

University Students' Willingness to Communicate in the Oral English Class: Problems, Causes and Suggestions

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Abstract. As is revealed in the past research, students' willingness to communicate (WTC) plays an important role in enhancing their communicative competence. However, improving students' WTC has not been easy, which is especially so in the case of my students. So, to better identify this problem, and seek out the underlying causes, three models are employed as the basis for the analysis based on my students. It is found that reticence, low L2 self-confidence, and pronunciation mistakes are the major WTC-related problems. The causes to these problems are also examined from the perspective of WTC. Based on the analysis of problems and causes, some practical suggestions are made in the end. It is hoped that this research will be conducive to scholars in the same field, and to teachers teaching the same course.

Keywords: willingness to communicate; reticence; self-confidence; anxiety

1. Introduction

Communicative competence is a key objective in teaching a foreign language. It refers to the ability of a speaker to use proper verbal (and body) language to respond to different communication needs and social situations. To enable students to communicate in a competent way, a series of factors needs to be considered, which include vocabulary, familiarity with the topic, chances to speak and so on. Among them willingness to communicate (WTC) is one which is attached great importance.

WTC is an essential factor in developing students' oral English. According to my observation, the WTC of students can help students to have greater progress. For example, those students who are more willing to speak in class are more likely to have greater progress in the long run. Another fact worthy of attention is that students with the same or similar level in written tests may vary sharply in their WTC. The imbalance in students' WTC and their parted oral English achievements have triggered my interest in it. On the other hand, a series of problems I noticed in my class are related to WTC. It seems that a close examination of the WTC in my students can help my teaching significantly.

Basing on the practical need, I began to collect materials on WTC and probed into the issue. Based on the literature I collected, this paper is aimed at summarizing the problems related to the WTC of my students, examining the causes underlying these problems, and then finding out solutions to these problems. It is hoped that this study can help teachers better understand the underlying factors that hinder students' unwillingness to speak and find a way to solve this problem.

2. Context

The college I'm teaching in is a private one with a history less than 2 decades. The English department is a stable one among all the departments. Though there had been some structural changes in the history of my college, the English department remained. It enrolls English majors every year. The students I'm teaching is from the English department. They are English majors from a class of 35 students, mostly girls. This is their second year in the college and the fourth term for them to have the oral English class. In the past three terms, they had two oral English teachers. The feedback from the other two teachers is vague. Those two teachers did not give me enough

useful information about them. According to my observation, most students want to perform well, but when chances to speak do come, many would be hesitant. Though they had learned oral English for one and a half years, a small portion of my students cannot speak fluently when the topic is comparatively difficult.

The key teaching goal of this term is to practice students' ability to debate. To serve this purpose, 6 periods were devoted into the three debates in this term. To help them grasp the debate skills, some prior-debate practice was given which include some basic debate and shorthand skills. A large part of my observation about my students' WTC is from the three debates.

On the whole, the communicative competence of my students is not good enough. The following are some features related to my teaching context.

First, the students do not have a strong confidence in their oral English. Compared with the students in elite colleges in China, the students in my college can be classified as low achievers since their Gaokao (the National College Entrance Examination in China) scores are ranked at the bottom level of all the undergraduates. Considering this, the students do not have enough confidence in themselves in speaking. Second, the motivation of the students are not very strong in learning English, which has led to a certain degree of reticence. Anxiety is another reason which contributes to this situation. Seen from the debates and class activities, many students feel anxious when they speak. A typical sign of their anxiety is that some students would suddenly lose all lines in the debate, though actually they prