for the group product) (Olsen & Kagan, cited in Dörnyei, 1997, p. 484).

The interaction between group dynamics and CL stems from the importance of group cohesiveness to successful cooperative learning. As mentioned above, group cohesiveness is enhanced by common goals, common norms, and knowledge about and acceptance of the other group members as people. These factors are an integral part of the process of implementing CL in the classroom and will likely have great importance for the successful use of OPCF as well. The CL process also involves encouraging learner autonomy, allowing learners to make decisions on their learning in their groups without necessarily seeking input from the teacher. To engage in OPCF successfully, learners must have the freedom and ability to make decisions on accuracy on their own. Thus, a CL framework would go a long way towards increasing group cohesiveness and boosting the potential for OPCF in the language classroom.

Dörnyei (1997) claimed that numerous studies on cooperative learning have shown that it has encouraged positive learner motivation in the L2 classroom. The importance put on attaining cooperative goals instead of competitive ones, the conditions that enhance group cohesiveness, the convergence between

individual goals and group goals, and the opportunity for greater learner autonomy all promoted greater motivation on the part of learners (pp. 487-489). A CL framework may work to increase motivation to learn a language and consequently to help other language learners by providing OPCF.

2.8. First-Language Influence on Learner Errors

No language learning takes place in a vacuum. The research conducted in this thesis study took place in Quebec, whose official provincial language is French. The great majority of learners who participated in the study grew up speaking French as their first language. The linguistic feature eventually chosen as the targeted feature of this study was the pronunciation of *th-* in English. Pronunciation is an area of second language where the influence of a first language can be very transparent. Markedness, phonetic environment, and salience are three factors which govern first-language influence on second-language production and perception. These factors will be discussed with respect to their influence on the pronunciation of *th-* in English by francophones in Quebec.

2.8.1. The Hierarchy of Phonological Difficulty

A marked aspect of language is one that is generally less common than a corresponding unmarked aspect of language. The English pronunciation of *th-*, for example, using the phonemes /θ/ and /ð/, is quite an uncommon sound throughout the world's languages, and is thus a marked form. Eckman (1977) formulated a theory of markedness which predicted which forms of a first language would be likely to transfer to the second language. This Markedness

Differential Hypothesis was the basis for the devising of the Hierarchy of Phonological Difficulty (Stockwell & Bowen, 1983), which predicted levels of difficulty in learning phonological categories in a second language based on whether the categories were present or absent and obligatory or optional in either or both languages (see Figure 2.1 for depiction of this hierarchy. Also see Stockwell and Bowen (1965, p. 17) for another version of the phonological hierarchy of difficulty).

	Native Language	Target Language
Most Difficult	Ø	Obligatory
	Ø	Optional
↑	Optional	Obligatory
	Obligatory	Optional
	Obligatory	Ø
	Optional	Ø
	Optional	Optional
Least Difficult	Obligatory	Obligatory

Figure 2.1 – *Hierarchy of Phonological Difficulty* (Adapted from Stockwell and Bowen, 1983)

According to this hierarchy, the English phonemes /θ/ and /ð/ will be difficult for francophones to learn because they are obligatory in English but do not exist in French. Indeed, in a study of the comparative phonetics of English and French, Picard (1987) notes that these phonemes are "particularly problematic for francophones" (p. 66) precisely because they do not exist in French.

2.8.2. The Gradual Diffusion Model

In a study on the distribution of the phonemes /θ/ and /ð/ in the speech of Quebec francophone males, Gatbonton (1978) found that, in read-aloud or spontaneous speech samples, these speakers produced four variants of both /θ/ and /ð/ in different phonetic environments. She found that the distribution of these variants could be explained and predicted by a gradual diffusion model of phonetic variability. Speakers at a higher stage of acquisition of a phoneme produced nativelike variants in both phonetic environments which were statistically favourable *and* phonetic environments statistically less favourable to the production of nativelike variants. Speakers at a lower stage produced only non-nativelike variants or both nativelike and non-nativelike variants of the phoneme in the less favourable environments, though these speakers nonetheless produced nativelike variants in phonetic environments statistically more favourable to their production. At each succeeding stage of acquisition, nativelike variants and non-nativelike variants would co-occur in increasingly less favourable environments for nativelike variants. More and more environments that were less favourable would also see, in a predictable way, the non-nativelike variants be replaced by nativelike variants at higher stages of acquisition (see Figure 4.4) for a graphic representation of this model.

Further demonstration of the gradual diffusion model was found by Zampini (1996) who investigated the effect of voiced stop spirantization in Spanish on the acquisition of the phonemes /b /, /d /, /g /, and /ð/ in English by native Spanish speakers. In certain contexts in Spanish, /b/, /d/, and /g/ are

pronounced as stops, and in other contexts, as continuants or spirants, e.g. [um beso] and [el βeso], [mundo] and [naða]. Therefore, /d/ and /ð/ are allophones in Spanish. Zampini found that, although spirantization occurred for /b/, /d/, and /g/ in the same contexts as it occurred in Spanish, less spirantization occurred for /d/ than for /b/ and /g/.

Acquisition Phase					
Stages	PE1*	PE2	PE3	PE4	PE5
a	1**	1	1	1	1
b	1,2***	1	1	1	1
c	1,2	1, 2	1	1	1
d	1,2	1,2	1,2	1	1
e	1,2	1,2	1,2	1,2	1
f	1,2	1,2	1,2	1,2	1,2
Replacement Phase					
g	2	1,2	1,2	1,2	1,2
h	2	2	1,2	1,2	1,2
i	2	2	2	1,2	1,2
h	2	2	2	2	1,2
k	2	2	2	2	2

* PE = phonetic environment
** 1 = non-nativelike variant
***2 = nativelike variant

Figure 2.2 – *Gatbonton's (1978) Gradual Diffusion for Second-Language Variability*

In other words, /d/ was pronounced more accurately in these contexts than /b/ and /g/. Zampini postulated that Spanish learners of English learn that /d/ and /ð/ are different phonemes in English more quickly than they learn that /b/ and /g/ and their spirantized equivalents are not allophones in English, as they are in Spanish. However, Spanish speakers seem to only gradually extend their production of the /ð/ phoneme to all the phonetic environments that demand its

use in English. Zampini suggested that native Spanish speakers are able to first produce /d/ and /ð/ separately in postvocalic positions, then go on to acquire the distinction in postconsonantal and pausal positions. This claim for native Spanish speakers mirrors the findings in Gatbonton (1978), who proposed the gradual diffusion model of phonetic variability to explain the variable production of /θ / and /ð/ phonemes by francophones.

2.8.3. Training Francophone Learners in the Production and Perception of *th-*

In order to train learners in the pronunciation and perception of *th-*, researchers have used both high- and low-technology approaches. An example of traditional training and its results was described by LaCharité and Prévost (1999a, 1999b). Francophone university students in Quebec studying to be ESL teachers had completed a semester-long course in general and contrastive phonetics two months before they were tested on their perception of the phonemes /θ/, /ŋ/ and /h/ in English. The course covered "the prediction and amelioration of pronunciation errors" (1999b, p. 376). The teacher used "explanations[,]...demonstrations, as well as exercises focusing on, among other things, the perception, articulation and transcription of *θ*, *ŋ*, and *h*" (p. 376).

Participants in the study were tested on word discrimination using samples of recorded minimal pairs for each phoneme, and tested on word identification using the same recorded words. A control group of native speakers also took the tests. On the word discrimination test, both groups received generally high scores and no statistical difference appeared between the groups in the overall test scores. However, the authors found that the accuracy on word discrimination with the /θ/

phoneme in the francophone group varied with the position of /θ/ in the word. When /θ/ was in the final position, accuracy in word discrimination was highest. When /θ/ was in initial position by itself, discrimination of the word was more accurate in the francophone group than when /θ/ was in initial position as part of a consonant cluster (1999b, Figure 2, p. 379).

On the word identification test, overall test scores for the francophone group were higher than their scores on the word discrimination test, and were again very similar to the control group's scores. The authors reported that, for words using /θ/, the francophone group performed best on words where /θr/ was in initial position and performed less well on words where /θ/ alone was in initial position. However, the figure showing the results contradicted the authors' reports, showing the best performance on words with /θ/ in final position, then on words with /θr/ in initial position, then with /θ/ alone in initial position. In any case, the francophone group found identifying words with only /θ/ in initial position the most difficult of all the tested options (1999b, Figure 4, pp. 380-81).

In analysing the results of individual learners, the authors discovered that those learners who scored low on the /θ/ phoneme on the word discrimination test also scored low on the /θ/ phoneme on the word identification test. Additionally, some learners who scored high on the /θ/ phoneme on the word discrimination test also scored high on the same phoneme on the word identification test, while a few learners with high scores on /θ/ on the word discrimination test scored low on the word identification test. The authors interpreted these results to mean that the first set of learners could neither

discriminate phonetically between /θ/ and the decoy phonemes in the minimal pairs NOR had they acquired the phonological category of /θ/ in their phonological systems for English. The set of learners with two high scores was able to discriminate phonetically between /θ/ and other sounds and had acquired the phonological category of /θ/, while the set of learners with one high score and one low could discriminate phonetically between /θ/ and other sounds, but had not yet acquired the category of /θ/ in their phonological systems for English. Along with Gatbonton (1978) and Zampini's (1996) work, LaCharité and Prévost show that, for second-language learners, nativelike control over particular phonemes is easier in certain phonological environments than in others. The results also suggest that an ability to phonetically tell the difference between /θ/ and other phonemes does not necessarily imply that the learner has the category of /θ/ in her phonological system of English.

Other researchers have trained and tested learners in /θ/ and /ð/ perception using more targeted methods. Jamieson and Morosan (1986) trained Canadian francophone learners in the perception of these phonemes during two training sessions lasting ninety minutes in total using a method called perceptual fading. The participants listened to synthetic sounds that contained one of the two phonemes (/θ/ or /ð/) but that had been artificially manipulated. The sounds ranged along a continuum of sounding clearly different from the other phoneme to sounding more and more similar to the other phoneme. Learners had to identify which phoneme they heard and received immediate feedback on the correctness of their responses. This trained group and a control group were

tested before and after the training on discrimination and identification tasks for the two phonemes.

The researchers found that the treatment group had improved significantly on the identification test, while the control group had not. The treatment group also showed significant improvement on discrimination of the most difficult pair on the discrimination test, while the control group showed no significant improvement. The authors suggested that perceptual training using perceptual fading might be a useful method "to train adult francophones to identify both.../ð/, and.../θ/...with a high degree of accuracy" (Jamieson & Morosan, 1986, p. 214). The same two researchers later performed another investigation into perceptual training for the /θ/ and /ð/ phonemes (1989) that did not use the perceptual fading technique, but only one synthetic prototypical example of each phoneme. The trained learners improved significantly on identifying synthetic sounds and on discriminating between a synthetic pair that sounded fairly different, but did not improve as much as the group who had received the perceptual fading training.

2.9. Summary

From the overview of the research above, we have seen that learners often do provide feedback in a different way than NSs. The speech they use is more ungrammatical, but they do give accurate and useful corrective feedback for other learners' errors, though not a large amount. Previous research has found that negotiated interaction may not necessarily make target-language forms salient or induce learners to pay attention to form unless the interaction is structured to draw learners' attention to form (Gass & Varonis, 1989; Lin &

Hedgcock, 1996; Pica, Kanagy, & Falodun, 1993; Schmidt & Frota, 1986). However, learners can be taught how to best use the corrective feedback they receive, as Corbeil's (1992, 1990) studies demonstrated. Work in group dynamics can also foster the will among learners to help their classmates improve their accuracy in speaking. However, the activities must be structured so that learners are motivated to work together cooperatively. The language feature that was targeted in this study (pronunciation of *th-* in English) is acknowledged to be problematic for Quebec francophone learners. Both traditional and non-traditional perceptual training methods have shown that francophone learners can improve their perception of /θ/ and /ð/. However, LaCharité and Prévost have demonstrated that some francophone learners may be able to phonetically perceive /θ/, but may not have acquired the category for /θ/ in their phonological systems of English.

With these factors in mind, I present below three research questions for a quasi-experimental study of oral peer corrective feedback in the second-language classroom.

2.10. Research Questions

1. Can learners be trained to use oral peer corrective feedback, and to use it appropriately, in small-group communicative activities in the classroom?

2. How often does the use of oral peer corrective feedback divert the topic of conversation and/or interrupt communicative flow?

3. Does a group of learners trained in OPCF for small-group communicative activities exhibit a change in interlanguage or greater accuracy of use for targeted linguistic features over time than a group of learners with no training in OPCF?

Chapter 3 - Research Design

3.1. Participants

Two groups of CEGEP[1] ESL learners, a control group and a treatment group, participated in the study. Both groups of participants were from the same CEGEP in Montreal, Quebec and were in two ESL courses at the same level. Twenty-five learners made up the control group and 22 made up the treatment group. The learners had not been randomly assigned to one group or the other, but had registered for the class time that best suited their timetable.

3.1.2. Language Learning History

At the beginning of the course, learners from both groups filled out a questionnaire created for the study, providing some information about themselves and about their language-learning history. Of the 25 learners in the control group, 20 completed the questionnaire administered by the teacher (see Appendix A for the questionnaire and for an overview of responses). The remaining five learners may have joined the group on the second day of the course. The learners who completed the questionnaire ranged in age from 17 to 20. Most grew up speaking French at home; three also reported speaking either Spanish, Creole, or Arabic at home. Two learners reported Arabic and Portuguese as their home language while growing up, and one learner spoke Italian and English at home.

All learners in the control group reported speaking French at school as they were growing up, and the learner of Italian background also reported speaking English and Italian at school as he grew up. The majority of learners

from the control group had started studying English at the age of nine or ten, but eight learners had had some exposure to English before that age, often from watching TV or talking to friends or relatives. Two learners had lived in an English-speaking environment outside Quebec for an unspecified time period as children.

Of the 22 learners in the treatment group, 20 completed the questionnaire (see Appendix A for the questionnaire and for an overview of responses). The learners who responded ranged in age from 18 to 20. Like the control group, most reported growing up speaking French at home; however, one learner reported speaking Italian, one, Italian and English, and one, Spanish as home languages as they were growing up. The majority of learners had started studying English when they were between 8 and 10 years old; seven learners had had exposure to English at an earlier age, usually from talking to relatives or watching TV.

The two groups were similar in their language learning histories and in the age of their first exposure to English. Three learners from each group reported speaking a language other than French at home while growing up, but all learners had spoken French at school. Most learners from each group reported their studies in English beginning between the ages of 8 and 10, though 2 learners from the control group had lived in an English environment outside of Quebec.

3.2. Context

Each group was in a 102 level ESL course, which is the second-highest level of ESL courses in CEGEPs. The courses were part of the "B" block, which is the classification for courses that are related to a student's field of study. The description of the course from the teacher's course plan handout reads:

> This high-intermediate course, for students in *Science et techniques humaines, de la gestion et de la santé*, is designed to improve specific skills needed for the job market or for pursuing a field of study (Plan de Cours, 2000, no page number given).

The methodology of the course

> involve[s students] in group and individual oral presentations in [their] field[s] of study....[goes] beyond simple conversations into more challenging discussions and debates...ensure[s students'] use [of] correct grammatical structures and more words and expressions becom[ing] part of [their] active vocabulary through reading and discussions...[aids in] greater fluency and confidence in English by [students] actively participating in all classroom activities (Plan de Cours, 2000, no page number).

Both groups were taught by the same ESL teachers, first by a female ESL teacher who taught both classes until week 7 of the study, when she took leave for personal reasons, then by a male ESL teacher who taught both classes until the end of the 15-week course. Both teachers had teaching degrees in ESL and at least 2 years of ESL teaching experience. Both groups attended class once a

week for 3 hours; two hours were spent in the classroom and 1 hour in the computer lab. Both classes met at the same time of day on different days of the week.

At the beginning of the study, learners in both groups were given a consent form in French asking for their agreement to participate. All learners out of the 25 in the control group read and signed the form. Twenty learners out of twenty-two in the treatment group read and signed the form. Because group work was a necessary element of the study, data were collected on all learners, but only the data from consenting learners were analyzed as part of the results.

3.3. Instruments

As mentioned above, a language-learning history questionnaire (see Appendix A) was administered to all participants in order to get an idea of their language-learning backgrounds. The questionnaire targeted areas that could help shed some light on learners' future behaviour, performance, and results on the pre- and posttests.

Spada and Fröhlich's (1995) Communicative Orientation of Language Teaching (COLT) scheme, Part A [see Appendix B] was used to code activities in the classroom in real time in order to enable me to identify and categorize those activities. I had previous training in using COLT, Part A to code videotaped classroom activities. Classroom activities were also audio-recorded on five or six hand-held or tabletop tape recorders. One hand-held tape recorder was stationed on the teacher's desk and the remainder of the tape recorders were

placed among the groups during small-group activities. PZM microphones were attached to the tabletop tape recorders.

A consciousness-raising questionnaire on feedback in the classroom (see Appendix C) was administered to all participants in the third week of the study. This questionnaire consisted of three questions (in English) that were meant to encourage learners to think about the kind of feedback available in the classroom, the people who can provide feedback, and the amount and utility of the feedback that can be provided (see Appendix C, Tables C.1 and C.2 for a breakdown of answers to the consciousness-raising questionnaire). A questionnaire was also administered to both groups after the treatment phase. The questionnaire for the control group explored learners' opinions on their oral ability and accuracy in English, the effect of being tape-recorded, the importance of speaking accurately in English, and their awareness of the goals of the study. The questionnaire for learners in the treatment group covered much of the same ground as the control group questionnaire, but also explored learners' opinions on the importance of the targeted linguistic feature and their experiences with giving or receiving help. Both questionnaires administered after the treatment phase were in French; this was done in order to bypass any comprehension problems, but especially to encourage detailed responses, since responses in French were explicitly encouraged (see Appendix D for the questionnaire).

Training materials created for the treatment group were used both before and during the treatment period, and will be described in the Training Materials section (3.4.2).

3.4. Procedures for Data Collection

Data collection comprised three phases: the pre-treatment phase (3 weeks), to collect a language sample, target a linguistic feature, and pre-test the students; the treatment phase (9 weeks), to train learners to give oral peer corrective feedback and to allow an opportunity for learners to provide oral peer corrective feedback to each other; and the post-treatment phase (1 week), to post-test the learners and allow them to reflect and make comments on the training and the study in general. Figure 3.1 shows the time-line of the phases of the study.

3.4.1. Pre-Treatment Phase

In the first week of the term, both groups completed the language-learning history questionnaire described above in sections 3.1 and 3.3. These questionnaires were collected by the teacher.

Audio recording and observation of both groups began the second week of the term, the first week of the pre-treatment phase. I introduced myself to each group as a graduate student from Concordia University who would be in the classroom recording their speaking because I was interested in how the learners worked together in groups. The learners were assured that they were not obliged to sign the consent forms, they could withdraw their consent at any time, and that the teacher would not evaluate them based on the content of the recordings.

Control Group		Treatment Group	
Week (Date)	Group Activity	Week (Date)	Group Activity
1 (January 24)	Translation exercise – humourous church bulletins	1 (January 26)	Translation exercise – humourous church bulletins
2 (January 31)	Creating dialogues - influential people	2 (February 2)	Creating dialogues - influential people
3 (February 7) **Pre-test**	Present dialogues	3 (February 9)	Present dialogues
4 (*February 21*) (Class cancelled February 14)	Create job and job advertisements	4 (February 16)	Create job and job advertisements
5 (*February 28*)	Create interview questions; interview candidates	5 (March 2) (Class cancelled February 23)	Create interview questions; interview candidates
6 (*March 14*) (Mid-term break March 7)	Translation exercise - expressions and sentences	6 (March 16) (Midterm break March 9)	Translation exercise - expressions and sentences
7 (*March 21*)	Discuss answers to book questions; discuss opinions on certain topics	7 (March 23)	Discuss answers to book questions; discuss opinions on certain topics
8 (*March 28*)	Discuss answers to book questions; correct errors from compositions	8 (March 30)	Discuss answers to book questions; correct errors from compositions
9 (*April 4*)	Brainstorm society's problems for Utopia project	9 (April 6)	Brainstorm society's problems for Utopia project
10 (*April 11*)	Structure essay points from sample essay	10 (April 12)	Structure essay points from sample essay; Too Many in a Bomb Shelter task
11 (*April 25*) (Class postponed April 18 – Easter holiday)	Lost on the Moon task; Too Many in a Bomb Shelter task	11 (April 27) (April 20 strike by CEGEP students)	Organize points for debate: women are equal to men

12 (*May 2*)	Organize points before debate: women are equal to men	12 (May 4)	Organize points for debate: reading vs. Internet
13 (May 9) **Post-test**	Presentation: Utopia project	13 (May 11)	Presentation: Utopia project

Note – training session dates are italicised

Figure 3.1: *Timeline and List of Activities Recorded during Study*

Both groups were provided with consent forms in French and were given time to read them, sign them, and hand them back (see Appendix F for the consent form).

For both groups, all classroom activities throughout the pre-treatment phases were coded using COLT, Part A (Spada & Fröhlich, 1995). This instrument served as an objective record of the organization, content, mode, and materials of the learning activities. As mentioned above, the teacher was audio-recorded during the class, and tape-recorders were placed on some learners' desks at the beginning of small-group activities, except when those activities were done in the computer lab. The recordings of the pre-treatment phase were transcribed partially or completely over the week following each class. The first and second weeks of the pre-treatment phase were used to determine which errors most of the learners were consistently producing. In order to ensure that the feature chosen was demonstratively problematic for both groups, no decision had been made before the study began on the feature to be targeted.

The teacher and I discussed the learners' errors, and a decision was made to target the pronunciation of *th-*. This was done because many learners in both groups had problems accurately producing this feature and because

providing and taking up feedback for the feature could be relatively simple and brief (see Kormos, 1999, pp. 325-26 for other evidence of ease of correction for phonological errors. Lyster, 1998, and Mackey, Gass, and McDonough ,2000, have also found that corrective feedback on phonological errors were noticed by learners more often than corrective feedback on other error types). It was thought that, for other features which were consistently produced inaccurately (e.g., verbs in the passive, choice of prepositions), most learners would not be able to promptly provide feedback at an acceptable level of accuracy. In addition, many of the types of errors consistently produced were very infrequent in the learners' output. However, the *th-* phoneme was very frequent, allowing many opportunities for OPCF. The problems francophone learners have with the *th-* phonemes in English are documented in sections 2.8.1, 2.8.2, and 2.8.3).

3.4.1.1. Pretest

In the third week of the pre-treatment phase, all learners in both groups presented dialogues they had created the week before between two famous people who had influenced them. The dialogues were presented to the class by pairs of learners. It was decided that these dialogue presentations would be used as the pretest since another presentation was scheduled later in the term and could be used as the posttest. The pretest was recorded with at least two, sometimes three, tape recorders at the front of the class, where the learners were presenting. As they spoke, I evaluated each learner on their pronunciation of words containing *th-* (see section 4.2.1 for a detailed description of the *th-* grading method). Acoustic problems occurred with the real-time evaluation in the

posttest, so in order to be consistent, the real-time evaluation for the pretest was discarded and replaced by evaluation from transcripts of the recordings (see section 3.4.4 below for details).

After all the presentations, the learners were presented with a consciousness-raising questionnaire (see Appendix C) displayed on an overhead projector with questions for them to answer for homework.

3.4.2. Training Materials

During the third week of the pre-treatment phase, a training video for the first week of the treatment phase was created. It showed two sets of three different conversations using three different methods of giving oral peer corrective feedback (see Appendix G for the transcript of the video conversations). Each conversation contained at least one *th-* pronunciation error taken from the transcripts of the previous three weeks. The error was always spoken by the second actor in the conversation in order to give students watching the video time to understand the context of the conversation. Each conversation lasted thirty seconds or less

A different method of oral peer corrective feedback was used for each conversation. In the first conversation, a clarification request was used, in the second, a recast, and in the third, an explicit correction. Lyster and Ranta (1997) provide descriptions of six different types of corrective feedback found in their database. The three methods of corrective feedback used in the training video were based on Lyster and Ranta's categories (see Figure 3.2 for descriptions of these categories). The explicit correction sequence was acted as a rude

interruption by the actor giving feedback. The original error in pronunciation was always repaired in the end by the second actor, whether or not the error had first been repaired by the other actor.

The actors were recruited from a course for ESL academic writing at Concordia University. One actor was an Afghani male; one, a Polish female; and one, a French female (from France). All actors signed consent forms.

The actors sometimes had to be coached on the correct and incorrect pronunciation of *th-*; however, everyone managed to adequately play each part in each conversation at least once. All the actors commented that they were much more aware of their pronunciation after the taping, especially of the pronunciation of *th-*.

Type	Description	Example
Explicit Correction	Explicit provision of the correct form	"You mean 'he went', not 'he go'."
Recast	Accurate reformulation by another speaker of all or part of a speaker's inaccurate utterance	A: "It seem strange." B: "It seems strange, does it?"
Clarification Request	Indication either that utterance has been misunderstood or that utterance is somehow inaccurate and should be reformulated	"Sorry, what was that?"
Metalinguistic Feedback	Comments, information, or questions related to accuracy of utterance, without explicit correction	"No, that's not right."
Elicitation	Eliciting of the accurate form from the speaker through partial repetitions, questions, or requests for reformulation	A: "I listen the TV." B: "What do I do with the TV?"
Repetition	Repetition of isolated inaccurate utterance	A: "She coming soon." B: "She coming?"

Figure 3.2 – *Six Types of Corrective Feedback (following Lyster & Ranta, 1997)*

The video tape was then edited to show two sets of three conversations. In the first conversation a clarification request was given as feedback, in the second, a recast, and in the third, an explicit correction. The episodes in the second set of conversations contained the same three dialogues as the first set, but the actors did not always play the same roles. The video tape contained two sets of the same three conversations so that learners would have the chance to see and hear the conversations twice without having to wait for the tape to be rewound. The excerpts chosen for the final version were selected for adequate volume, appropriate pronunciation (both accurate and inaccurate), little hesitation by the actors, and a fairly natural tone. The video in its entirety lasted 2 minutes and 15 seconds.

3.4.3. Treatment Phase

3.4.3.1. Introducing OPCF with Video

The class for the control group was cancelled because of teacher illness in the fourth week of the study and the first week of the treatment phase, but the class for the treatment group went on as scheduled. At the beginning of the computer lab time for the treatment group, the first oral peer corrective feedback training session began. The consciousness-raising questionnaire was again displayed on an overhead projector. Learners had already handed in their answers to the questions, but a few of the answers they had given were elicited, specifically, who could provide help with English in the classroom, what kind of help, and how often the help could be provided. I explained to the learners that

the teacher could not provide a great amount of help one-on-one because of time constraints and the size of the class, so learners would be trained in helping each other. The learners were told that they would see a video with three conversations where other learners helped each other with speaking in three different ways. (see 3.4.2. section for a description of the video and actors, and Appendix G for transcripts of the conversations). The treatment group was asked to consider three questions while watching the conversations: Is the help helpful? Is it polite? Does it stop the conversation too much? The questions were written on the board and the video was started.

After watching the entire video once on a large-screen TV, the learners in the treatment group were asked to identify the different methods of giving help. A few learners correctly said that one method was to repeat the error in the correct way (recast). Some learners said in another method, the error was repeated. I agreed with the recast answer but disagreed with the second answer, reminding the learners that the actor giving help had said "What?". When asked about the third method, few learners remembered it or were able to describe it. A few learners said that the learner giving help had talked a lot and said "*Th-*, *th-*." The learners were reminded that the second actor had spent a long time telling the first actor about her mistake. I asked the class about the helpfulness of the three methods. Most respondents considered the first and third methods mentioned to be helpful (recast and explicit correction), but thought that the second method mentioned (clarification request) was neither helpful nor polite. I expressed the opinion that the second method was neither polite nor impolite, but was helpful.

There was no consensus among learners about the politeness of the third method mentioned (explicit correction), but most respondents thought that it stopped the conversation too much.

The learners were asked to watch the video again, keeping in mind the questions. The entire video was shown again and learners were asked which error was targeted. Some learners correctly identified the error as improper pronunciation of *th-*. The learners were told that analysis of the tapes from the first two weeks had demonstrated that everyone in the class had some trouble with this feature, so that next week they would start helping each other in pairs. However, to gain practise in giving help before the coming week, I asked the learners to act as if we were in conversation, and to respond to my error by giving help. One sentence transcribed from a tape of the previous week was read out loud, using improper pronunciation of *th-*. One learner eventually responded with one of the methods shown on the video. Other learners complained that they could not hear, so the next sentence was read out more loudly. Eventually, another learner responded using one of the methods on the video. I praised the learner and said that we would try this again next week. When asked if they had questions, one learner asked if the pronunciation of *th-* was all that important to correct. I replied that people could easily be understood if they didn't pronounce *th-* properly, but that the pronunciation of *th-* was a consistent problem for everyone in the class. The training took a little over twenty minutes from start to finish.

Few students actually answered during this training session. This may be because the television was at the front of the computer lab but off to the side because the teacher's console was in the centre. The television was raised on a moveable platform, but some students may have had difficulty seeing and hearing the video because of the cubicle set-up of the computer lab. All the students who responded to questions during the training sat on the side of the class where the television was located.

3.4.3.2. Control Group in Treatment Phase

Learners in the control group simply handed in their consciousness-raising questions as homework the next week, the fifth week of the study. They were not discussed. The control group had mistakenly been given the consciousness-raising questions the week before, and it was decided to allow them to answer, but not to discuss the answers. The class continued in its normal routine; activities were coded using COLT, Part A, and small-group activities were audio-recorded. The group was not told that *th-* pronunciation was being targeted. In the sixth week, the routine and activities of the control group were again coded and recorded as was done the week before. For the next 7 weeks, the classroom activities of the control group were coded and recorded as described above.

3.4.3.3. Selection of Pairs for Recording

The class for the treatment group was cancelled in the fifth week of the study because of teacher illness. Meanwhile, pairs for recording were chosen from both groups by listening to the tapes of learner-formed pairs recorded from

previous weeks and identifying pairs in which one person seemed to be more accurate and one person seemed to have some difficulty with her/his pronunciation of *th-*. During weeks 5 and 6, four pairs were chosen, of which one pair was female-female, one male-male, and two female-male. The pairs had formed themselves in the previous weeks; they had not been formed by the teacher. The same method for selection of pairs was used for the control group.

3.4.3.4. Training in OPCF with Sample Sentences

The class for the treatment group began as usual in the sixth week. After some administrative business, the teacher explained the next activity, writing interview questions. The learners were scheduled to have mock interviews during the class. After the teacher explained the content of the task and how to go about it, the learners again received training in OPCF. I reminded the class about the video they had watched 2 weeks ago and asked what two ways (since I had previously dismissed explicit correction as an appropriate method) they remembered of helping other people. The learners needed to be reminded of the two methods. They were then told of different ways of providing clarification requests, then reminded that they could also say what their partner said, but correctly (recast). The learners were told that we would practise giving help using a few examples from the video transcript. A sample sentence with non-nativelike pronunciation of *th-* was read out, and a learner responded with the correct pronunciation. I asked how the same sentence would be met with a clarification request and a learner responded using a clarification request. Another sentence was read out, and a learner responded with a clarification

request. The non-nativelike pronunciation in the third sentence read out was recast by a learner. The learners were reminded that there were two methods of giving help, and I described the recast and clarification request again. The learners were then asked to remind their partners when creating the interview questions about pronunciation using these two methods.

Learners moved into their groups and the teacher gave a few last instructions. The tape recorders were then placed on the desks of previously-selected pairs, described above. The pairs were often asked in the first few weeks of the treatment phase if they could be recorded, even if they had already signed a consent form agreeing to be recorded.

Each selected pair in the treatment group was recorded while creating interview questions. After they finished creating the questions, the class was divided in two and one half began to interview the other. The pairs now being recorded were usually one member of the original pair and the person they were interviewing or being interviewed by. The tape recorders were stopped and removed at the end of the activity.

The next week was the mid-term break; no classes were held.

The recordings of the small-group activities for the treatment group were transcribed over the following week. The control group was observed and recorded as usual. During the class for the treatment group, the teacher introduced a translation activity, explained it, and then I told that class that we would again be working on helping each other with the pronunciation of *th-*. The learners were praised for showing an increased attention to their pronunciation of

th-, based on evidence from the tapes, but were told that no one had yet helped out someone else with their pronunciation. They were reminded that helping other people with their pronunciation would be like helping themselves because they would start monitoring their own pronunciation as well. The two methods of giving feedback previously discussed were elicited, using a sample sentence taken from the transcript from the class of the week before. The learners then started working on the translation exercise in pairs and the selected pairs were recorded. I attempted to record some of the same pairs as the last class, though not all the learners were present.

3.4.3.5. Sample Sentences

From the fourth week to the seventh week of the study, the sample training sentences that were chosen from the treatment group recordings were complete sentences and demonstrated a typical mispronunciation of *th-* (/ð/ or /θ/) or a mispronunciation in a typical phonetic environment, comprising both non-salient environments ("Someone's asking you on de phone") and more salient environments ("I tink I have more good dreams than nightmares"). Beginning from the eighth week of the study, the sample training sentences were still taken from recordings, but focussed on the words *think* and *they*, for reasons explained below in section 3.4.3.7. No more than four sample sentences were normally presented in a typical training session. In week 12, some *th-* mispronunciations other than *think* and *they* were presented because too few instances of mispronunciations of *think* and *they* could be found in the transcripts.

3.4.3.6. Changes in Teachers and Activities

The rest of the treatment during the treatment phase was administered in a similar fashion. The teacher introduced the small-group activities, I elicited methods of giving oral peer corrective feedback using sample sentences from recordings of the class before, and learners were audio-recorded. From week 5 on, every effort was made to transcribe all the recordings from the treatment group before the next week's class; although all the recordings were listened to, some could not be transcribed before the following class.

Some other changes occurred. In the seventh week of the study, a new teacher took over the class because the first teacher took personal leave. The new teacher used some group activities that focussed less on form and more on discourse, as shown by the coding of the classes with COLT, Part A, and the activities were usually done with groups of three or more instead of pairs. The composition of the groups were almost always self-selected, and the groups chosen to be recorded usually contained at least one member of the original pairs from weeks 5 and 6.

3.4.3.7. Changes in Training – Sample Sentences

The training was also somewhat modified. In the eighth week, sample sentences from the class transcripts that focussed on particular words began to be used. One of the activities following the training in the seventh week was a discussion task where learners had to agree or disagree with a statement and give reasons for their choice. The learners were reminded during the training prior to the activity that they would often be hearing "I think,", and so to be sure to

help with the proper pronunciation if they heard someone say, "I tink,". This statement seemed to focus some learners' attention very well on the phrase "I think/tink," as was evident from the recordings of the discussions.

This led to sentences with the words "think" and they" being pulled from the transcripts and recordings in order to be used for sample sentences in subsequent training sessions. "Think" was chosen because it seemed fairly salient aurally to learners and had a well-defined scope of use (when the speaker was talking about mental activity or belief). "They" was also targeted to provide a word that, by contrast, seemed less salient and harder to pay special attention to because of the almost unlimited scope of use (when the speaker was talking about more than one entity).

3.4.3.8. Changes in Training – Visual Aid

From the eighth week on, learners were also shown the sample sentences on an overhead projector during the training. This was done partly because I had listened to a training session recorded before and had found it difficult to hear my own intentional non-nativelike pronunciation as such, and also was done in an attempt to reach those learners who had a more visual learning style and may have found it difficult up to that point to grasp how the sample sentences were different from nativelike pronunciation. The sentences had not been displayed graphically before in an attempt to train the learners to listen for the difference, but it was decided that some learners might need the information transmitted in another form.

3.4.3.9. Changes in Training – Listener Roles

Also from the eighth week, before beginning the activity, one learner in each group was chosen to be "the listener." As well as participating in the activity, it was the listener's job to listen for non-nativelike pronunciation of *th-* and remind/help the speaker improve the pronunciation. The role of listener was rotated, and everyone in the class took the role of listener at least once over the course. Listeners were not chosen for the pair work in the early part of the course because it was thought that with only one speaker to listen to, each partner would be able to manage listening to both the content of the message and the form. Listeners were not necessarily the only ones to remind speakers about their pronunciation. Some learners scolded the listener from time to time for not reminding someone about her pronunciation, and occasionally the listener was herself reminded about her pronunciation. Some learners seemed to pay no special attention to their periodic role as listener because, whether they were in the role of listener or not, throughout the treatment phase they made no effort to monitor others' pronunciation of *th-*.

The treatment phase lasted 9 weeks.

3.4.4. Post-Treatment Phase

In the next week, on the last day of class, students from both groups presented projects they had been working on for 4 weeks. These presentations were used as the posttests. The projects were created and presented by small groups. Each class was divided in half, with two or three groups in each half. Groups presented two at a time on opposite sides of the classroom, facing

towards the centre. Their audiences sat in front of them, and the teacher and I sat behind the two audiences in the exact centre of the classroom. Each group's presentation was recorded by two tabletop tape recorders with PZM microphones placed on desks in front of the group.

Because I was unable to listen to two presentations simultaneously, I listened to those students who had been recorded extensively throughout the study. Their pronunciation of *th-* was coded for accuracy as described in section 4.2. As noted above, because of the simultaneous presentations, I was not able to hear the selected presentations completely clearly, so the accuracy codings done in the classroom were not used in the final tabulation of accuracy scores; to be consistent, all the presentations, both pretests and posttests, were graded for pronunciation accuracy from the transcripts later made of the audio recordings of the presentations. Some of the audio recordings of the presentations for the posttests were not of sufficiently good quality to be analysed, so the data from these posttests were discarded. In the end, the presentations of 17 participants from the treatment group and 17 from the control group were analysed as posttests, along with the corresponding pretests from the same participants. The pre- and posttest data from the remaining learners were not used in the analyses.

3.4.4.1. Post-Treatment Questionnaire

After the presentations were finished, a post-treatment pencil-and-paper questionnaire was administered in the computer lab (see section 4.10 for a description of results and Appendix D for the questionnaire). Before they completed the questionnaire, learners in the control group were told about the

real objectives of the study and were told that they had been the control group for an experimental treatment administered to another group. The learners in the treatment group were also asked to complete a similar questionnaire. Learners were told that they did not have to write their names. Both groups were given ten minutes to complete the questionnaire.

3.4.4.2. Interview

Following the last class, a short, informal interview was conducted with Syl, a learner from the treatment group who had seemed somewhat uncooperative about giving or receiving oral peer corrective feedback over the course of the study, though he was otherwise an extremely able and proficient student. The interview was conducted to explore his thoughts about the study and his reasons for his lack of enthusiasm for oral peer corrective feedback. He was assured that there was no problem with his behaviour and that it was not an occasion for an apology. The substance of his replies were written down in note form immediately after the interview, and is described in section 4.5.

Chapter 4 - Results

4.1. Overview

This chapter comprises five main parts. The first part is a description of the analyses used on the data collected. The results for each research question are then described in the next three parts. The final part contains results not directly within the scope of the research questions.

4.2. Analyses

4.2.1. Subtractive Marking Method

Learners' pronunciation of words containing *th-* was evaluated from the transcripts of recordings of the pre- and posttests, for the reasons explained in section 3.4.4. One of the methods used to evaluate the pretests and posttests was the subtractive marking method (Underhill, 1987, p. 102-103).

Pronunciation of a word containing *th-* was graded as Ø, -1, or -2. Nativelike pronunciation of a word containing *th-* ([θ] or [ð]) was graded as Ø, with no points subtracted. Some words containing *th-* were pronounced with the tip of the tongue pushed up between the back of the front teeth and the alveolar ridge, with very little or none of the tongue between the upper and lower teeth. The air flow was not continuous, but midway between a stop and a fricative. This sound was rendered orthographically in the transcripts as *dth* or *tth*, and was graded as -1 (see Gatbonton, 1978, pp. 335 and 339 for other evidence of this phoneme in the speech of francophone learners of English). Pronunciation of a *th-* word with a /d/ or /t/, rendered orthographically in the transcripts as *d* or *t*, was graded as -2.

Accordingly, a learner whose tongue was between their teeth would produce, "I think it's all right," and would receive a mark of Ø for that utterance. A learner whose tongue was at the back of their front teeth would produce, "I tthink it's all right," and would receive a mark of -1. A learner whose tongue was all the way back at the alveolar ridge would produce, "I tink it's all right," and would receive a mark of -2. See Figures 4.1 , 4.2, and 4.3 for diagrams of the tongue positions for these three sounds.

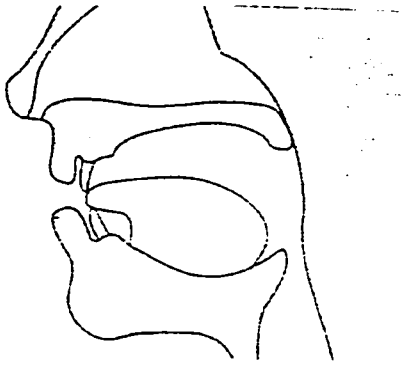

Figure 4.1 – *Position of the Tongue in the Production of th-*

From Avery & Ehrlich (1992)

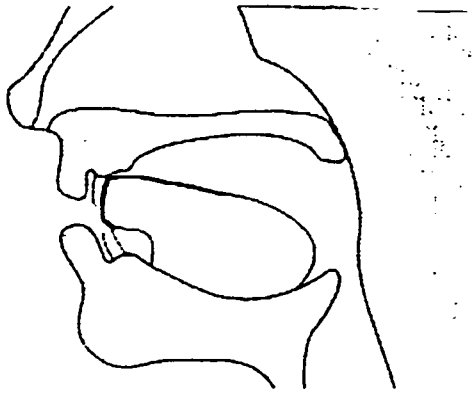

Figure 4.2 – *Position of the Tongue in the Production of tth-* and *dth-*
Adapted from Avery & Ehrlich (1992)

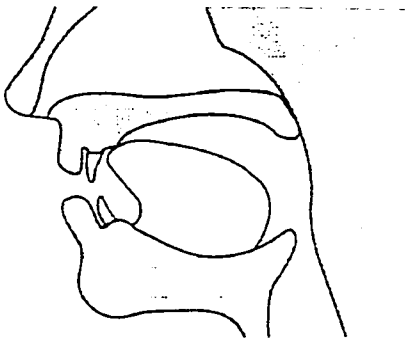

Figure 4.3 – *Position of the Tongue in the Production of d-* and *t-*
From Avery & Ehrlich (1992)

4.2.2. Accuracy Scores

The overall accuracy scores for the pre- and posttests of each student were derived by dividing the number of instances of nativelike pronunciation of *th-* by the number of obligatory contexts for the pronunciation of *th-*. For instance,

if a learner's transcript for the pretest showed 42 obligatory contexts for *th-*, and the learner used nativelike pronunciation of *th-* 9 times, the learner's overall accuracy score for the pretest would be 9/42, or .21. However, environments where an initial *th-* assimilated to the final consonant in the word before it (e.g. Is zat so?) were not labelled as obligatory contexts because this type of assimilation is common in the speech of native speakers. A more finely-graded analysis was also done to determine the relative percentages of the two types of error (*dth/tth* or *d/t*) out of the total number of errors made.

4.2.3. Inter-Rater Reliability

The principal rater for the analysis of learners' pronunciation was the researcher, but another rater later analysed approximately 15% of the pretest and posttests of both the treatment and control group. This second rater was a Master's graduate in linguistics with training and experience in analysing and rating the pronunciation of second- and third-language learners. The rater received approximately one hour of initial training using transcripts of pretests and posttests not used in the reliability sample. The transcripts used in the reliability sample were complete except for blanks at each obligatory context for *th-*. The second rater could choose to fill in the blank with *th-*, *dth/tth*, or *d/t*. After an initial rating by the second rater of the sample 15%, the rating was checked and some of the discrepancies between the two raters' samples were highlighted. One pretest and one posttest were rated again by the second rater while discussing the rating with me. The remaining pretests and posttests were then rated independently by the second rater.

Each of the three possible choices for the raters (*th-*, *dth/tth*, and *d/t*) had rater correlations calculated separately of the other two choices. The intraclass coefficient for *th-* was r = .97. For *dth/tth*, r = .74, and for *d/t*, r = .88. The inter-rater reliability was thus found to be extremely high for the rating of *th-*, high for the rating of *d/t*, and marginal (Hatch & Lazaraton, 1991, p. 534) for the rating of *dth/tth*.

4.2.4. Gradual Diffusion Model

Two learners each from the control and treatment groups had been frequently recorded over the course of the study. It was decided, in addition to doing the other analyses, to analyse their production of *th-* for accuracy related to phonetic environment. In this way, the gradual diffusion model of phonetic variability (Gatbonton, 1978) could be tested.

4.3. Research Question 1

Can learners be trained to use oral peer corrective feedback, and to use it appropriately, in small-group communicative activities in the classroom?

4.3.1. Dependent Variable

Use and appropriateness of oral peer corrective feedback.

The use of oral peer corrective feedback was measured by the amount of clarification requests, recasts, or explicit corrections provided by learners on the pronunciation of *th-* (see section 3.4.2. for descriptions of these feedback moves). The amount of OPCF on other pronunciation was also calculated as a measure of each group's level of attention to pronunciation in general. It was decided to open up the scope of the answer to question 1 in the description of

results because there was so much evidence of learners in the treatment group being aware of the pronunciation of *th-*, although some may not have provided oral peer corrective feedback. Therefore, instances of self-repair and other forms of awareness of pronunciation of *th-* were calculated to measure attention to *th-* pronunciation which was not in the form of OPCF. The appropriateness of OPCF on *th-* was measured by whether the feedback followed inaccurate pronunciation of *th-*.

4.3.2. Use and Appropriateness of Oral Peer Corrective Feedback – Treatment Group

Table 4.1 shows the occurrences of oral peer corrective feedback on *th-* in the treatment group. The table also shows instances where learners demonstrated that they were aware of *th-* pronunciation while they were speaking and displayed this by spontaneously attempting self-repair (whether successful or unsuccessful) or by emphasizing *th-* pronunciation in a word or words. The table also shows instances where learners provided OPCF on aspects of pronunciation other than *th-*. This measurement demonstrates the extent to which OPCF on pronunciation was generally provided and was meant as a measure of the degree to which learners paid attention to pronunciation accuracy in general.

As Table 4.1 shows, 22 episodes of oral peer corrective feedback on *th-* took place; 7 or 8 of those episodes were appropriate (in response to inaccurate pronunciation of *th-*), while the rest of the OPCF episodes were inappropriate (following accurate pronunciation of *th-*). In order to demonstrate the nature of the feedback and its appropriateness, sections 4.3.4 to 4.3.15 contain excerpts

Table 4.1 – *Treatment Group – Evidence of Oral Peer Corrective Feedback*

Week of Study	Episodes of Oral Peer Corrective Feedback *th-*	Episodes of Appropriate OPCF	Episodes of Awareness of *th-* Pronunciation	Episodes of OPCF (other pronunciation)
1	0	0	0	0
2	0	0	7	1
3 (pre-test)	0	0	4	0
4	0	0	3	0
5	1	1	9	0
6	2	1	1	0
7	4	3	3	1
8	3	0	11	0
9	7	2	10	1
10	5	1?*	9	0
11	0	0	2	0
12	0	0	1	0
13(post-test)	0	0	6	0
Total	**22**	**7 (8?)***	**66**	**2**

* See excerpt 46

showing instances of oral peer corrective feedback and evidence of awareness in the pronunciation of *th-*.

4.3.3. Typography Conventions

Characters are bolded to show where oral peer corrective feedback has occurred, and capitalized to show emphasis through volume or length of a *th-* sound. Most episodes related to pronunciation in the early weeks of the study were self-repairs of the pronunciation of *th-*. Underlined characters in the

utterances show the location of the self-repair. Recall that learners had not received training before the end of week 4, so these early instances of self-repair had not been prompted by any guidance by the researcher. Dashes following words or parts of words indicate interruption or incompletion.

4.3.4. Week 2

Of the seven instances of *th-* self-repair which were recorded in week 2, five of those episodes originated from one pair, and four of the five from one person in the pair. One other spontaneous instance of self-repair of another aspect of pronunciation was recorded.

1. (creating dialogue)

Fr: Eighteen-sixty-five to nineteen-
EmS: Cause he start in the nineteen and I was in twenty, twentiETH[2].
Fr: Nineteen twentieth?
EmS: I wa- you were in the nineteen century.

2. (creating dialogue)

Fr: O.K., um, the millenium. The millenium. (unintelligible) So...maybe it's a, a meeting with famous people who have to fought. Fought for deir, their, uh, their vision.

3. (looking for new words to put in a dialogue)

MarL: No, but I don't understand de, the definition, so... I'm cannot take it.

4. (looking for new words to put in a dialogue)

Es: Oh, and we'll have to write the words on de black- on the blackboard.
MarL: Yeah.

5. (discussing grades)

Es: Well, I- it, it decreased, though. I had tree, I had tthirty-three point two, but, like, I wasn't really concentrate last session, so it decreased a little bit.

6. (discussing future prospects)

Es: So I don't wanna, like, go back into de kind of atmosphere....Maybe my uncle is gonna hire me in tree- in three years, I don't know!
MarL: Yeah.

7. (discussing future prospects)

MarL: I wanna go there.
Es: HEC?
MarL: Yeah.
Es: But I talked to de, the woman, uh, (French)
MarL: Yeah.

8. (creating dialogue)

El: Yeah. So I could just...look at you, like, O.K. O.K., what's your starry? Your story?

4.3.5. Week 3 (pre-test)

Learners role-played dialogues of famous people in front of the class in week 3, so there was no opportunity for oral peer corrective feedback except from their partners; no partners provided feedback to each other. However, learners repaired or made an attempt to repair their own pronunciation of *th-* several times. As well as being used for the pretest, these role plays were evaluated by the teacher, so the learners almost certainly were paying more attention to the accuracy of their speech than usual.

9. (roleplaying dialogue)

EmD: Dthe kids were doing de same thing at dthe, on their toys during the recreation.

10. (roleplaying dialogue)

Ger: Dthat's why your- that's why you were arrested tirty time.

11. (roleplaying dialogue)

Fa: I'm one of de greatest- I'm one of the greates' people on this eart'

12. (roleplaying dialogue)

SA: They were only deir husband's shadows, and dey- dthey had to do and say...

4.3.6. Week 4

In week 4, students received their first training session in oral peer corrective feedback near the end of class time and so did not have the opportunity to engage in an activity where they could practise OPCF after the training. However, before the training session one pair of students self-repaired non-nativelike pronunciation of *th-* tokens in 3 separate instances.

13. (creating job ad)

Fr: For de, the kids, de...

14. (creating job ad)

EmS: (unintelligible) de, uh, de well, the bon fonctionnement, the well, uh...

15.. (creating job ad)

EmS: We have to find dthe, include the complete address.

4.3.7. Week 5

Week 5 was the first week where students received both a training session in oral peer corrective feedback and the opportunity to use it. The one instance of

OPCF in Week 5 appropriately targeted non-nativelike pronunciation, but the mis-pronunciation of *th-* was seemingly done intentionally, since it followed nativelike pronunciation of the same word.

16. (making interview questions)

EmS: What kind of job would they, uh...
Fr: Were THey. Zey.
EmS: **What? They**....You have, like, facility to, uh, control situation, critical situation? You know what I mean?
Fr: Not really.

Numerous episodes demonstrated in the fifth week that students were thinking about *th-* pronunciation.

17. (thinking of interview questions)

St: We need a girl. Now.
El: We don't THink there is a girl.
St: Do I look like (unintelligible)?
El: Who were you, John Grisham?
St: THink, THink...THink about it.
El: (laughter) Um...
St: Oh, maybe, yeah. Oh, yeah. Yeah, (unintelligible) scrip'. Yeah, it was typed. Typed up.

18. (interviewing a job applicant)

Teacher: Same questions, so you're interviewing her and (unintelligible)
Me: That's a great CV. THat's!
El: (unintelligible) interview.

19. (making interview questions)

EmS: Let's say they're like, like, just, give an example, let's say dat dere's a fight and what do you do? (unintelligible) Or let's say dat, you know, something's happening, what will you do to (unintelligible)...What do you do? If DERE is fighting going on. If THere is a fight?
Fr: That's all right?
EmS: I'm just (unintelligible) Je comprends pas... Maybe, like, ask what she wants to do, like, as a future job?

4.3.8. Week 6

Two episodes of oral peer corrective feedback occurred in the same group. This group (Me, El, and Ni) would provide the highest tally out of all the groups of transcribed oral peer corrective feedback, so it will be henceforth known as the "supergroup". Interestingly, the feedback inappropriately provided in excerpt 21 for "the" influenced the original speaker to change to a more nativelike variant of "I think"".

20. (translating sentences and expressions from French into English)

Ni: I heard dat Canadien won yesterday night.
El: Yeah.
Me: Cause it's de game.
El: Yeah. **THe**.
Ni: I heard de Canadiens won yesterday.

21. (translating sentences and expressions from French into English)

Me: He's prepared for de worst. He's (unintelligible) worst.
El: Or dthe worst.
Ni: He's expecting the worst. I tink it was good.
Me: **THe**
Ni: I tthink.
El: I THink.
Ni: He's expecting the worst.
Me: *He*'s especting de worst.
El: Yeah, I think.

One episode in the same group contained a spontaneous self-repair of a *th*-token to a nativelike pronunciation

22. (translating sentences and expressions from French into English)

Ni: Den, <u>dthey</u> got married last summer. It's last summer <u>they</u> got married.

4.3.9. Week 7

Four episodes of oral peer corrective feedback occurred; 3 were appropriate. Three of them were rather public episodes, as they happened either between groups or in front of the whole class.

23. (discussing answers to questions about a novel)

Xa: Uh, psychology, uh, see de concepts, uh, of, uh, conditioning-
Syl: **See what**? (laughing)
Xa: The. The conthepts, of, uh, conditioning, and, so, uh...
Syl: (laughing) (French)
Xa: (laughs) Yeah. O.K., uh...
EmD: O.K.
Xa: Uh, I just don't remember what (unintelligible)
EmD: Conditioning.

24. (discussing opinions on various topics) Syl is from one group; SA, Jos, and Car are in another group. They have finished talking and are listening to Syl.

Syl: I tink nowadays, uh...
SA: (French)
Syl: Hein?
SA: (French) Sorry.
T: Only English in the classroom
Syl: O.K., ça va?
SA: Sorry.
Syl: O.K., thank you. And stopped interrupting, please, unh? (jokingly)
Ca: No, but we have to correct for de "de."
SA: THE.
Syl: When I get married, I tink I (unintelligible)-
SA: **I what?**
Jo: **I, I what?** I THink! (laughter)
Syl: I tink! I tink.
SA: I THink! THink. (laughter)
Syl: And nowadays society, uh, most of the couple dat got married, almost 'alf of de couples dat get married, uh, get divorced.

*Note: Later in conversation, Syl uses "I tink" three times.

25. (sharing opinions on the topics; whole class)

Teacher: Sixteen, uh, life in North America is very easy. Wanna tell us what you feel?
Syl: What do you tthink about dat?
Teacher: What's your topic-
SA: **What do I what?** (laughter)
Teacher: Your topic sentence, it'll be right away what you feel. So what do you feel?
SA: Uh, I think dat life-
Syl: **You what?** (laughter)
SA: I said it correctly.
Syl: No.
SA: Yeah....I thing dat lo- life in North America is easier den everywhere else in de world, in THe world.
Teacher: Good, good, great. See, it's working, it's working.
SA: Not for everybody. I thing dat some people are, life is harder for some people.

*Note: SA's comment "Not for everybody" in the last line likely referred to the content of her answer, as she had already said in her group that life in North America is not easy for some people.

Not only did students provide oral peer corrective feedback on the pronunciation of *th-* in Week 7, but a student also gave oral peer corrective feedback on another pronunciation problem.

26. (discussing answers to questions about a novel)

Syl: Good, uh, good, good discussion.
Xa: We all partisate, participate.
Son: **What?**
Xa: We all, uh, participate.
Son: Yeah.
Xa: Participated.
Son: (unintelligible) (French)
Xa: (unintelligible)
EmD: Yeah.
Son: (into the mike) T-h- the. What? (laughter)

4.3.10. Week 8

Groups were asked for the first time to choose someone in their group with the specific responsibility of listening for the pronunciation of *th-*. The names of the speakers who were chosen as listeners are bolded and italicized. Listeners do not appear in many of the excerpts presented because they were not saying anything at the time. The sample sentences for the training session were also shown on the overhead for the first time, in addition to being read out loud. Three episodes of oral peer corrective feedback and 11episodes showing awareness of *th-* pronunciation occurred. The 3 utterances prompting oral peer corrective feedback already contained accurate pronunciation of *th-*, as illustrated below.

27. (finding errors in samples from compositions) Son and Syl are in different groups.

Son: I thing that a twenty-year-old person is suppost. Suppose. Suppose-
Syl: (overhearing) **You what?**
Son: I think!
Syl: Right.
(five second pause)
Son: Dthan an eighteen-year-old .

28. (discussing answers to questions on a novel)

Syl: Maybe it's at (unintelligible)
EmS: Yeah. I think it's at (unintelligible) end. I THink it's at de end.
Syl: **You what?**
EmS: I THink.
Ni: Oh brave new word, oh brave new word-

29. (Finding errors in samples from compositions)

MarL: I think (unintelligible)
Fr: No-
Es: I think you (unintelligible)-
Fr: **I THink.**
(3 second pause)
MarL: I THink (unintelligible) "de" (unintelligible)
Es: Influence, no e-d-

Quite a few instances where students showed an awareness of *th-* pronunciation were preceded by someone, either the student themselves or someone else, saying a word containing a *th-* phoneme.

30. (finding errors in samples from compositions)

Son: I thing dat twenty-one-year-old- I think that a twenty-one-year-old person is supposed to be more responsible and mature than an eighteen-year-old.

31. (finding errors in samples from compositions)

Syl: I thing dis law would also influence people between seventeen and twenty years old.
Ni: What do you THink?

32. (finding errors in samples from compositions)

Es: Twenty-year-old.
MarL: I think, uh, it's no s-
Es: Yeah. Yeah.
MarL: I tthink. THat. (unintelligible)

4.3.11. Week 9

Listeners for each group were chosen by me before the activity in Week 9 because I thought that some groups had not taken responsibility for the role very seriously when they had been asked to choose someone the week before. The abbreviated names of learners chosen as listeners are italicised and bolded in

the excerpts. Six occurrences of oral peer corrective feedback on *th-* and 9 demonstrations of awareness of *th-* pronunciation were found in the transcripts. The supergroup burst out with OPCF episodes in this week, accounting for three of the six occurrences in the class. As shown below, all of the OPCF episodes in this group followed an utterance where *th-* was pronounced accurately.

33. (just before brainstorming problems in society for a utopia project)

El: I am dthe speaker. You are...THE-
Ni: (unintelligible) last class
El: Next class.
Ni: Yeah, last class.
El: Last...
Mel: T'was (unintelligible)
El: I'm sorry about that.
Ni: **About what?**
Me: **About what?**
Ni: You're supposed to be de one listening!
Me: She's listening- she's listening to her hown mistakes.
El: About THat. THat.
Me: THat.
Ni: THat. (jollily)
Me: Do you have a (unintelligible)...No, I have three of them.
Ni: Oh, I have-
Me: I think it's enough.
Ni: I think!
Me: I THink it's (unintelligible)
El: **You what?**
Ni: I tthink.
Me: O.K., we create (unintelligible)...First tthing-...I have three.
El: THree. But you're the second.
Ni: THree is my colour.
Me: (unintelligible) I have enough.
El: Must be a puny-looking one.
Me: I like your shoes. They're neat.
Ni: Thank you.
Me: THank you.
El: O.K., so-
Ni: I'm trying to THink about it.
El: **Trying to what?**
Ni: But I don't see the difference-

El: Page?

34. (brainstorming problems)

Me: I thought that product would be funny. Like, uh, a society with, uh, only (unintelligible) something.
Ni: Could you- **what**? You didn't say what.
(three second pause)
El: No, I'm not listening.
Me: Some THing!

The abundance of awareness of *th-* pronunciation in this group once had a confusing effect when the listener was paying particular attention to her own pronunciation and the other two members were simply listening for the meaning.

35. (brainstorming problems)

El: There's a lot of problems.
Me: O.K., so we're going-
Ni: We could start-
El: TH-
Me: The, the what? (inquiringly)
Ni: The what? (puzzled)
El: Let's. Start. With. Justice. Justice.
Me: We're having problems in our justice?

The other two members were often more attuned than the listener to the pronunciation of *th-*, as demonstrated above, and sometimes chided the listener for being inattentive.

36. (brainstorming problems)

Me: (unintelligible) perfect but we have to tink about it. You **what**? You **think** about it! I'm correcting myself. You're not doing your job.
El: Yeah, well...
Me: Well, what?
Ni: She didn't choozis job.
El: Next time, you'll do it.

Me: I'm the secretary.

On paper, the students in this group might sound annoyed or frustrated. However, their tone on the tape was often teasing, playful, or, at its most negative, forbearing. The feedback occurring in this group was not a weighty, serious matter, but almost seemed to be a game. The other group to engage in oral peer corrective feedback also seemed to treat it as a game, but as a game of tug-of-war, where each side dug in their heels and tried not to move from their positions.

37. (brainstorming problems)

Syl: But dat doesn't (French)
SA: **Dat, dat what**? (laughing)
Syl: Dat doesn't.
SA: **That what**? (laughing).
Syl: Doesn't.
SA: O.K., problem-
Syl: Ça commence par un "d", "doesn't". ("Doesn't" starts with "d".)
SA: Non, t'as dit "dat". (No, you said "dat".)
Syl: Ah.
SA: THat doesn't.
Syl: (picks up microphone and puts close to mouth) DAT doesn't.
SA: O.K. So.
Syl: (Drily) Thank you for correcting me.
SA: Oh, it's my pleasure...What do you, what problem would you like to solve in, uh, the justice-

38. (brainstorming problems)

SA: Something else?
Syl: I'll tink about it.
SA: **You'll what**?
Syl: TSeh-
SA: (Laughing) Think about it. O.K.. JonaTHan.
Syl: JoneTin.
SA: Jonathan.
Syl: Jonadin.
SA: What would you like to work on?

This tug-of-war soon went in the other direction, with Syl taking his opportunity even though the utterance preceding the feedback was accurate.

39. (brainstorming problems)

SA: And then...
Syl: **What?**
SA: And then...
Syl: **What?**
SA: And then.. (exchange continued 4 more times, laughing)

Syl did give oral peer corrective feedback on another aspect of non-nativelike pronunciation (probably intentional on SA's part since she had never before pronounced the word in this way.).

40. (free conversation)

SA: It's just a joke. Yeah, it's t[R]ue (trilled r).
Syl: It's t[R]rue? (trilled r)
SA: It's t[R]ue. (trilled r)
Syl: It's t[R]ue? (trilled r) **It's what?**
SA: T[R]ue. (trilled r)
Syl: So, you go I- you go dere dressed as a pitoune?

These same two students were earlier featured in excerpts of public or semi-public occurrences of oral peer corrective feedback (excerpts 24 and 25) and sometimes seemed to be playing a game of one-upmanship with each other using OPCF as the chosen instrument. Again, the words on the page do not convey the tone of the conversations very well. There was likely some measure of irritation on the part of Syl, but the exchanges were often accompanied by laughter and sounded like a contest of wills between friends.

4.3.12. Week 10

All of the occurrences of oral peer corrective feedback on *th-* and most of the instances showing awareness of *th-* pronunciation took place in the supergroup. In total, 5 occurrences of *th-* OPCF and 9 demonstrations of awareness of *th-* pronunciation were found in the transcripts. As before, all of the feedback was provided following utterances where the pronunciation was accurate, except perhaps for excerpt 46, where some of the utterance preceding the feedback is unintelligible. Some excerpts of oral peer corrective feedback are shown below.

41. (deciding on who to keep in a bomb shelter)

Ger: De farmer, do we need the farmer, or...?

42. (deciding who to keep in a bomb shelter)

Van: If de farmer make grow things. THings. Who will bake dem?

43. (reading an essay aloud in turn, sentence by sentence)

Ni: In an urban area, it might also be expensive to park the car.
Me: **What**?
Ni: The car. DTHE car, DTHE car.
Me: It's err. Second, owning a car can cause worry and stress.
Ni: It is not safe to drive in rush-hour traffic or drive around and around looking for a parking space.
Me: If you leave your car in the street, it might be stolen.
Ni: THat is something else to worry about.
Me: Finally, everyone wants to think about-

44. (making outline of essay)

El: Very thank you.
Ni: **Very what**?
El: Very thank you.
Ni: **What**?
El: THank you.
Ni: Thank you.

El: Thank you.
Ni: Thank you....THHHank you (exaggerates tongue between teeth).
El: (makes sound of disgust).
Ni: (French, laughing) O.K., so...
El: Thezis statement.
Me: **THezis**.
Ni: (unintelligible) introduction. Owning a car.

45. (free conversation)

St: Mrs. Tomato.
Me: (unintelligible) not funny. That's not funny.
St: **What? What?**
Me: THAT'S not funny (laughs)
Ni: It's like, this was the idea, like-

At times, the attention to pronunciation in the group was not only evident, but explicit.

46. (free conversation)

El: If we don't skip (unintelligible)
Me: **Dthe what?**
El: The, the-the the-the.
Me: The. Please say THE.
El: THe.
Me: There (unintelligible)

Another group also showed evidence of awareness of *th-* pronunciation.

47. (making outline of essay)

Teacher: You're working just together?
EmS: Yeah.
Fr: Yeah. Because dey are, uh, they want to, to work, uh...
EmS: Together.
Fr: Togedther.

48. (making outline of essay)

Fr: Two tousand.
EmS: More den this. Two thousand and-
Fr: Three?
EmS: THree. Around three, hein? Uh, c-. Preparation. Prepare and, um, preparation?

4.3.13. Week 11

No occurrence of oral peer corrective feedback for *th-* pronunciation was found in this week's transcripts and only one episode was found showing awareness of *th-* pronunciation. This episode was prompted by a comment by the teacher which was taken up by a member of the group. Because of equipment failure, two groups, including the supergroup, did not have their discussions recorded.

49. (getting arguments ready for a debate)

Teacher: One of the reasons why I did this activity is so you can, uh, speak English.
Syl: All right.
SA: Ahhh. You're supposed to watch over us, eh?
Fr: Yeah, I'm supposed to watch about the TH- TH- (had not said anything about *th-* up to this point)
SA: TH- TH- TH- (laughing)
Fr: TH- TH-
SA: O.K., and, something else? Where woman are, uh, no, there's not enough things here.

4.3.14. Week 12

Equipment failed again in this week and two groups were not recorded, including the supergoup, the group that had thus far provided most of the oral peer corrective feedback. Only 1 instance demonstrating awareness of *th-* pronunciation was recorded.

50. (starting a debate)

Es: Go ahead.
Ma: So, um, I THink...
Syl: Yes.
Ma: Businesses have invested, uh, billions in the Internet. That's why, uh, Internet will change our lives in every aspect.

One group did provide feedback to each other, but all of it was directed towards speaking in French and most of the feedback was directed at one member in particular, who appears in the first excerpt below.

51. (getting arguments ready for a debate)

Xa: Unh? Bon...
Ma: **What?**
Xa: 'Oo? (Who)
Ma: **Who what?**
Xa: 'Oo? (laughs) (French)
Ma: **What?**
Xa: (unintelligible)
Ma: Unh? (Ma does this two more times in response to Xa).

52. (getting arguments ready for debate)

EmD: (French)
Ma: In English, please!
EmD: But, uh....

It seems laudable to remind people to speak in English, but on the tape, this feedback had a much more mocking and badgering tone than the OPCF that had occurred before. The listener chosen in the group for Week 12 was the learner who had responded most in the training sessions in the second and third weeks of the treatment phase, and had actually been later asked to let other learners respond to the sample sentences during the training sessions. The nagging tone

of the feedback in Week 12 was even adopted by Xa, who later responded What? to someone else speaking French.

4.3.15. Week 13

The last week of regular classes included the activity used as the posttest. Groups of students presented their vision of a utopian society to half the class, with two groups presenting simultaneously. Again, there was no possibility of oral peer corrective feedback because each person in the group took her or his turn to present an aspect of the society. A few more episodes of *th-* awareness took place than in the pretest, but there were still only 7 instances when students self-repaired their own pronunciation of *th-*. A few of these episodes are excerpted below.

53. (presenting utopian society)

Fr: Plant more trees and flowers in de, in the, uh, society

54. (presenting utopian society)

Jon: He will tell you dat, that was used to be rush hours...

55. (presenting utopian society)

El: Width the of- with the one offered in dthe other society.

4.3.16 Summary of Use and Appropriateness of OPCF – Treatment Group

Of the 22 episodes of oral peer corrective feedback on *th-* pronunciation found in the transcripts, 7 (perhaps 8) of them were appropriately targeted at non-nativelike *th-* pronunciation, and 13 were inappropriately targeted at nativelike pronunciation of *th-*. One of the inappropriately targeted episodes

could technically be said to be appropriate. Syl's feedback on SA's "I think dat" in Excerpt 25 did flag a phrase that was pronounced in a non-nativelike way, but it was likely that both he and SA were targeting "I think", since that had been previously targeted in feedback from the same groups in the same class and had also been stressed by me in the training sessions. The majority of the appropriate feedback was provided in the first five weeks of the training phase (5 out of 10 feedback episodes). Of the 10 episodes of *th-* oral peer corrective feedback that the supergroup was responsible for, all but 1 (perhaps 2) were inappropriate. Two of the ten episodes in this group were immediately preceded by utterances in which the pronunciation of *th-* was emphasized by the speaker. Of the total 9 episodes of OPCF supplied by SA and Syl (not all with each other), SA provided appropriate feedback 4 times and never provided inappropriate feedback, and Syl provided appropriate feedback once and inappropriate feedback 4 times. All of SA's OPCF episodes followed utterances where no emphasis was put on the pronunciation of *th-*. One of Syl's OPCF episodes followed an emphasized (and accurate) pronunciation of *th-*, but the other 4 episodes followed normally stressed utterances.

Of the 22 episodes of oral peer corrective feedback, females gave feedback 15 times, and males, 7 times. The supergroup, all of whom were female, provided feedback 10 times, and SA, 4 times. For the males, Syl contributed feedback for all but two of the seven OPCF episodes. There were 14 females and 8 males in the treatment group.

4.3.17. Use of Oral Peer Corrective Feedback – Control Group

The control group was also tape-recorded during communicative activities. This was done in order to have some basis of comparison for the level of OPCF and awareness of *th-* pronunciation going on in the respective groups. Not surprisingly, no OPCF on *th-* was provided in the control group, but many episodes occurred which showed awareness of *th-* pronunciation (see Table 4.2). All of these episodes (57 in total) were attempts (successful or unsuccessful) at self-repair. Although no OPCF on *th-* took place, 12 episodes of OPCF on other pronunciation occurred.

Table 4.2. – *Control Group – Evidence of Oral Peer Corrective Feedback*

Week of Study	Episode of Oral Peer Corrective Feedback *th-*	Episodes Appro-priate OPCF	Episode of Awareness of *th-* Pronunciation	Episode of Oral Peer Corrective Feedback (other pronunciation)
1	0	0	0	0
2	0	0	7	3
3 (pretest)	0	0	4	0
4	0	0	3	2
5	0	0	3	1
6	0	0	0	0
7	0	0	13	1
8	0	0	4	1
9	0	0	12	4
10	0	0	1	0
11	0	0	1	0
12	0	0	0	0
13(posttest)	0	0	9	0
Total	**0**	**0**	**57**	**12**

4.3.18. Examples of Awareness of *th-* Pronunciation

As mentioned above, self-repair episodes comprised all the instances when learners showed awareness of pronunciation of *th-*. Some representative excerpts are shown below.

56. (creating dialogue)

Vla: Yeah, dat's it. So now we talking English, we could slip some French (unintelligible) into our discussion.
Jus: Yeah.
Vla: So dat's why I spoke French, like, sometimes. That's why. Dat de key.

57. (making interview questions)

Els: Uh, no, no, how can you, how would you, how do you think you could contribute to de, uh, the growth of the company?

58. (discussing answers to questions about a novel)

Ol: And I think, uh, I think dat, that we can, uh, can say that.

59. (brainstorming society's problems)

Ol: And they're ugly, and dey don't, they don't dress properly.

4.3.19. Oral Peer Corrective Feedback on Other Pronunciation

Unlike the treatment group, the control group engaged in numerous episodes of OPCF on pronunciation other than *th-*. Three learners whose pronunciation was more native-like than the majority of the other students, Ol, Seb, and Za, provided the majority of the OPCF. Some representative excerpts of OPCF on other pronunciation are shown below. The utterances in which

OPCF was provided have been bolded. Capitalization of phonemes denotes primary stress or emphasis.

60. (creating dialogue)

And: In vain (French)
Ol: **Vienna or Vienne?**
And: Vienne

61. (creating dialogue)

Fi: I honestly believe that your biggest was when you /peɪt/- /pætri/-
Ma: **/peɪtrieɪtəd/.**
Fi: / peɪtrieɪtəd/ de Canadian constitution back in, in 1982.

62. (creating job advertisement)

V: I like n/æ/chos.
Seb: **Na/æ/chos or n/a/chos?**
V: N/æ/chos. Y est n/æ/chos en bas (There are n/æ/chos downstairs).

63. (discussing answers to book questions)

Za: School, too (unintelligible)
Gen: Yeah, yeah.
Ann: /ɛnvɪRΛNmənt/.
Za: **/ɛnvAYrənmənt/.**
Gen: /ɛnvAYrənmənt/.
Za: /ɛnvAYrənmənt/.
Ann: /ɛnvAYrənmənt/.
Za: /ɛnvAYrənmənt/.
Ann: Sorry.
Za: No, no, I, I'm just telling you.

64. (discussing society's problems)

Ja: So, uh, ni-, uh, de coolture-
Ol: **What?**
Ja; De culture? Culture.
Ol: O.K., you're on de culture side.

4.3.20. Summary of Use of OPCF – Control Group

Although many more episodes of OPCF of other pronunciation occurred in the control group than in the treatment group, only 3 male learners out of the 17 female and 9 male learners in the control group provided OPCF on other pronunciation more than once. The treatment group showed more occurrences of awareness of *th-* pronunciation (66); however, the episodes in the treatment group included not only self-repair, but also instances where the pronunciation of *th-* was emphasized. The control group produced 57 episodes of awareness of *th-* pronunciation only through self-repair, but the group had received no focussed training on the pronunciation of *th-*.

4.4. Research Question 2

How often does the use of oral peer corrective feedback divert the topic of conversation and/or interrupt communicative flow?

4.4.1. Dependent Variables

Diversion of topic was measured by whether the conversation had returned to its original topic 2 turns after the feedback was provided. The smoothness of communicative flow during episodes in which oral peer corrective feedback was used was also rated impressionistically for interruptions and/or hesitations.

4.4.2. Diversion of Topic – Treatment Group

Thirteen of the twenty-two conversations where OPCF for *th-* took place were diverted (see Table 4.3). Some of these diversions were because the correctors were repeating their feedback or recasting the offending word (e.g, excerpt 46),

the original speaker had forgotten what he was saying (e.g., excerpt 23), or, as was especially the case with Syl and SA, the speakers were arguing about pronunciation. Syl and SA together were involved in 5 of the diverted conversations, and the supergroup was also involved in 5. All 5 of the diversions in the supergroup stemmed either from someone repeating or recasting the offending word, or the designated listener being chided for not catching the error. The OPCF was inappropriate in 8 or 9 of the diverted conversations, and appropriate in 4 (possibly 5).

4.4.3. Disruption of Communicative Flow – Treatment Group

The flow of communication could be described as disrupted in 9 of the 22 episodes of OPCF for *th-* pronunciation (Table 4.3). Three of these disruptions took place between Syl and SA; one of them happened with the supergroup; 2 occurred between Syl and other speakers. The criteria for interruption of flow were very broad, and included speakers interrupting others to provide feedback (excerpt 25), speakers hesitating while repairing their speech after feedback (excerpt 27), or a pause in the conversation after feedback wais given (excerpt 29). Four of the episodes where communicative flow was disrupted contained inappropriate OPCF.

Table 4.3 – *Topic Diversion and Disruption of Communicative Flow in OPCF Episodes*

Week of Study	Episode of Oral Peer Corrective Feedback *th-*	Episode Appropriate OPCF	Episode – Topic Diversion	Episode – Disruption of Communicative Flow
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	1	1	0	1
6	2	1	1	0
7	4	3	3	4
8	3	0	2	2
9	7	2	5	1
10	5	1? *	2	1
11	0	0	0	0
12	0	0	0	0
Total	**22**	**7 (8?)***	**13**	**9**

* See excerpt 46

4.4.4. Summary of Diversion of Topic and Disruption of Communicative Flow – Treatment Group

In over half of the total episodes of OPCF, the topic was diverted. The OPCF was inappropriate in over half the episodes with topic diversion; however, few OPCF episodes were appropriate, so the greater number of inappropriate episodes with topic diversion is not surprising.

Communicative flow was disrupted in close to half of the OPCF episodes. Less than half of these episodes contained inappropriate OPCF.

4.5. Posttest Interview

As mentioned in section 3.4.4.2, Syl was briefly and informally interviewed after the posttest about his reactions to the training and the study. He said that he had found the training too repetitive and would have been more interested if the training had been in a new or different form every week. He also said (in response to my question) that he did not feel insulted or upset by the focus on non-nativelike pronunciation that was typically francophone (Syl's first language was French), but that perhaps the pronunciation of *th-* was not such a big problem in speaking English.

4.6. Research Question 3

Does training a group of learners in OPCF for small-group communicative activities bring about a change in interlanguage or greater accuracy of use for targeted linguistic features over time than a group of learners with no training in OPCF?

4.6.1. Dependent Variable

Change in interlanguage or accuracy of use -

Changes in learners' interlanguage for use of the targeted linguistic feature(s) were measured quantitatively. Each group's accuracy of *th-* pronunciation was measured by the percentage of instances of nativelike pronunciation of *th-* in obligatory contexts for *th-* found in pre-treatment and post-treatment tests for speaking where no oral peer corrective feedback was given.

More detailed changes in interlanguage were measured by analysing the speech over the study from a sample of two learners each from the treatment

and control groups. Their transcribed speech was analysed for changes in the percentage of instances of nativelike pronunciation of *th-* in obligatory contexts for each conversation. The transcripts were also analysed for evidence of greater awareness of *th-* pronunciation and for changes in amount of spontaneous self-repair. As well, the phonetic environments of nativelike and nonnativelike *th-* pronunciation were examined. This more detailed analysis was limited to samples of two learners each because of the intensive data processing and analysis demanded.

4.6.2. Accuracy of Pronunciation – Treatment and Control Groups

Recall that transcripts from the audio-recorded pretests and posttests of 17 learners from the treatment group and 17learners from the control group were used in the analyses for accuracy (see Table 4.4, and see Appendix E for the raw accuracy scores). The pretests and posttests of other participants were not analyzed because some of the participants' recorded posttests were not of sufficiently good quality. Because the participants in the study were not randomly assigned to the groups but were from intact classes, all the accuracy scores from the pretests of both the treatment and control group were analysed using a one-way ANOVA to see if any differences in pretest accuracy scores could be found between the groups at the beginning of the treatment phase. No significant differences were found between the groups at the pretest, F (1, 32) = 0.62, and the test for homogeneity of slopes was not significant for the dependent variable posttest accuracy score, F (1, 32) = 0.16. The data from the pre- and posttest scores could then be entered into a repeated measures ANOVA in order to

determine if the groups differed significantly at the posttest, if there was significant improvement over time, and if there was a significant interaction between time and group. No significant difference was found with respect to either group or time, F (1, 32) = 0.17 and 3.37 respectively, and there was no interaction between time and group, F (1, 32) = 1.16. Thus, no significant difference in the accuracy of pronunciation of *th-* was found between the treatment and control groups in either the pretest or the posttest, and the change from pretest to posttest was not significant for either group.

Table 4.4 - *Mean Accuracy Scores for Pretest and Posttest Measures (Maximum Score = 1.00)*

	Treatment group (n =17)				Control group (n = 17)			
	M	*SD*	Min.	Max.	*M*	*SD*	Min.	Max.
Pretest	.43	.19	.12	.80	.38	.23	.04	.90
Posttest	.34	.18	.11	.70	.35	.22	.04	.79

4.6.3. Detailed Analyses of Changes in Interlanguage

In order to look beyond accuracy alone and to have a more detailed picture of whether learners' pronunciation of *th-* changed over time, the transcripts of 2 learners each from the control group and the treatment group were examined for changes in their pronunciation of *th-* over the semester. In each group, one of the learners had obtained a relatively low accuracy score and one had obtained a relatively high accuracy score on the pretest. The two learners from the treatment group, Jon and El, had scored .24 and .51 out of a possible 1.00, respectively, on the pre-test. The two learners from the control

group, Seb and Fi, had scored .17 and .61, respectively. The high scorers were female and the low scorers were male. All four learners had participated in at least seven of the conversations that had been transcribed over the course of the thirteen-week study (see Table 4.5 for a complete listing of the weeks for which each conversation was transcribed). No other criteria were used for the selection of the four learners. The four learners were not homogeneous with respect to childhocd languages spoken at home. At least one of the four learners had spoken another language in addition to French at home as a child.

4.6.3.1. Elements of Analyses

The accuracy scores for each of the four learners were calculated for each week in the same way as the accuracy scores for the pre- and posttests. From the non-nativelike variants of *th-*, the relative percentages of more and less nativelike variants (*dth/tth* and *d/t*) were calculated and analysed for patterns of change over the study period. The phonetic environments (following Gatbonton, 1978) of words containing *th-* were analyzed, as well as the pronunciation of certain words containing *th-* in word-initial, word-medial, and word-final positions. This was done in order to see if the phonetic environment or position of *th-* in a word revealed any patterns in how accurately those words were produced.

Table 4.5 – *List of Transcribed Conversations for Selected Students*

Week / Student	1	2	3	4	5	6	7	8	9	10	11	12	13
El[t*]	X	X	Pretest	X	X	X	∅	X	X	X	∅	∅	Posttest
Jon[t]	X	∅	Pretest	X	X	X	X	X	X	X	X	X	Posttest
Fi[c*]	X	X	Pretest	X	X	∅	X	X	X	X	X	X	Posttest
Seb[c]	X	X	Pretest	X	X	∅	X	∅	X	X	X	∅	Posttest

*t = treatment group; c = control group

Note – X = transcript available; ∅ = no transcript available

4.6.3.2. Accuracy Scores

The accuracy scores were calculated by counting all the obligatory contexts for /ð/ and /θ/, counting all the nativelike variants in those contexts, and dividing the second number by the first. For example, if a student's speech had one week contained a total of 20 obligatory contexts for /ð/ and /θ/, and 10 nativelike variants in those contexts, the accuracy score would be 10 divided by 20, or .50. Transcripts that contained three or fewer tokens of *th-* were not considered in the analysis. Contexts when *th-* was assimilated from the sound preceding it (e.g. /ɪnə/ for /ɪnðə/) were not used in the calculations if the assimilation was judged to be similar to native speaker pronunciation.

4.6.3.3. Percentages of Non-Nativelike Variants

NNS pronunciation may sometimes become more nativelike, though not completely nativelike. To see if this occurred, the non-nativelike *th-* tokens of each of the four participants were analysed each week for the percentage of non-nativelike *th-* variants which were more nativelike (*dth/tth*) and less nativelike (*d/t*). For instance, a word pronounced as "I tink" would be rated as less nativelike than if it were pronounced "I tthink".

4.6.3.4. Accuracy in Phonetic Environments

Zampini (1996), investigating voiced stop spirantization in the acquisition of English /b d g/ and /ð/ by Spanish speakers, found that the mispronounced variants of English /d/ were partially dependent on the position of /d/ in a word (p. 349). In order to discover if accuracy of pronunciation changed according to

the location of *th-* in a word, the accuracy of pronunciation for the word *the* (word-initial) and for tokens that contained *th-* in word-final and word-medial position was calculated. Following Gatbonton (1978), the frequencies of nativelike (*th*) and non-nativelike (*dth/tth*, *d/t*) pronunciation in particular phonetic environments before words containing *th-* were calculated for the treatment and control groups.

4.6.3.5. Accuracy Scores – Jon – Treatment Group

The results will be presented for each learner in turn. We begin with the learners in the treatment group. Jon, the learner with the lower score at the pretest, seemed to show some improvement in his overall accuracy scores near the end of the study, but this improvement did not last (Table 4.6). The first nine weeks contained scores mostly from the low twenties to mid-thirties, but then showed somewhat of an increase in accuracy in weeks 10 and 11 with scores in the mid-fifties to sixty percent accuracy. This gain in accuracy then fell in week 12 and fell even more drastically in the posttest. The dissimilarity for all four learners between the pre- and posttest scores and the pattern of the other weekly scores is discussed in section 5.6.1.

Table 4.6 - *Accuracy Scores – Longitudinal (Maximum Score = 1.00)*

Week	El[t]*	Jon[t]	Fi[c]*	Seb[c]
1	⊗**	⊗	⊗	.41
2	.62	∅	.80	.41
3 (pretest)	.51	.24	.61	.17
4	.67	.80	.71	.26
5	.72	.23	.87	.22
6	.83	⊗	∅	∅
7	∅***	.34	.73	.34
8	.71	.26	.51	∅
9	.76	.28	.66	.48
10	.85	.56	.66	.31
11	∅	.60	.71	.46
12	∅	.27	.67	∅
13 (posttest)	.62	.11	.56	.59

* t = treatment group; c = control group

** ⊗ = not enough *th-* tokens for calculation of accuracy score

*** ∅ = no transcript available

4.6.3.6. Percentages of Non-Nativelike Variants – Jon – Treatment Group

Jon produced a proportionally greater amount of less nativelike variants of *th-* as time passed (Table 4.7). At no time did the percentage of less nativelike variants (*d/t*) dip below 75%. In weeks 10 and 12, all non-nativelike tokens were less nativelike rather than more nativelike.

Table 4.7 – *Treatment Group – Jon – Non-Nativelike Variants*

Week	Number of *d/t* variants	Number of *dth/tth* variants
1	⊗*	⊗
2	∅**	∅
3 (pretest)	27 84%	5 16%
4	⊗	⊗
5	15 79%	4 21%
6	⊗	⊗
7	33 85%	6 15%
8	54 93%	4 7%
9	9 90%	1 10%
10	15 100%	0 0%
11	3 75%	1 25%
12	9 100%	0 0%
13 (posttest)	57 79%	15 21%

*⊗ = no tokens in transcript
**∅ = no transcript available

4.6.3.7. Accuracy Scores – El – Treatment Group

In contrast, the changes in El's accuracy scores over the semester seem to be a slow, fairly steady increase (Table 4.6). The first five weeks show almost all scores in the sixties and low seventies; accuracy reaches the low eighties in the sixth week, decreases in the eighth week to the low seventies, then climbs back up to a range between the mid-seventies and mid-eighties in weeks 9 and

10. The posttest score is in the low sixties. It is worth noting that El was in the "supergroup" that provided most of the oral peer corrective feedback in the study, and that in the transcripts available from week six on, El worked with that group in every week but one.

4.6.3.8. Percentages of Non-Nativelike Variants – El – Treatment Group

The percentage of errors with the less nativelike variants of *th-* (*d/t*) decreased from a high of 85% to settle at percentages in the forties and fifties from week 5 and on (Table 4.8). That is, from week 5 on, El was often using a greater number of more nativelike variants than less nativelike ones.

4.6.3.9. Accuracy Scores – Seb – Control Group

The overall accuracy scores for Seb, the learner with the lower pretest score, were first in the low forties in weeks 1 and 2, then decreased to the mid- to low twenties in weeks 4 and 5 (see Table 4.6). The accuracy score rose again in week 7 and stayed in the thirties and forties until week 11, then rose again to the high fifties in the posttest .

Table 4.8 – *Treatment Group – EI - Non-Nativelike Variants*

Week	Number of *d/t* variants	Number of *dth/tth* variants
1	⊗*	⊗
2	20 69%	9 31%
3 (pretest)	24 80%	6 20%
4	11 85%	2 15%
5	3 23%	10 77%
6	⊗	⊗
7	∅**	∅
8	4 44%	5 56%
9	4 57%	3 43%
10	2 50%	2 50%
11	∅	∅
12	∅	∅
13 (posttest)	17 57%	13 43%

* ⊗ = no tokens in transcript
** ∅ = no transcript available

4.6.3.10. Percentages of Non-Nativelike Variants – Seb – Control Group

In week 2, 67% of the non-nativelike variants Seb produced were of the relatively less nativelike kind (Table 4.9). That percentage increased to 81% in week 4 and remained in the eighties and nineties for the rest of the study (i.e., Seb used a high percentage of less nativelike *th-* tokens).

Table 4.9 – *Control Group – Seb – Non-Nativelike Variants*

Week	Number of *d/t* variants	Number of *dth/tth* variants
1	⊗*	⊗
2	18 67%	9 33%
3 (pretest)	30 79%	8 21%
4	50 81%	12 19%
5	42 93%	3 7%
6	∅**	∅
7	56 88%	8 12%
8	∅	∅
9	21 91%	2 9%
10	11 100%	0 0%
11	37 80%	9 20%
12	∅	9 20%
13 (posttest)	11 85%	2 15%

* ⊗ = no tokens in transcript
** ∅ = no transcript available

4.6.3.11. Accuracy Scores – Fi – Control Group

The overall accuracy scores for Fi (Table 4.6) started off for the most part in the seventies and eighties, then abruptly dropped to just over 50% in week 8 and increased to the high sixties and low seventies, where it remained for weeks 9 to 12. The score dropped further in the posttest to 56%.

4.6.3.12. Percentages of Non-Nativelike Variants – Fi – Control Group

Over the study, Fi used a greater percentage of non-nativelike variants that were relatively less nativelike (*d/t*) as compared to the non-nativelike variants (*dth/tth*) that more closely resemble the nativelike variants of the *th-* phonemes (Table 4.10).

In week 2, 53% of the non-nativelike variants Fi produced were of the relatively less nativelike kind. That percentage grew, and by week 11, 73% of the errors made were with the relatively less nativelike variant.

Table 4.10 – *Control Group - Fi – Type of Non-Nativelike Variants*

Week	Number of *d/t* variants	Number of *dth/tth* variants
1	∅*	∅
2	8 53%	7 47%
3 (pretest)	22 73%	8 27%
4	9 53%	8 47%
5	3 100%	0 0%
6	∅	∅
7	14 64%	8 36%
8	19 90%	2 10%
9	18 70%	8 30%
10	8 67%	4 33%
11	11 73%	4 27%
12	0 0%	1 100%
13 (posttest)	39 81%	9 19%

* ∅ = no transcript available

4.6.3.13. Analysis of Phonetic Environments

The data from the learners in each group were combined to create one set of data for the treatment group and one set for the control group. Calculations for the pronunciation of *th-* tokens according to location in the word consisted of accuracy scores for each of the three environments (word-initial *the*, word-medial, and word-final). This method followed Zampini (1996), who investigated the relative effect of phonetic environment through accuracy scores. Gatbonton's gradual diffusion model, described in section 2.8.2, uses another method of analysis.

4.6.3.14. Treatment Group – Location in Word

The two learners in the treatment group showed no general pattern of accuracy or development for pronunciation of *the* (Table 4.11). Accuracy scores ranged from .00 to .83, but usually ranged between .20 and .40. No pattern or tendency was evident for the pronunciation of *th-* in the word-final position. Accuracy scores ranged from .00 to 1.00, and some weeks, no tokens appeared. A tendency for higher accuracy scores was seen in the word-medial environment. Six of the nine scores available were above .70. This apparent trend for more accurate pronunciation in this environment stemmed almost entirely from El, while Jon did not demonstrate more accurate pronunciation in this environment compared to the other two.

4.6.3.15. Control Group – Location in Word

In the control group (Table 4.12), pronunciation of *the* tended to fall in the 35 to 55% accuracy range when both learners' results were combined.

Table 4.11 – Treatment Group – Jon and El – Pronunciation Accuracy of *the* and Tokens with *th-* in Word-Final and Word-Medial Position

Pronunciation Accuracy* / Week	*The*	*Th-* Word-Final	*Th-* Word-Medial
1	*0:1* ⊗ 0%	⊗** ⊗ –	⊗ ⊗ –
2	∅# 13:22 37%	∅ ⊗ –	∅ 9:0 100%
3 (pre-test)	*4:25* 9:16 24%	*1:3* 5:3 50%	*1:1* 5:0 86%
4	*1:0* 2:4 43%	*0:1* 1:1 33%	⊗ 2:0 100%
5	*0:4* 5:3 42%	*3:4* 1:4 33%	*0:4* 2:1 28%
6	⊗ 5:1 83%	⊗ ⊗ –	⊗ ⊗ –
7	*2:11* ∅ 15%	*0:3* ∅ 0%	*0:3* ∅ 0%
8	*5:26* 6:3 28%	*3:3* 7:1 71%	*3:3* 7:1 71%
9	*2:5* 3:7 29%	*1:0* 3:0 100%	*1:0* 7:1 89%
10	*2:8* 11:1 59%	⊗ ⊗ –	⊗ 1:0 100%
11	*2:3* ∅ 40%	⊗ ∅ –	⊗ ∅ –
12	*2:7* ∅ 22%	*0:1* ∅ 0%	⊗ ∅ –
13 (post-test)	*8:39* 20:16 34%	*8:5* 3:2 61%	*2:3* 1:3 33%

Note – The upper, italicized ratios are Jon's data and the lower ratios are El's data
*Ratios represent native-like tokens:non-native-like tokens
** ⊗ = no tokens in transcript
# ∅ = no transcript available

Fi's pronunciation of *the* mirrored her overall accuracy scores, with her pronunciation of *the* becoming more accurate as time went on, rising from the fifties to the high seventies and low eighties until week 8, when her accuracy suddenly dropped and had only partially recovered to its previous levels by the end of the study period.

The combined results of pronunciation of *th-* in word-final positions demonstrated a tendency for the pronunciation to be more accurate than inaccurate (5 of the 11 weeks when tokens appeared had accuracy scores over 70%), but the range of accuracy scores over the study period was variable. Fi's accuracy scores alone show a marked tendency for accurate pronunciation in the word-final environment. In 7 of the 10 weeks in which *th-* tokens in this environment appeared in her speech, her pronunciation of them was completely accurate. The variable range of accuracy in the pronunciation of *th-* in the word-medial positions, from 20% to 100%, showed no clear pattern for the combined accuracy scores of the two learners in the control group. However, from week 4 Fi again showed a noticeable tendency to be very accurate in her pronunciation in this environment. Starting from week 4, her accuracy scores in six of the eight weeks in which she produced these tokens were at 100% accuracy.

4.6.3.16. The Gradual Diffusion Model

Changes related to the distribution of all nativelike and non-nativelike *th-* tokens in different phonetic environments were not clear-cut.

Table 4.12 – *Control Group – Seb and Fi – Pronunciation Accuracy of the and Tokens with th- in Word-Final and Word-Medial Position*

Pronunciation Accuracy* / Week	*The*	*Th-* Word-Final	*Th-* Word-Medial
1	*1:7* 0:2 10%	*2:0* ⊗** 100%	*2:0* ⊗ 100%
2	*14/:11* 13:11 55%	*1:1* 6:0 88%	*0:1* 5:2 62%
3 (pre-test)	*2:19* 9:5 31%	*1:1* 1:1 50%	*1:2* 2:1 50%
4	*11:21* 11:9 42%	*2:3* 2:0 57%	*1:7* 4:0 42%
5	*3:15* 9:2 41%	*1:2* 2:0 60%	*1:7* 1:1 20%
6	*∅#* ∅ --	*∅* ∅ --	*∅* ∅ --
7	*12:15* 16:5 58%	*4:4* 2:0 60%	*0:4* 7:0 64%
8	*∅* 5:9 36%	*∅* 0:2 0%	*∅* 1:2 33%
9	*6:8* 13:12 49%	*1:0* 7:0 100%	*2:0* 6:0 100%
10	*2:4* 2:10 22%	*0:2* 1:0 33%	*⊗* 5:0 100%
11	*22:26* 14:10 50%	*2:0* 1:0 100%	*1:4* 3:0 50%
12	*∅* ⊗ --	*∅* ⊗ --	*∅* ⊗ --
13 (post-test)	10:8 23:21 77%	1:1 4:1 71%	2:2 5:0 77%

Note – The upper, italicized ratios are Seb's data and the lower ratios are Fi's data
*Ratios represent native-like tokens:non-native-like tokens
** ⊗ = no tokens in transcript
# ∅ = no transcript available

The five categories for the phonetic environments described below were modified from those used by Gatbonton (1978) in her paper on the distribution of variants of /θ/ and /ð/ phonemes. The environments that she formulated for the distribution of /ð/ phonemes were used in this study for tokens containing either /ð/ or /θ/. The phonetic environments Gatbonton formulated for the distribution of tokens with /θ/ phonemes were too narrow for the distribution of tokens with /θ/ phonemes in this study.

Another phonetic environment which was not analyzed in Gatbonton's study was *th-* tokens following a pause (Zampini, 1996). After consulting Gatbonton (personal communication) this category was added to Environment 1 to account for the numerous tokens that appeared in the data. It was not given its own environment as in Zampini (1996) in order to keep the number of environments the same as in Gatbonton (1978), and because it was judged that in both the pause environment and in Environment 1, the tongue was not touching a point of articulation and so the two environments were similar in that sense. The phonetic environments applied to the analysis of *th-* tokens in this study can be seen in Figure 4.5.

4.6.3.17. Treatment Group – Gradual Diffusion Model

The data for the two learners in the treatment group and the data for the two learners in the control group were combined, following Gatbonton (1978), who developed the gradual diffusion model from the data accumulated from 27 speakers.

For Jon and El's data in the treatment group, Gatbonton's gradual diffusion model was not replicated (see Table 4.13). No phonetic environments showed tendencies of nativelike *th-* variants coexisting with non-nativelike variants, then replacing the non-nativelike variants.

All phonetic environments contained both nativelike and non-nativelike variants over the weeks the data were recorded, but no environments consistently contained all nativelike or all non-nativelike variants (see Figure 2.2 in section 2.8.2 for a depiction of the gradual diffusion model found by Gatbonton, 1978).

Environment 1 (E1) -- preceding + vocalic – continuant – consonant or preceding + pause	(to the) (wait, the)
Environment 2 (E2) – preceding + voice + continuant + consonant	(here's that)
Environment 3 (E3) – preceding + voice – continuant + consonant	(could there)
Environment 4 (E4) – preceding – voice + continuant + consonant	(off the)
Environment 5 (E5) – preceding – voice – continuant + consonant	(like the)

Figure 4.5 – *Modified Phonetic Environments following Gatbonton (1978)*

4.6.3.18. Control Group – Gradual Diffusion Model

Seb and Fi's combined data from the 13-week study also did not replicate Gatbonton's (1978) gradual diffusion model (see Table 4.14). All environments contained both nativelike and non-nativelike tokens, but no environments showed tendencies to hold only nativelike or only non-nativelike tokens

Table 4.13 – *Treatment Group – Jon and El – Overall Accuracy Ratios in the Gradual Diffusion Model*

Environments Week	E1 + pause	E2	E3	E4	E5
1	*Ø**	*⊗*	*1:0***	*⊗*	*0:2*
	⊗	⊗	⊗	⊗	⊗
	--	--	**1:0**	--	**0:2**
2	*Ø****	*Ø*	*Ø*	*Ø*	*Ø*
	21:4	17:13	2:11	1:2	2:1
	21:4	**17:13**	**2:11**	**1:2**	**2:1**
3	*4:7**	*4:11*	*2:4*	*0:2*	*1:7*
	13:10	10:10	5:5	0:1	4:4
	17:17	**14:21**	**7:9**	**0:3**	**5:11**
4	*2:1*	*2:0*	*⊗*	*⊗*	*⊗*
	20:6	6:5	0:1	0:1	⊗
	22:7	**8:5**	**0:1**	**0:1**	--
5	*3:13*	*2:6*	*⊗*	*⊗*	*⊗*
	17:8	8:4	3:0	1:1	6:0
	20:11	**10:10**	**3:0**	**1:1**	**6:0**
6	*⊗*	*⊗*	*⊗*	*⊗*	*⊗*
	3:0	3:2	3:0	⊗	1:0
	3:0	**3:2**	**3:0**	--	**1:0**
7	*14:14*	*1:17*	*1:2*	*1:0*	*2:3*
	Ø	Ø	Ø	Ø	Ø
	14:14	**1:17**	**1:2**	**1:0**	**2:3**
8	*11:27*	*7:20*	*1:3*	*1:1*	*0:7*
	10:3	10:3	1:0	⊗	1:3
	21:30	**17:23**	**2:3**	**1:1**	**1:10**
9	*1:1*	*2:4*	*0:2*	*0:1*	*1:2*
	17:6	3:2	⊗	⊗	4:1
	18:7	**5:6**	**0:2**	**0:1**	**5:3**
10	*12:7*	*2:3*	*1:2*	*⊗*	*3:1*
	20:1	2:1	0:1	⊗	1:1
	3:8	**4:4**	**1:3**	--	**4:2**
11	*3:3*	*1:1*	*⊗*	*⊗*	*2:0*
	Ø	Ø	Ø	Ø	Ø
	3:3	**1:1**	--	--	**2:0**
12	*3:4*	*1:1*	*0:2*	*0:1*	*0:1*
	Ø	Ø	Ø	Ø	Ø
	3:4	**1:1**	**0:2**	**0:1**	**0:1**
13	*12:24*	*14:27*	*3:3*	*1:4*	*0:13*
	20:12	11:8	6:3	3:2	5:6
	32:36	**25:35**	**9:6**	**4:6**	**5:19**

Note - The upper, italicized ratios are Jon's data and the lower ratios are El's data

* ⊗ = no tokens in transcript

** Numbers represent native-like tokens:non-native-like tokens

*** Ø = no transcript available

Table 4.14 – *Control Group – Seb and Fi – Overall Accuracy Ratios in the Gradual Diffusion Model*

Environments / Weeks	E1 + pause	E2	E3	E4	E5
1	*3:2**	*1:4*	⊗	*2:1*	*1:3*
	⊗**	0:1	0:1	⊗	⊗
	3:2	**0:1**	**0:1**	**2:1**	**1:3**
2	*8:13*	*9:9*	*2:1*	*1:2*	*1:5*
	42:4	10:6	2:0	3:0	6:5
	50:17	**19:15**	**4:1**	**4:2**	**7:10**
3	*6:18*	*1:13*	*1:4*	*1:2*	*0:1*
	20:7	10:6	0:4	0:2	3:3
	26:25	**11:19**	**1:8**	**1:4**	**3:4**
4	*11:30*	*5:19*	*1:4*	*1:2*	*4:9*
	26:4	13:7	0:1	2:0	4:5
	37:34	**18:26**	**1:5**	**3:2**	**8:14**
5	*9:25*	*1:9*	*0:3*	⊗	*1:5*
	4:1	4:1	1:0	1:0	4:1
	13:26	**5:10**	**1:3**	**1:0**	**5:6**
6	∅***	∅	∅	∅	∅
	∅	∅	∅	∅	∅
	--	--	--	--	--
7	*18:22*	*7:12*	*3:4*	*0:1*	*4:12*
	25:13	18:4	1:2	5:2	2:1
	43:35	**25:16**	**4:6**	**5:3**	**6:13**
8	∅	∅	∅	∅	∅
	16:9	3:5	0:3	0:1	2:3
	16:9	**3:5**	**0:3**	**0:1**	**2:3**
9	*16:11*	*2:8*	*0:3*	*2:0*	*1:1*
	30:10	12:9	1:1	2:2	7:5
	46:21	**14:17**	**1:4**	**4:2**	**8:6**
10	*3:7*	*1:4*	⊗	*1:0*	⊗
	17:4	2:5	0:1	1:0	3:2
	20:11	**3:9**	**0:1**	**2:0**	**3:2**
11	*17:15*	*12:11*	*1:6*	*4:2*	*6:13*
	16:3	11:7	1:2	1:0	5:2
	33:18	**23:18**	**2:8**	**5:2**	**11:15**
12	∅	∅	∅	∅	∅
	1:0	⊗	⊗	1:1	⊗
	1:0	--	--	**1:1**	--
13	*11:5*	*5:7*	⊗	⊗	*3:1*
	29:15	18:14	1:8	5:2	8:10
	40:20	**23:21**	**1:8**	**5:2**	**11:11**

Note – The upper, italicized ratios are Seb's data and the lower ratios are Fi's data.

* Numbers represent nativelike tokens:non-native-like tokens

** ⊗ = no tokens in transcript

*** ∅ = no transcript available

4.7 Self-Repair and *th-* Awareness

Although very few significant or noticeable changes in interlanguage or greater accuracy in the pronunciation of *th-* were shown in the analyses, the four learners' accuracy scores may not have been a true reflection of the degree to which they were attending to the nativelike pronunciation of *th-*. Therefore, transcripts for the four learners were examined for evidence of awareness of *th-* pronunciation and self-repair of *th-* errors to see if the learners were noticing the pronunciation of *th-*, even though they may not have been entirely nativelike in their production.

Tables 4.15, 4.16, 4.17, and 4.18 show, for each learner, the frequency of occurrence over the study of self-repair of *th-* in the same utterance, self-repair of *th-* in their next utterance, emphasis of *th-* in a word, and provision of oral peer corrective feedback to another speaker.

Of the two students who were more nativelike in their pronunciation of *th-* at the outset of the training phase, El (from the treatment group) had very few occurrences of self-repair, while Fi (from the control group) did not usually self-repair in her utterances except for week 9. The other two students, who originally produced a lower percentage of nativelike tokens, self-repaired a number of times.

Table 4.15 – *Treatment Group – Jon – Evidence of th- Self-Repair and Self-Awareness*

Week	1	2	3	4	5	6	7	8	9	10	11	12	13
Self-repair Same Utterance	0	∅	0	0	2	0	1	2	0	0	0	0	1
Self- repair Next Utterance	0	∅	0	0	1	0	0	0	0	0	0	0	0
Th- Emphasis	0	∅	0	0	0	0	0	0	0	0	0	0	0
Oral Peer Corrective Feedback Provision	0	∅	0	0	0	0	0	0	0	0	0	0	0

Note – Ø = no transcripts available

Table 4.16 – *Treatment Group – El– Evidence of th- Self-Repair and Self-Awareness*

Week	1	2	3	4	5	6	7	8	9	10	11	12	13
Self-repair Same utterance	0	0	0	0	1	0	∅	0	0	0	∅	∅	2
Self- repair Next utterance	0	0	0	1	0	0	∅	0	0	0	∅	∅	N/A
Th- Em-Phasis	0	0	0	0	1	0	∅	0	3	0	∅	∅	0
Oral Peer Corrective Feedback Provision	0	0	0	0	0	1	∅	0	2	0	∅	∅	N/A

Note – Ø = no transcripts available

Table 4.17 – *Control Group - Fi – Evidence of th- Self-Repair and Self-Awareness*

Week	1	2	3	4	5	6	7	8	9	10	11	12	13
Self-repair Same utterance	0	0	1	0	0	∅	1	0	4	0	0	0	0
Self- repair Next utterance	0	0	0	0	0	∅	0	0	1	0	0	0	0
Th- Em-Phasis	0	0	0	0	0	∅	0	0	0	0	0	0	0
Oral Peer Corrective Feed-back Provi-sion	0	0	0	0	0	∅	0	0	0	0	0	0	0

Note – Ø = no transcripts available

Table 4.18 – *Control Group – Seb – Evidence of th- Self-Repair and Self-Awareness*

Week	1	2	3	4	5	6	7	8	9	10	11	12	13
Self-repair Same utterance	0	3	2	2	1	∅	2	∅	1	0	0	∅	0
Self- repair Next utterance	0	1	0	0	0	∅	0	∅	0	0	0	∅	0
Th- Em-Phasis	0	0	0	0	0	∅	0	∅	0	0	0	∅	0
Oral Peer Corrective Feed-back Provi-sion	0	0	0	0	0	∅	0	∅	0	0	0	∅	0

Note – Ø = no transcripts available

Table 4.19 - *Evidence of Th- Self-Repair and Self-Awareness*

	Self-Repair – Same Utterance	Self-Repair – Next Utterance	*Th-* Emphasis	Oral Peer Corrective Feedback Provision
Jon	6	1	0	0
El	3	1	4	3
Fi	6	1	0	0
Seb	11	1	0	0

4.7.1. Self-Repair and Oral Peer Corrective Feedback – Treatment Group

In the treatment group, Jon performed self-repair 7 times, 6 in the same utterance and 1 in the next utterance. The self-repair was concentrated in weeks 5 and 8, with 3 and 2 episodes of self-repair, respectively. The repair was usually performed after a pause or an "uh". Speakers' names in the following excerpts are bolded and italicized to show that they had been designated as the "listener" for the activity. The self-repair is underlined.

65.
Jon: You know, a caste, uh, is not a satisfy of what they're doing or <u>dey</u> wanna be, uh, <u>they</u> wanna be elevate in de society, so dey can, uh, do a kind of war to, uh, to make, uh...

66.
Jon: But <u>dthey</u> say, <u>they</u> say he repeated, so he said it once...

The self-repair was not always completely successful, and sometimes was to a more native-like, but not completely native-like, variant of *th-*.

67.
Jon: Um, I like to play golf, but I know dat in dis, uh, in nis, uh, in dis, uh, area dere, <u>dere</u>, <u>dthere's</u> not supposed to be golf.

El did not self-repair very much, but she did provide OPCF 3 times, once in week 6 and 2 times in week 9, and she emphasized her pronunciation of *th-* 4 times. Week 9 was a productive one for El, with 3 episodes of *th-* emphasis and 2 episodes of oral peer corrective feedback. Oral peer corrective feedback is typed in bold. Some excerpts are shown below.

68.
Me: I think it's enough.
Ni: I think!
Me: I THink it's (unintelligible)
***El*: You what?**
Ni: I think.

69.
Me: O.K., we create (unintelligible)...First tthing-...I have three.
El: THree. But you're the second.
Ni: THree is my colour.

4.7.2. Self-Repair and Oral Peer Corrective Feedback – Control Group

Fi performed 7 instances of self-repair, 1 in week 3, 1 in week 7, and 5 in week 9. She did not emphasize the pronunciation of *th-* or provide oral peer corrective feedback.

70.
Fi: I see the people around me, like me, dthat has dthe, the Parkinson's disease.

71.
Fi: My father doesn't like de idea, my father doesn't like the idea that (unintelligible)

72.
Fi: O.K., uh, well, in the World State, they, uh, they are, like, sort of, uh, I think (unintelligible) dey're, dey're not free. You know, they're no- (unintelligible) can't make their decisions, they can't hold, they can (unintelligible) so dthey're, like, conditioned to do something and dthey have no choice (unintelligible)

73.
Fi: Dey all fit-
Na: Dey all related togedder, I know.
Fi: Dthey all fit in social services.

Seb showed a relative abundance of self-repair, repairing his utterances in weeks 2, 3, 4, 5, 7, and 9, for a total of 11 episodes repaired in the same utterance and 1 episode repaired in the next utterance. The majority of the self-repair (9 episodes) took place in the first five weeks. No oral peer corrective feedback or *th-* emphasis occurred.

74.
Seb: [O]n de odder side there's a Congress in the, uh, 'ouse of, uh Representatives, and it balances de, dthe system.

75.
Seb: Yeah, I think so. You mean width the cane?
RAk: Unh?
Seb: You mean with the cane?

76.
Seb: Oh yeah, uh, I appreciate, uh, alcol at de job. On the job. Alcol when working

Seb did not emphasize *th-* in any words, but he was aware of pronunciation and of typically Québecois pronunciation. In the following excerpt, it was mostly his intonation that changed and rose at the end of every phrase, parodying an intonation typical of some Québecois speakers.

77.
Seb: (first, French in heavy Quebecois accent) Or you can speak like dat wid a, uh, big, big, big Quebec accent, uh... You mind, Justin, uh, speaking with a Quebec accent?
Ju: I always speak wid a Quebec accent.

Seb: (Accent) Dat's good. Well, uh, today, in, uh, interview, we're going to ask a couple of question, uh, about, uh, you and your, uh, your, uh, your, uh, life highlights, and den, uh...

Seb also once took the time, along with another student, to look up the spelling and pronunciation of a word (parenthesis) in a reference book, although he wasn't able to convert what he read into native-like pronunciation.

78.
V: /pærəntɛz?
Seb: **/pærətəs/**...Check in de dictionary.
J: Yeah, I have it here.
Seb: Oh, yeah. I'm sure it's /PÆRəntɪsəs/. /pærəntisəs/. /pærəntisəs/, /pærəntisəs/, /pærəntisəs/...Full-time-

4.8. Variability

What was striking about the investigation into the four learners' self-repair and awareness of the pronunciation of *th-* was the frequency with which nativelike variants and non-nativelike variants were produced in close proximity to each other, often with a nativelike variant preceding a non-nativelike one. This phenomenon was true for all four students.

79.
Fi: For medical use, yeah. I mean... but now de idea of putting a picture on the...

80.
Seb: O.K., the six young girls, O.K., de six young girls. The, uh, 'andyman. Yeah, we keep the 'andyman. O.K., de 'andyman.

81.
Seb: You, you wanted to take the, uh, de serious tthing, so, uh, stick to de, stick to de serious tthing.

82.
El: Oh, really? What other word? Find anudder one.

83.
Jon: And he learns to read by, uh, by her teaching, and, uh, to read dis book, and he also finds, uh, a book of Shakespeare on de floor and he, he reads all, all the words.

Clearly, there is no guarantee that a student will pronounce a word containing *th-* in a nativelike way simply because she has accurately pronounced a preceding *th-* word, even if it is the same word and perhaps is even in the same phonetic environment. The students' inconsistent pronunciation means that their inaccuracy is not because of lack of ability to accurately pronounce words containing *th-*, but because of some other factor(s).

4.9. Summary of Changes in Accuracy, Interlanguage, OPCF, and *th-* Awareness

No significant difference was found in the pretest and posttest accuracy scores for pronunciation of *th-* between the treatment group and the control group. A longitudinal analysis of the accuracy of *th-* pronunciation of two learners each from the treatment and control groups revealed different patterns of accuracy scores. El, the initially high scorer in the treatment group, increased fairly steadily in accuracy from beginning to end, while Jon, the initially low scorer, had accuracy scores which generally stayed around the twenties and thirties. In the control group, the accuracy of the initially high scorer, Fi, showed a tendency to remain at .60- .70. Seb, the initially low scorer, started off around .40 accuracy, worsened, then recovered from week 9 on. El was the only learner whose proportionate production of the more nativelike variants (*dth/tth*) to less

nativelike variants (*d/t*) increased over time. The other three learners produced a proportionately greater amount of less nativelike variants over the study. Each learners' accuracy of production of *the* and of *th-* tokens in word-medial and word-final position also varied widely.

As noted above, the gradual diffusion model developed by Gatbonton (1978) was not replicated in the data reported here. In this study, all the phonetic environments contained both non-nativelike and nativelike *th-* variants over time, with no consistent trend for nativelike variants to replace non-nativelike ones in any environment. The phonetic environments and implicational scales used in this study were modified from the ones used by Gatbonton (1978). Since Gatbonton's implicational scale for phonetic environments containing /ð/ was modified in its evaluation ratings and was applied to the production of both /ð/ and /θ/ in this study, direct comparisons cannot be made between Gatbonton's scale and the accuracy rankings results in this study.

Thus, no noticeable or significant changes in interlanguage or accuracy of *th-* pronunciation were found between either the treatment group and control group or the sample of two students from each group.

Of the four students whose transcripts were analyzed in detail, only one from the treatment group, El, provided oral peer corrective feedback in her speech or emphasized *th-* in her production. However, each of the four students did self-repair their non-nativelike *th-* pronunciation, though most episodes of self-repair took place before week 10. All four students often produced nativelike and non-nativelike *th-* tokens in the same utterance.

4.10. Post-Treatment Questionnaire

Some learners in the treatment group were definitely able to provide oral peer corrective feedback, as was shown above. To explore learners' thoughts on the impact of the training and their thoughts on accuracy in general, at the end of the training phase, both groups were asked for their opinions on the importance of accuracy in speaking in English, especially in pronouncing *th-*, and on what effects they thought the study had had on them. Learners responded on pencil-and-paper questionnaires administered in the post-treatment phase. Each learner had 10 minutes to fill in the questionnaire, which contained 10 questions for the treatment group and 7 questions for the control group (see Appendix D). All questions were in French and learners were told that they could respond in French and did not have to write their name. Out of 22 questionnaires handed out for the treatment group, 19 were returned. All 25 questionnaires were returned by the control group. Not all questions were answered by all respondents.

4.10.1. Responses to Questionnaire – Questions Common to Both Groups

Table 4.20 shows the answers to the first four questions on the questionnaire. The first question was whether the learners thought their oral abilities in English had improved over the course and in what aspects. In the treatment group, various learners thought that they now had more self-assurance in speaking English, were more fluent, or increased their vocabulary or accuracy in general. Five learners thought that their pronunciation had improved, with 3 specifically mentioning their pronunciation of *th-* and 1 mentioning stress on syllables. One learner reported that s/he now *listened* more for *th-*. Three

learners reported that they had not improved or that they had merely had the chance to practise using English.

In the control group, 14 learners reported that they had not improved. One learner in that group wrote that s/he had not improved because s/he was anglophone. Eleven learners reported improvement in speaking English over the course, whether in grammar, vocabulary, or ease of speaking English. One learner reported that she had improved because when she started speaking French, she began again in English and now tried to correct her errors. Two learners reported improved pronunciation, with one of those learners citing improved intonation, delivery, and volume. Four learners reported that they had generally improved or improved because of practice.

Learners were asked whether being recorded while speaking had bothered them, and how. The great majority of learner in the treatment group reported that they were not bothered or that they were a little shy at the beginning of saying the things they wanted to say, but not by the end.

The 5 learners who wrote that they were bothered a little by the recording explained that they either couldn't say what they wanted to, found being recording to be embarrassing or bothersome, or didn't allow themselves to make mistakes. One learner did not give a reason for her/his answer.

For the control group, the great majority of learners again said that they were not bothered by being recorded or had gotten used to it by the end.

Table 4.20 - *Post-Treatment Questionnaire -Treatment and Control - Questions 1-4*

Questions	**Answers – Treatment n=19**			**Answers – Control n=25**		
1. Improved oral abilities? In what?	Yes 16	Pronuncia-tion	5	Yes 11	Pronuncia-tion	2
		Self-assurance	2		Inhibit speech in French	1
		Fluency	4		Fluency	1
		Accuracy	2		Grammar	2
		Vocabulary	2		Vocabulary	1
		Grammar	1		General	1
	No 3			No 14		
2. Audio recording bother you? In what way?	Yes 5	Annoying/ Embarrassing	1	Yes 6	Embarrassing	1
					Had to pay attention to pronunciation	1
		No freedom to say what want	2		No freedom to say what want	2
					Ruined group intimacy	1
		Didn't allow self to make mistakes	1		Always felt evaluated	1
	No 14			No 19		
3. How important speaking English w/out errors for you?	Very important	12		Very important	16	
	Important	3		Important	5	
	Not (very) important	4		Not (very) important	4	

4. Some errors in English worse than others? Which?	Yes 12	Grammar	7	Yes 14	Gramma r	5
		Pronuncia-tion	2		Pronunci a-tion	5
		Vocabu-Lary	2		Vocabul ary	1
		False Friends	1		False friends/ Interfere nce	2
		Basic Errors	2		Writing	1
	No 7				Topic Fronting	1
				No 9		

Six learners reported being bothered by the tape recorder. Some reasons were that they inadvertently said bad things or spoke of things that didn't concern me (the researcher), because it always felt like an evaluation, or because it took away from the intimacy of the group. One learner reported being bothered because s/he had to pay more attention to pronunciation.

The third question focused on the importance of speaking error-free English. In the treatment group, 12 learners wrote that it was quite important to speak English with no errors, especially for their future careers or studies. Four learners thought that speaking error-free English was of little importance, with two of those four writing that it was just important that they were understood.

Sixteen learners in the control group reported that speaking error-free English was quite important. Some reasons given were: to be understood, because English is very useful nowadays, or to avoid criticism from anglophones or to be taken seriously by them. Five learners wrote that speaking error-free English was important, and 4 learners reported that it was not very important.

Both groups were also asked if certain errors in English were worse than others, and if so, what these errors were. Seven learners in the treatment group wrote that there were no "better" or "worse" errors. Two learners wrote that some errors were more basic than others. Seven learners said that grammar errors were worse than other errors, 2 cited vocabulary, and 2 cited pronunciation errors as worse than others, with 1 student specifying the pronunciation of *th-*.

For the control group, 9 learners reported that no one error was worse than another, while 14 learners thought that some errors were more serious. More serious errors were said to be false cognates or transference errors from French, grammar or verb tense errors, errors in writing, or topic fronting. Five learners regarded pronunciation errors as serious, with two specifying the pronunciation of *i*, *th-*, and/or the third person *s*.

4.10.2. Responses to Questionnaire – Treatment Group Only

The next few pages (and Table 4.21) will describe the treatment group's responses to the rest of the questionnaire since the questions from this point on were different for the two groups. The next question for the treatment group was about the importance for them of pronouncing *th-* like a native English speaker. Eleven learners wrote that it was important or quite important, but 2 of those thought that other aspects of their English were more important to work on. Six learners reported nativelike *th-* pronunciation to be of little importance, especially if the speakers could otherwise be understood.

Table 4.21 - *Post-Treatment Questionnaire - Treatment Group - Questions 5-9 n=19*

Questions	*Answers*					
5. How important pronounciing *th-* like native speaker?	Very important	2				
	Important	9				
	Not (very) important	6				
6. Did you help anyone w/ pronunciation of *th-*?	Yes	13				
	No	6				
7. Difficult to help? Why? Why not?	Yes 4	Shy	1			
		Have problem w/ *th-*	1			
		Used to hearing "d"	1			
		Not attentive to others	1			
	No 14					
8. Did you receive help w/ *th-* pronunciation? Worth it? Why? Why not?	Yes 5	Worth it?	Yes 6	Make aware of errors/ pronunci a-tion	4	
	No 3		No ?			
9. Did your *th-* pronunciation change over course? How?	Yes 10	Pay more attention	4			
		Become (more) aware	2			
	No 6					

The treatment group was then asked if they had helped someone in class with the pronunciation of *th-*. Thirteen learners responded "Yes." Six of those thirteen wrote that they had helped someone only a couple of times or not as much as they should. Six learners reported that they had not helped anyone.

The seventh question asked whether learners in the treatment group had found it difficult to give help with *th-* pronunciation and why or why not. Fourteen learners reported a variety of reasons for having no difficulty in helping others with *th-* pronunciation. Four learners reported a lot of difficulty helping others with *th-* pronunciation for reasons of shyness, lack of attention, being accustomed to hearing "d" instead of "th" when talking with friends, and difficulty

providing a greater variety of activities or targeted features for the training. One learner suggested that learners would have been helped a lot by hearing the recordings. One learner thought that working on the pronunciation of *th-* was not relevant to people who had attained that level of English. Another learner reported that s/he wasn't bothered by the recording, but that s/he didn't think s/he could improve rapidly because s/he didn't often speak English. One learner wrote that it was good to think about pronouncing *th-*, but she had difficulty actually doing it.

4.10.3. Responses to Questionnaire – Control Group Only

We now return to the control group's remaining responses to their questionnaire (Table 4.22) The learners were asked what problems they had in speaking English. Thirteen learners reported pronunciation or fluency. Other learners cited problems with vocabulary, sentence structure, transfer errors from other languages, topic fronting, nervousness in speaking English, or expressing an exact meaning.

The last question for the control group was whether they had known about the real objective of the study (oral peer corrective feedback and evaluating the pronunciation of *th-*). A couple of learners reported that they had thought general pronunciation was being evaluated, but most had no idea about the real objective.

themselves with pronunciation. One learner found helping with *th-* pronunciation not difficult to do, but of secondary importance to understanding and being understood.

The treatment group was then asked if anyone had helped *them* with their pronunciation of *th-*, whether it was worth it, and why. The responses to this question were somewhat unclear because it often wasn't obvious which question was being answered. Of the learners who explicitly answered the first question, 5 learners reported that they had been helped or thought they had been helped. Three learners reported that they had not been helped. One learner simply answered "Yes," and four learners simply answered "No." Six learners thought the help was worthwhile; three of the six reported that it helped them to become aware of their errors and pronunciation. One learner who had been helped thought that it didn't change anything for her/him. Two learners wrote that they tried to look after their pronunciation themselves, and one learner wrote that the help might have been useful for others but was insulting for her as an English speaker. This learner was no doubt one of the few participants who had had early exposure to English (see section 3.1.2). There were no explicit answers that the help was generally not worth giving.

The last question for the treatment group was whether they thought their pronunciation of *th-* had changed over the course, and how. Ten learners thought their pronunciation of *th-* had improved, usually because they now paid more attention to it or were more aware of it. Six learners thought there had been no change. One learner did not report a change but thought that s/he was finally more aware of *th-* after many go-rounds.

In the space provided for comments or complaints from the treatment group, 5 learners wrote that the training was too repetitive. They suggested

Table 4.22 – *Post-Treatment Questionnaire – Control Group – Questions 5-6 n=25*

Questions	*Answers*	
5. What are your problems in speaking English?	Vocabulary	5
	Fluency	4
	Pronunciation	9
	Formulating sentences	2
	Shyness	1
	Grammar	2
	Interference from French	3
	Topic fronting	1
	Can't express what want to say	1
6. Know the real objective of study? How found out?	Yes 0	No 21

In the space provided for comments, complaints, and suggestions, one learner requested to be told the reasons for the study next time. One learner requested a more elaborate explanation of the study and complained along with another learner that learners had not received any feedback (in the post-treatment phase, learners were asked to e-mail the researcher or provide their e-mail if they wanted to be sent the transcripts of conversations they took part in). One learner wrote that the study was done very discreetly. Another learner complained that s/he knew of someone who had not agreed to be recorded at the beginning of the year and whose wishes had not been respected (because of the nature of group work, learners who did not sign the consent form may have been recorded, but their data was not used in the study). One learner wrote that recording students was a good idea to see their improvement.

Chapter 5 - Discussion

5.1. Variability of Results

A very noticeable aspect of the results was the variability of learners' performance, both in terms of accuracy in the pronunciation of *th-* and in the use of oral peer corrective feedback. Accuracy scores in the pre-test for the treatment group ranged from a low of .12 to a high of .80, and scores in the post-test ranged from .11 to .70 (see Appendix E for raw accuracy scores for each group). The control group produced accuracy scores from .04 to .90 in the pre-test, and from .04 to .79 in the post-test. The accuracy scores of the four targeted learners and the patterns of change of those scores also varied, even within the same group.

The accuracy of *th-* pronunciation in particular phonetic environments was usually quite variable, and very few general patterns of distribution of nativelike *th-* tokens could be found.

A limited number of learners provided oral peer corrective feedback, although more than two-thirds of the learners in the treatment group reported that they had done so. Learners from both groups self-repaired faulty *th-* pronunciation, but the four learners targeted from each group often produced non-nativelike *th-* variants in the same utterance as nativelike ones.

Even though many of the individual learners within each group were comparable in the age at which they had started learning English and in the number of years they had taken English classes, performance within both groups varied widely.

5.2. Variability of Oral Peer Corrective Feedback Provision

Realistically, we should not expect that all learners will react the same way or react consistently to an instructional treatment, or even to instruction in general. We can, though, consider *why* learners may have reacted the way they did. In answer to the first research question, learners certainly can be trained to give oral peer corrective feedback in small-group activities. Although one intact small group of four learners and two other learners were responsible for most of the episodes of oral peer corrective feedback that were transcribed (18 out of 22 episodes), a majority of learners in the treatment group (13 out of 19 respondents) reported in questionnaires completed after the posttest that they had provided oral peer corrective feedback. These reports are puzzling. These students seem either to have provided oral peer corrective feedback only during those times when their conversations were not recorded, or to have believed they had provided OPCF when in fact they had not, or to have reported providing OPCF when they knew they had not. It is difficult to determine which possibility is more likely. Perhaps all of them are true to some degree.

Although a majority of the treatment group participants reported in their post-treatment questionnaires that they had not had difficulty providing OPCF, most of the OPCF produced by the treatment group (14 out of 22 episodes) was inappropriate; that is, it was provided after a speaker had pronounced a word containing *th-* in a nativelike way. One learner, SA, provided half of the total amount of appropriate oral peer corrective feedback (four of eight episodes).

Why did some learners provide appropriate feedback while others provided inappropriate feedback?

5.2.1. Noticing Non-Nativelike Variants

One answer might be that some learners were better able than others to notice non-nativelike variants of *th-* during a conversation. As Schmidt (1990) noted, various factors can influence noticing. Some students may have been at a generally higher proficiency level in English and could converse more automatically, and so were more able to spare some attention to listen for non-nativelike variants during conversations. The attention of learners at a lower level may have been completely occupied with "holding up their end" in English during the activity, and so they may not have noticed the form of any *th-* phonemes produced.

5.2.2. Variation in Perceptual Discrimination Abilities

Some learners may simply not have been able to discriminate perceptually between the non-nativelike variants and the nativelike ones. As Jamieson and Morosan's (1986) perceptual fading training has shown, francophone learners can be trained to improve their aural discrimination and identification of *th-* phonemes. In the post-treatment questionnaire, one learner from the treatment group wrote that s/he had a problem with the pronunciation of *th-* and so had difficulty giving oral peer corrective feedback. Recall LaCharité and Prévost (1999a, 1999b), who found that some francophone learners neither perceived /θ/ phonetically nor had acquired the category of /θ/ in their phonological systems. Some learners in this study may have literally not been able to hear the

difference between a nativelike and non-nativelike variant of *th-*, and so may have provided oral peer corrective feedback thinking that they had heard a non-nativelike variant when in fact they had not.

Another possibility related to the factor of noticing mentioned above is that learners may not have been able to spare the attention to notice a non-nativelike variant they were accustomed to hearing; however, when they heard "*the*" or another accurately pronounced *th-* token, it was unusual enough for them to take notice of it and to remind them that they were supposed to be giving feedback on this phoneme. I believe that the supergroup (Me, El, and Fi) sometimes reacted in this way. Providing oral peer corrective feedback was a way of reminding themselves and the other speakers, "Yes, we're working on the pronunciation of *th-*." The fact that members of the group sometimes repeated more than once the (almost always accurately-pronounced) word which had triggered the feedback also suggests that they were using the feedback as reminders and/or practice opportunities for *th-* pronunciation.

5.2.3. Different Expectancies of English

Some learners may have had different expectancies of what appropriate English sounds like. As one learner wrote in her questionnaire, "I'm used to hear 'd' instead of 'th' when I'm talking with my friends." Markham writes of the linguistic ambience effect, when "speaker characteristics [converge] towards the prevailing (ambient) linguistic environment" (Markham, 1997, p. 48). Since the learners spent a good part of their day in school, many of the learners in both groups would have spent more time speaking English with people whose native

language is French than those whose native language is English. There is also a good chance that their English teachers in elementary and high school were native French speakers who may have used non-nativelike variants of *th-*. Consequently, learners may have found it difficult to change their expectancies of appropriate and inappropriate pronunciation of *th-*. LaCharité and Prévost's (1999a, 1999b) findings of learners who could phonetically perceive /θ/ but had not acquired the phonological representation of /θ/ is relevant here. Whereas before participating in this study, the learners may have been accustomed to hearing *d*, *t*, *dth*, or *tth* in a context that called for a *th-* phoneme and may have accepted those variants, they were now asked to notice those variants as undesirable ones. Some learners may have had difficulty "re-setting" their expectancies of what acceptable English pronunciation was, and so may not have noticed the non-nativelike variants.

5.2.4. Self-Repair and OPCF – Control Group

Although the control group received no training on the provision of OPCF, many instances occurred of self-repair of the pronunciation of *th-*. Learners from the control group engaged in self-repair of *th-* 57 times in the conversations transcribed, as compared to 66 instances of *th-* self-repair in the conversations transcribed in the treatment group. The control group did not report any knowledge of the real objectives of the study in the post-treatment questionnaire; therefore, it seems that this attention to *th-* pronunciation on the part of the control group did not originate from attempts to "give the researcher what she wants", but was part of a more general awareness of pronunciation accuracy.

Thirteen of the learners in the control group self-reported problems with English pronunciation, so at least half the learners were conscious of the accuracy of their pronunciation. Even though the presence of the tape recorders in the control group may have heightened this awareness to an uncommon degree, both groups were audio-recorded and so both should have benefited to the same degree from this awareness. The fact that the control group self-repaired the pronunciation of *th-* at a roughly similar level to the treatment group, who knew that *th-* pronunciation was being targeted, suggests that the control group may generally have considered nativelike pronunciation to be more important than the treatment group.

An orientation towards more nativelike pronunciation may explain the much higher amount of OPCF on other pronunciation that was evident in the control group. Although most of these OPCF episodes were provided by just three learners, it is significant that the OPCF was provided although no guidance was given in this regard by the teacher or the researcher. Greater attention to accuracy may also bear upon the equal numbers of self-repair episodes in the pretest for the treatment and control groups (four and four) and the higher number of self-repair episodes in the posttest for the control group (nine as opposed to six for the treatment group). A greater attention to pronunciation accuracy may also have affected the lack of significant differences in the posttest accuracy scores between the groups. This will be further discussed in section 5.4. below.

5.3. Diversion of Topic, Disruption of Communicative Flow, and OPCF

Topic diversions occurred in more than half of all the treatment group's conversations when oral peer corrective feedback was provided. However, as mentioned in section 4.4.2., some of those diversions in the supergroup happened because at least one member of the group was repeating the word as they thought it should be pronounced (see excerpt 21 and excerpt 46). In effect, these diversions were mini-practice sessions for *th-* pronunciation, and often did not last more than three turns. For the supergroup, the number of inappropriate feedback episodes with topic diversion (5) was equal to the number of inappropriate feedback episodes when the topic was not diverted. The appropriateness of the feedback seemed not to have had an effect on whether the topic was diverted or not in the supergroup's conversations because diversions of topic were not due to disputes over appropriateness.

There were among other learners, however, more extended diversions of topic, such as when they were in conflict over whether they had pronounced a word accurately or when a student refused to accept the feedback or perhaps the need to be provided with feedback. Most of these types of diversions occurred between Syl and SA, and reflected the somewhat competitive aspect of their relationship (see excerpt 24, excerpt 37). The dynamics of the relationships between people seemed to play a significant role in the nature of the oral peer corrective feedback provided, and indeed whether it was provided at all. This will

be discussed further below (see Morris and Tarone, in press, for further discussion of this point).

Communicative flow was disrupted in just under half of the *th-* oral peer corrective feedback episodes (9 out of 22). Three of those disruptions happened between SA and Syl. The majority of the total tally of disruptions were interruptions of the first speaker by the second speaker in order to provide feedback. It is not surprising that speakers were sometimes interrupted when feedback was given. It is sometimes difficult in one's first language to judge when a gap in the conversation will be long enough to safely respond to an interlocutor. The learners had the additional burden of making this judgement in a second language and with second-language speakers. The majority of the feedback episodes did unroll smoothly, which testifies partly to the learners' abilities in maintaining the conventions of polite conversation, and partly to the learners' immediate ability to deal with the feedback that was provided to them, either by ignoring it, disputing it, or accepting it. Only 3 conversations out of all those in which communicative flow was disrupted came to a complete stop and had to be re-started, so to speak (see excerpt 23 for an instance of this). Even when the feedback led to a change of topic, if the change of topic was accepted by the speakers and integrated into the conversation, the flow of communication was maintained, as shown below.

33.
El: I'm sorry about that.
Ni: **About what?**
Me: **About what?**
Ni: You're supposed to be de one listening!
Me: She's listening- she's listening to her hown mistakes.

El: About THat. THat.
Me: THat.
Ni: THat. (jollily)

5.4. Changes in Interlanguage and Accuracy of Pronunciation

The third research question addressed changes in accuracy in pronunciation of *th-* and changes in interlanguage. No significant differences were found between pretest and posttest accuracy scores for the treatment group or between pretest and posttest scores for the control group. No significant difference between the two groups was found for both pretest and posttest scores. Generally, most of those who scored high (relative to the other learners) on the pretest scored high on the posttest, and vice-versa. With the noticeable amount of OPCF that occurred in the treatment group, we could expect to find some overall change in the accuracy of *th-* pronunciation in that group. After all, the entire group had received weekly training on *th-* pronunciation for 9 weeks, and in the post-treatment questionnaire, 13 learners reported that they had provided OPCF, 5 learners, that they had received OPCF, and 10 learners reported that they thought their pronunciation of *th-* had improved.

There may be a number of reasons why no difference in accuracy of pronunciation of *th-* appeared in the posttests. As mentioned above, a greater attention to accuracy of pronunciation on the part of the control group could have contributed to the lack of significant difference between the groups. If the control group took more care generally in pronouncing words in a nativelike way, any advantage the treatment group may have gained from provision and reception of

oral peer corrective feedback on the pronunciation of *th-* may have been cancelled out.

The form of the pretests and posttests may have also had an effect. Unlike the usual group activities in the class, the pre- and posttests were presented in front of the class or half the class, and were evaluated. The pretest was an imagined dialogue between two famous people who had influenced the presenters, and the posttest was a presentation of the changes that would be made to create a utopian society in Quebec in the year 2050. These presentations were chosen as the pre- and posttests because they were the only time that all learners could be recorded over one class when their pronunciation would not receive feedback and when learners would speak for a similar length of time and the speaking would be structured in similar ways. The great majority of the pre- and posttest presentations were read out loud and/or memorized, not spoken off the cuff. Consequently, the pre- and posttests were different in at least three aspects from the regularly recorded group activities in the class. They were evaluated, they were presented in front of a large group of people, and they were prepared beforehand and not produced spontaneously. The first two factors may well have caused learners anxiety and so affected the accuracy of their pronunciation. As well, a task that is presumed to encourage attention to form, such as a prepared speech or dialogue, may not in fact be consistent with more accurate speech. Both Sato (1985) and Tarone (1985) have found that learners engaging in tasks that required more attention to form, such as elicited imitation of words or acceptability judgements, were not necessarily more

accurate (and sometimes less accurate) than in freer, less formal tasks. In a related vein, Kormos (1999) notes that performance tasks which require a relatively greater amount of attention leave less attention available to the learner for monitoring accuracy. This condition may apply to the pre- and posttests in the sense that learners may have focussed the greatest amount of attention on aspects such as volume, fluency, or accurate production of vocabulary and grammar, and did not have attention to spare to monitor the pronunciation of *th-*.

Another factor affecting pronunciation in the posttest may have been what could be called "classroom fatigue". Learners were near the end of a 15-week course and may not have cared all that much about the accuracy of their speech, but may have just wanted to do their presentation and get the course over with.

5.5. Behavioural Change in Treatment Group

The concentration of OPCF, self-repair and *th-* emphasis episodes in weeks 7-10 shows that there was some behavioural change over the course of the study. Although most of the appropriate OPCF episodes were in the first five weeks out of the twelve weeks of the training phase, learners were demonstrating more instances of awareness of and attention to the pronunciation of *th-* a few weeks after the training had started than in the weeks before the training.

5.6. Performance of Four Learners from Treatment and Control Groups

5.6.1. Accuracy Scores

The accuracy scores of the four learners selected from the treatment and control groups showed some noticeable patterns of change over the course of the study. From the treatment group, Jon seemed to show a moderate improvement in his accuracy scores over weeks 10 and 11 of the study, although his posttest accuracy score showed a dramatic decrease. For her part, before the posttest El also seemed to be consistently improving in accuracy over the course; however, her accuracy score for the posttest was lower than all but one of her accuracy scores over the study. In the control group, Fi appeared to worsen overall in her accuracy of pronunciation, and her posttest accuracy score was the second-lowest of all she had received throughout the study. Seb, in the control group, showed a small increase in accuracy over the last 4 weeks of treatment phase, and his posttest accuracy score was notably higher than his other accuracy scores over the study. In fact, for El, Fi, and Jon, their pre- and posttest scores are among the three lowest scores they received. It appears, then, that the pre- and posttest accuracy scores do not tell the whole story.

Only El seemed to show moderate, consistent improvement in her accuracy of *th-* pronunciation over the study, while the other learners selected did not show the same consistency of improvement. El was the more accurate learner at the pretest when compared to Jon. Perhaps more accurate learners who receive, provide, or observe oral peer corrective feedback are better able to make use of it at the outset than less accurate learners. Alternatively, the

difference could be in the amount of oral peer corrective feedback that each learner engaged in. El was a member of the supergroup, which engaged in the most OPCF out of all the small groups. Jon did observe some oral peer corrective feedback as part of a small group which usually included Syl and SA, but never provided any and never received any in the transcribed conversations. As well, the attitudes of each learner towards the pronunciation of *th-* and towards the accuracy of their production may have affected their openness to oral peer corrective feedback and to modifying their pronunciation. This aspect will be explored later in sections 5.67.2. and 5.8.

Seb, in the control group, obtained a higher accuracy score on the posttest for pronunciation of *th-* than on the pretest. This may have been due to the language instruction in general, exposure to a native-speaker teacher every week, or the chance to practice speaking English. It might also have been due to the elements of language that Seb may have focussed on for accuracy, to be discussed below. Fi's decrease in accuracy is harder to explain, but may be because she felt more and more comfortable with being tape-recorded and paid less attention to her pronunciation. Fi also did not work with her original partner, who grew up speaking English and Italian, after week 6, and so may have been exposed to more non-nativelike variants of *th-* in conversation from week 7 on.

5.6.2. Phonetic Environments

As noted in the section 4.9, with respect to accuracy and its relation to the phonetic environment of tokens containing *th-*, there were very few patterns that showed tendencies for some phonetic environments to consistently contain all

nativelike or all non-nativelike tokens. With respect to the phonetic environments for the location of *th-* in a word, the pronunciation of *the* tended generally to be at a fairly low level of accuracy. In the treatment group, the word-medial environment showed a tendency for more accurate scores, due only to the scores of the more accurate learner, El. The results of the two learners in the control group showed no tendencies for any phonetic environment to consistently contain relatively more nativelike or non-nativelike tokens than other environments. However, Fi's accuracy scores alone were quite high in the word-final environment.

The results using phonetic environments modified from Gatbonton (1978) also did not replicate her gradual diffusion model of second-language variability. No environments showed tendencies to contain both non-nativelike and nativelike variants, then have the non-nativelike variants gradually replaced by the nativelike variants.

It must be stressed first of all that the number of speakers in this study whose speech was used to calculate the effect of phonetic environments was smaller than the number of speakers in both Gatbonton's (1978) study (27 speakers) and in Zampini's (1996) study (10 speakers). In the case of both Zampini and Gatbonton, all the speakers were of the same L1 background. In the case of the four learners whose conversations were analysed in this study, at least one, and perhaps two, grew up speaking a language other than French in the home. The effect of heterogeneous home languages may have skewed the data regarding the effect of phonetic environments on accuracy. The phonetic

environments used in this study were also substantially (but necessarily) modified from the ones used by Gatbonton in her 1978 study. Considering, then, all the compromises and modifications that slipped into the analysis of the effects of the phonetic environments, it would be surprising if the gradual diffusion model had been replicated. As Gatbonton remarks (personal communication), the model itself could also be too powerful in this instance to show different stages of acquisition. The results for the four learners could be described as all fitting within the lower stages of the model, but not reaching the replacement stage and thus not showing any difference between environments.

It may also be that the phonetic environments selected for use in the analyses were not the environments that would demonstrate a systematic difference in accuracy, whether the difference was between learners or between environments. Dickerson (1975) noted differences in accuracy in the production of /r/ by Japanese learners of English related to the height of the vowel following the /r/ variant. Young (1991) found that higher-proficiency Chinese learners of English marked plural nouns with an /s/ more often if there were other plural markings in the noun phrase. There are a myriad of different ways to conceive of environments for production of a given token. The environments analysed here may simply not have been the appropriate ones for showing systematicity.

5.6.3. Self-Repair and *th-* Awareness

As for evidence of self-repair or awareness of pronunciation of *th-*, the two least accurate learners of the four showed the most self-repair, which seems intuitively reasonable since more accurate learners would not have had as many

inaccurate utterances to repair. El was the only person, though, who showed awareness of *th-* pronunciation other than by self-repair. Recall that El's group provided the most oral peer corrective feedback of all the small groups in the treatment group. With such a relatively large amount of oral peer corrective feedback being used, El was in an environment where the group was stressing the pronunciation of *th-*, so it is not unexpected that El emphasized the pronunciation of *th-* in her speech. However, El was not the only one who showed an elevated awareness of pronunciation. Seb, in the control group, once imitated a person speaking English with a strong Quebecois accent. In this instance, he modified his intonation more than any segmental pronunciation. Seb also used a dictionary when he was questioning the spelling and stress of a word. Intonation and stress seem to have been what Seb paid the most attention to in his pronunciation; nevertheless, this focus on suprasegmental aspects may have also had a positive effect on his pronunciation of segmental features, including *th-*.

5.6.3.1. Attentional Capacity and Self-Repair

El's explicit awareness of her pronunciation of *th-* was not shared by Fi, who nonetheless was more nativelike in her pronunciation at the outset than Jon and Seb. Perhaps Fi was monitoring and catching many non-nativelike variants of *th-* before she actually pronounced them and, in Levelt's terms, was preventing errors from being produced and thus being detected by others (cited in Kormos, 1999, p. 310). However, even if the learners were monitoring their pronunciation either before or after they articulated it, non-nativelike *th-* variants were still

produced, often in the same utterance as nativelike variants. Kormos attributes this inconsistency in monitoring to limitations on attentional capacity . Producing speech in a second language is often more effortful than producing speech in a first language because not as many speech processes are automatized. Therefore, the L2 speaker needs to allocate more attention to producing speech. If the attentional demands of the speaking task are high or if very few of the L2 speaker's processes for producing the L2 are automatized, there is little attention left over to monitor, or notice, errors such as non-nativelike variants of phonemes (pp. 312-313). The inconsistent pronunciation of *th-* demonstrated by all four learners may be evidence of changes in the allocation of attention during the production of their utterances. The more accurate of the four learners may have been more adept at regularly focussing their attention on the pronunciation of *th-*, but still wavered in the attention that they gave to it. The training in oral peer corrective feedback was meant to direct learners' attention to the pronunciation of *th-* and thus make it more salient to them and more accessible to monitoring. Indeed, of the 10 learners in the treatment group who reported that their pronunciation of *th-* had changed over the course, 4 learners said that they paid more attention to the pronunciation of *th-* and 2 learners said that they had become more aware of *th-* pronunciation.

Although El was more accurate than the other learners and engaged in more OPCF, it isn't certain whether she was more accurate because of the oral peer corrective feedback she was exposed to, or because of the minimal yet regular instruction and whole-class feedback she received on *th-*, or because of

some other factor. The learners in the control group were not exposed to the same instruction, training, or whole-class feedback, so the effect of the oral peer corrective feedback as a separate variable cannot be determined.

5.7. No Provision of OPCF

The question has already been addressed as to why most of the OPCF provided in the treatment group occurred following nativelike variants of *th-*. But what of the learners who did not provide any OPCF at all? Did they not give any OPCF because they were not able to, or because of some other reason? There could be many reasons why most of the learners in the treatment group did not provide OPCF.

5.7.1. Importance of *th-* Pronunciation for Communication

One reason may be that they did not think working on the pronunciation of *th-* was important or necessary. Some learners may have felt, as a few of them put it in the post-treatment questionnaire, that it was just important to be understood by a listener. A weak correlation between Japanese students' acceptance of non-native accents and their attitudes towards English that was inaccurate but understandable was found in Chiba, Matsuura, and Yamamoto (1995). This may also have been true for some of the francophone learners in the study. Although 12 learners in the treatment group wrote in the post-treatment questionnaire that speaking English without errors was very important, many of the learners had probably heard over the course of their lives a substantial amount of English spoken with a Quebecois accent. Most learners would have realized, either by watching other non-native speakers communicate

with native speakers or by interacting with native speakers themselves, that successful communication can take place without completely accurate language. There are very few instances when using /d/ or /t/ as a variant of *th-* will lead to a breakdown in communication in English; consequently, any increases in the accuracy of *th-* pronunciation will not increase a message's comprehensibility, but will affect only how close it is to a norm of target-language pronunciation. Nearing that target-language norm was not important to at least 6 learners, who reported in the post-treatment questionnaire that using nativelike pronunciation for *th-* was of little importance.

5.7.2. Social Identity and the Pronunciation of *th-*

In fact, if the pronunciation of *th-* is a social marker for francophones, some students may have wanted not to pronounce *th-* like a native speaker in order to preserve their own self-identity as Quebecois francophones. Zuengler (1988) defines social markers as, "linguistic item[s], here...specific phonetic variant[s], whose use signals the influence, in the person's speech, of a particular social or social psychological state, such as feelings of identity, beliefs, motives, etc." (p. 33). Quebec contains the biggest concentration of francophones in North America, but some francophones feel their language, culture, and identity to be threatened by the sea of English that surrounds them. Markham (1997) writes of "linguistic accommodation", "when speakers alter their manner of speaking in order to increase their perceived communicative or social proximity" (p. 47). If producing English like a native speaker is seen as something desirable, learners may make greater efforts to produce language that approaches the native-

speaker norm. If nativelike production is not the goal, learners may choose not to spend time and effort trying to reach the native-speaker norm.

The use of *th-* as a social marker in a Franco-American community in New Hampshire was investigated by Ryback-Soucy and Nagy (2000). They found that use of the /d/ and /t/ variants for pronunciation of *th-* in English correlated significantly with age (those informants over sixty years old), occupation type (blue-collar), neighbourhood (a traditionally Franco-American area), and use of French (in more than one social setting).

In the informal interview held with Syl, he was asked whether his reactions to SA's oral peer corrective feedback had been connected to a feeling that to be asked to pronounce *th-* like an English speaker was insulting or threatening to him as a francophone; he assured me that he had not felt that way; however, other learners may have.

5.7.3. Attention and OPCF

Even assuming that learners had no objection to working on the pronunciation of *th-* on the grounds of identity or attitude towards comprehensibility, it may have been difficult for certain learners to provide OPCF. Two learners from the treatment group reported some difficulty or a lot of difficulty in providing OPCF because of problems with attention or noticing. Inconsistency in attentional control has already been discussed above with respect to discriminating between nativelike and non-nativelike variants in perception and production.

5.8. Group Dynamics and OPCF

Besides learners' attentional limitations, the framework of the activities was not structured to encourage oral peer corrective feedback on pronunciation of *th-*. Each small group was meant to complete some task as a group, and they were sometimes evaluated on their work as a group. Learners were sometimes assigned roles, such as as a secretary. However, each small group's pronunciation of *th-* was never evaluated as a group product, and no team scores were calculated for each small group. Feedback from me on pronunciation was only provided to the class as a whole. Out of all the elements from Olsen and Kagan's (cited in Dörnyei, 1997) five features for encouraging cooperative learning mentioned in the literature review section, only the designation of a student as "the listener" was included in the activities. Apart from that, there was no incentive built into the activities that would encourage students to give each other oral peer corrective feedback, and no disincentive not to provide it. Learners who provided feedback did so not because they couldn't complete the activity or would be evaluated unfavourably if they didn't, but because they wanted to provide OPCF or thought that they should provide it. The treatment group was reminded during the training that by monitoring other speakers for pronunciation, they would improve their own abilities to monitor their own accuracy, but learners' motivation for providing OPCF was essentially intrinsic, especially if they did not really believe that by providing OPCF, they would be helping themselves.

A learner might have been especially leery of giving oral peer corrective feedback if she was not very comfortable with the other members of her group, even if she believed that OPCF would be helpful to her and to others. One learner responded in the post-treatment questionnaire that s/he had had a lot of difficulty giving oral peer corrective feedback because s/he was shy. I believe that more than one learner may have refrained from providing OPCF because they were not sure how it would be received by their group. The possibility of being ignored or being chastised for being a teacher's pet would not be a desirable one. It is notable that the members of the supergroup, who provided the most oral peer corrective feedback, never once provided OPCF to other learners in the weeks when that group did not work together. In fact, Syl was the only person who provided oral peer corrective feedback to several different groups of which he was a member. Not coincidentally, in one week's transcripts he described his greatest strength as self-confidence.

It seems that oral peer corrective feedback was most likely to occur when the learners felt capable of providing useful feedback, felt comfortable with each other and especially with their interlocutor, and believed that the other group members agreed that oral peer corrective feedback was a worthwhile means to a worthwhile goal. Groups who did not share this goal or this level of comfort or cohesion did not produce much OPCF or did not produce any at all. As Dörnyei and Malderez (1997) noted, the more group norms are shared and supported, the more cohesive the group will be. The supergroup seemed to agree that oral peer corrective feedback was useful and valuable; their consensus contributed to

the cohesiveness of their group, but the group's cohesiveness probably also influenced the fact that this norm was accepted by all. Even when El was being chastised for not listening as she was supposed to (excerpt 36), she did not dismiss the importance of the feedback (although she may have censored herself because of the tape recorder), but stressed that she had not chosen the role for herself. Of all the factors that may have influenced the use, misuse, or disuse of oral peer corrective feedback, I believe that the issue of group cohesion, as well as the learners' attitudes towards accuracy and accurate pronunciation, were the two most important.

5.9. Limitations of the Research

The results of this research study have been very much influenced by the context in which the research was done. First of all, the participants in the treatment and control group were not a random sample of the population of francophone CEGEP learners, but were learners from classes whose teacher had agreed to participate in the study. Results of the learners' performance and behaviour during the study should not be generalized to the population of francophone CEGEP learners in general, or indeed to learners of other ages, language backgrounds, or learning environments. A group of learners in a class where the teacher stresses accuracy or learners whose class is arranged in a cooperative learning framework may react very differently to training in OPCF.

The language feature targeted was very specific, which is another factor which limits generalizability of results. The pronunciation of *th-* has a particular nature with respect to communicative necessity, ease or difficulty of production

and perception, social meaning for speakers, and frequency in the input. All of these characteristics have affected how oral peer corrective feedback on *th*-pronunciation has been performed. Targeting another language feature may have a very different effect on how OPCF is provided and received.

The categories for the three variants in the production of *th*- (*th*, *dth/tth*, *d/t*) were derived from theoretical and empirical support. However, the lack of perfect or near-perfect accuracy scores on the pre- and posttests suggests that a straight coding and rating of the phonetic variants neglected to discriminate between the few learners who had spoken English as children and the other learners. This may be due to the ethnic background of those learners who had reported speaking English at home. The two learners who reported English as a home language as children also reported speaking Italian at home. In Montreal, various dialects of English in which *dth/tth* or *d/t* are used as allophones of /ð/ and /θ/ are used by some members of the Italian, Greek, and Lebanese communities.

The two learners who spoke English as children may have been speakers of dialects in which the three variants of *th*- were allophones. If so, they may have been aware of the fact that they used these three variants interchangeably, but may have seen nothing wrong in pronouncing *th*- in this way. The rating of one variant of *th*- as nativelike and the two others as non-nativelike might then have penalized these learners for speaking their dialect of English. For future research, one methodological answer to this problem might be to remove from

the analyses data from learners who as children have spoken English at home or at school.

5.10. Implications for Further Research

In some ways, this research study has been an investigation into what many second-language teachers already know. Second-language learners can be trained to appropriately use oral peer corrective feedback in communicative activities in the classroom. Like most research, though, the results of this study raise more questions than they answer. What are the effects of training in OPCF on learners' production of aspects of language other than pronunciation? How does integrating OPCF into true cooperative learning activities affect the provision of OPCF? What ages of learners can successfully be trained in OPCF? How do learners whose language learning histories have included extensive attention to accuracy react to OPCF? How do naturalistic language learners react to OPCF? How do gender, proficiency, cultural background, or situational factors influence the provision of OPCF? Which techniques and approaches are best suited to training learners to provide OPCF? What happens when learners themselves are allowed to select the language elements for which they will provide OPCF?

All these questions provide great scope for further investigation. As second-language teachers and second-language researchers, we are sometimes guilty of forgetting that people can learn languages without, and sometimes in spite of, our "expert" help. How much more helpful it would be to teach language learners how to keep learning without us.

END NOTES

[1]The province of Quebec has a system of junior colleges called CEGEPs (College d'éducation générale et professionelle). All students who want to attend university in Quebec must first receive a CEGEP diploma. CEGEPs also offer diplomas for technical or "professional" programs, for example, bookkeeping or administration. University-bound CEGEP students usually receive their diploma after two years, while following the normal course of study in a technical or professional program takes two or three years. The CEGEP students in this study were in the university-bound stream.

[2]The self-repair in Excerpt 1 could also be described as repair of a morphological error. Without using the stimulated recall method to elicit what the learner was doing psycholinguistically at the time of the self-repair, it is very difficult to judge whether the learner had intended to correct the morphology or the pronunciation. In including this excerpt, I have judged it to be a self-repair of pronunciation because of the methodological difficulties in determining otherwise.

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Appendix A – Language Learning History Questionnaire

Please answer the questions below. This questionnaire will help me determine how much English teaching you have had in the past and what **you** think your strengths and weaknesses are in English.

_____ _____ _____

Family name First name Age

1. What country did you grow up in? _____

2. What language did you speak at home when you were growing up? _____

3. What language did you speak at school when you were growing up?_____

4. How old were you when you first started learning English? _____

5. Did you first **start** learning English in an English class, or did you first **start** learning in another way? e.g. TV, talking to people

English class Other way_____

6. How many years of English class have you had? _____

7. Why are you taking this English class? _____

_____

8. What are you **good** at in English? e.g. talking, writing, grammar exercises, etc.

_____

9. What do you want to **improve** in English? e.g. asking directions, a bigger vocabulary, etc.

_____

Table A.1 – Control Group - Language Learning History Questionnaire
n= 20

1. Age	17 yrs - 1	18 yrs – 15	19 yrs –3	20 yrs - 1
2. Country(ies) grown up in	Canada		18	
	Lebanon		3	
	Saudi Arabia		1	
	Mexico		1	
3. Language(s) spoken at home while growing up	French		17	
	Spanish		1	
	Creole		1	
	Arabic		2	
	Italian		1	
	Portuguese		1	
	English		1	
4. Language(s) spoken at school while growing up	French		20	
	Italian		1	
	English		1	

5. Age when first started learning English (years old)	1 yr - 1	4 yrs - 1	5 yrs - 2	6 yrs - 1	7 yrs - 2	8 yrs – 1	9 yrs – 6	10 yrs – 6

6. How first started learning English	English class	8
	Talking to parents/friends/others	3
	TV	2
	Combination	7

7. # of years of English class to date	7 yrs - 3	8 yrs - 3	9 yrs - 9	10 yrs -3	11 yrs - 1	12 yrs -1

8. Reason(s) for taking English class	Get diploma/ obligated	8
	Improve English	5
	Improve English writing	1
	Improve English speaking	3
	Improve vocabulary	2
	Improve grammar	1
	Improve pronunciation	1
	Job market necessity	1
	Just right for me	1
	Be able to talk to people at work	1
9. Strengths in English	Speaking	13
	Listening/Understanding	7
	Writing	8
	Reading	2
	Grammar	3
10. Desired improvements in English	Writing	6
	Listening	1
	Speaking	5
	Grammar	6
	Vocabulary	12

Table A.2 –Treatment Group - Language-Learning History Questionnaire
n=20

Questions	*Answers*								
1. Age	18 yrs – 11			19 yrs - 7			20 yrs – 2		
2. Country(ies) grown up in	Canada	20							
3. Language(s) spoken at home while growing up	French	17							
	Italian	2							
	Spanish	1							
	English	1							
4. Language(s) spoken at school while growing up	French	18							
	Italian	1							
	English	1							
5. Age when first started learning English	Infan-cy - 1	3 yrs - 1	4 yrs – 1	5 yrs - 2	6 yrs - 1	7 yrs - 1	8 yrs - 3	9 yrs - 9	10 yrs – 1
6. How first started learning English	English class	11							
	Talking to family/friends/others	4							
	TV	2							
	Combination	3							
7. # of years of English class to date	8 yrs - 5		9 yrs - 8		10 yrs – 4		11 yrs – 3		
8. Reason(s) for taking English class	Get diploma/Obligated	10							
	Preparation for future	6							
	Like English	2							
	Improve English	7							
	Improve fluency	2							
	Improve grammar	1							
	Practice pronunciation	1							
9. Strengths in English	Writing	8							
	Listening/Understanding	6							
	Speaking	11							
	Reading	4							
	Grammar	1							
10. Desired improvements in English	Speaking	2							
	Writing	2							
	Grammar	9							
	Vocabulary	12							
	Fluency	3							
	Pronunciation	2							
	Self-confidence	2							

Appendix B – Communicative Orientation to Language Teaching, Part A

CULT PART A

Communicative Orientation of Language Teaching Observation Scheme

Grade(s) Observer

Lesson (min.) Visit No

Date Page

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TIME	ACTIVITIES & EPISODES	PARTICIPANT ORGANISATION			CONTENT			CONTENT CONTROL	STUDENT MODALITY	MATERIALS		
		Class	Group	Indiv.	Manag.	Language	Other topics			Type	Text	Source
1	2	3 T↔S/C	6 Same task	8 Same task	10 Procedure	12 Form	16 Narrow	18 Teacher/Text	21 Listening	26 Minimal		30 L2-NNS
		4 S↔S/C	7 Different tasks	9 Different tasks	11 Discipline	13 Function	17 Broad	19 Teacher/Text/Stud.	22 Speaking	27 Extended		31 L2-NS
		5 Choral				14 Discourse		20 Student	23 Reading	28 Audio		32 L2-NSA
						15 Socioling.			24 Writing	29 Visual		33 Student -made
									25 Other			

Appendix C – Consciousness-Raising Questionnaire

Please write down answers to the following questions for homework

1. When you are in English class, who can help you improve your English?

2. What kind of help can you get from others in English class?

3. How much help can you get from others in English class?

Table C.1 - Treatment Group - Consciousness-Raising Questionnaire
n=9

Questions	Answers	
1. When you are in English class, who can help you to improve your English?	Teacher	9
	Other students/friends	9
	Me	2
2. What kind of help can you get from others in English class?	Pronunciation	7
	Grammar	4
	Fluency	2
	Vocabulary	5
	Advice/tricks	1
	Correct mistakes	7
3. How much help can you get from other people in English class?	A lot/unlimited	6
	Some	1
	Just a little	2

Table C.2 - Control Group - Consciousness-Raising Questionnaire
n=14

Questions	Answers	
1. When you are in English class, who can help you improve your English?	Teacher	13
	Other students/friends	9
	Me	2
2. What kind of help can you get from others in English class?	Pronunciation	3
	Hearing them speak/ their mistakes	1
	Correcting their mistakes	4
	Vocabulary	5
	Practise speaking/ fluency	4
	Explanations	1
	Writing	1
3. How much help can you get from other people in English class?	A lot/unlimited	8
	Some	0
	Not a lot/ a little	6

Appendix D – Post-Treatment Questionnaire

Friday Class (treatment group)

For: Sarita Kennedy yurf@hotmail.com

Je l'apprécierais beaucoup si vous prendiez un moment pour répondre aux questions suivantes. Merci.

1. Pensez-vous que vos habiletés orales en anglais ont amélioré depuis le début du cours? Si oui, quels aspects ont amélioré?

2. Est-ce que le fait d'être enregistré vous dérangeait quand vous parliez? Si oui, qu'est-ce qui vous dérangeait?

3. Parler en anglais sans erreurs a quelle importance pour vous?

4. Est-ce que vous pensez que certaines erreurs en anglais sont pires que des autres? Quelles erreurs?

5. Prononcer *th-* comme un anglophone a quelle importance pour vous?

6. Avez-vous donné de l'aide avec la pronunciation de *th-* à quelqu'un en classe (dit What? ou répété le son érroné correctement à votre interlocuteur)?

7. Est-ce que c'était difficile pour vous de donner de l'aide? Pourquoi ou pourquoi pas?

8. Est-ce que quelqu'un vous a donné de l'aide avec la pronunciation de *th-*? Pensez-vous que l'aide valait la peine? Pourquoi ou pourquoi pas?

9. Pensez-vous que votre pronunciation de *th-* a changé depuis le début du cours? Comment a-t-elle changé?

10. L'espace ci-bas est prévu pour vos commentaries, vos plaintes, ou vos suggestions.

Post-Treatment Questionnnaire

Wednesday Class (control group)

For: Sarita Kennedy yurf@hotmail.com

Je l'apprécierais beaucoup si vous prendiez un moment pour répondre aux questions suivantes. Merci.

1. Pensez-vous que vos habiletés orales en anglais ont amélioré depuis le début du cours? Si oui, quels aspects ont amélioré?

2. Est-ce que le fait d'être enregistré vous dérangeait quand vous parliez? Si oui, qu'est-ce qui vous dérangeait?

3. Parler en anglais sans erreurs a quelle importance pour vous?

4. Est-ce que vous pensez que certaines erreurs en anglais sont pires que des autres? Quelles erreurs?

5. D'après vous, quels sont vos problèmes en parlant anglais?

6. Est-ce que vous saviez quel était l'objectif reel de ce project de recherché? Si oui, comment avez-vous appris quel était l'objectif?

7. L'espace ci-bas est prévu pour vos commentaries, vos plaintes, ou vos suggestions.

Appendix E – Accuracy Scores

Table E.1 - Treatment Group – Pretest and Posttest Accuracy Scores

	Learners	*th*/Obligatory Contexts (Pretest)	*th*/Obligatory Contexts (Posttest)
1	Ca	.441	.195
2	El	.508	.615
3	EmS	.295	.370
4	EmD	.174	.120
5	Es	.562	.573
6	Fa	.392	.208
7	Fra	.257	.121
8	Ger	.341	.256
9	Gu	.123	.109
10	Jon	.238	.272
11	Mar	.600	.385
12	MarL	.522	.376
13	Me	.585	.404
14	Ni	.317	.396
15	SA	.712	.420
16	Son	.800	.696
17	Syl	.413	.192

Table E.2 - Control Group - Pretest and Posttest Accuracy Scores

	Learners	*th*/Obligatory Contexts (Pretest)	*th*/Obligatory Contexts (Posttest)
1	An	.605	.368
2	AnL	.312	.211
3	Co	.357	.255
4	El	.157	.270
5	Fa	.280	.275
6	Fi	.607	.536
7	Gen	.212	.048
8	Ja	.043	.120
9	Mar	.268	.542
10	MA	.416	.035
11	MC	.655	.448
12	ME	.146	.274
13	Na	.152	.175
14	Ol	.600	.693
15	RA	.416	.311
16	Ran	.903	.787
17	Seb	.173	.593

Appendix F – Consent Form

CONSENTEMENT À LA PARTICIPATION À UN PROJET DE RECHERCHE

Je déclare, par les présentes, consentir à participer à un projet de recherche sous la direction de Sarita Kennedy, du département de linguistique appliqué de l'Université Concordia

A. OBJECTIFS DU PROJET

J'ai été informé que le but de ce projet de recherche est le suivant :

- Faire une enquête sur le travail de groupe dans les classes d'anglais, langue seconde.

B. PROCÉDURES

- J'ai été informé que le projet de recherche comprendra l'enregistrement, audio et écrit, des discussions des étudiants et du professeure;
- J'ai été informé que ce projet n'interrompra pas indûment le cours normal des activités pédagogiques et que ma participation audit projet n'affectera pas de manière négative mon apprentissage du matériel de classe;

C. CONDITIONS À MA PARTICIPATION

- Je comprends et j'accepte que ma participation à ce projet de recherche est
  - CONFIDENTIEL (La recherchiste connaîtra mon identité, mais ne la dévoilera pas)
- Je comprends et j'accepte que les données de cette recherche puissent être publiées;
- J'ai été informé que j'ai le droit de refuser que les données qui me concernent soient utilisés;
- De plus, j'ai été informé que mon refus de permettre l'utilisation des données qui me concernent n'affectera pas, de quelque manière que ce soit, mon évaluation

J'AI LU ET COMPRIS DE MANIÈRE DILIGENTE LES DISPOSITIONS DE CE CONSENTEMENT ET J'ADHÈRE VOLONTAIREMENT ET DONNE MON CONSENTEMENT LIBRE À MA PARTICIPATION À CE PROJET

NOM (Veuillez écrire lisiblement) _____

SIGNATURE _____

SIGNATURE DU TÉMOIN _____

DATE _____

Appendix G – Video Script

CONVERSATION 1

A: Do you know the answer to question number six? I can't figure it out.

B: I ting dat de answer is-

A: I what?

B: I think that the answer is "to boldly go where no one has gone before."

A: Ah.

CONVERSATION 2

A: So, when did you come to Montreal?

B: Well, I was in Chicoutimi for a long time, but I arrived here at de age of 20.

A: (nicely) At the age of 20.

B: At the age of 20. How about you?

CONVERSATION 3

A: I need some more space. Where can I put my books and all this stuff?

B: Put it over dere-

A: (rudely) No, not dere! There!

B: Over there wit de-

A: No, th-, th-!! With the! Come on!

B: (frustrated) With the paper, all right!?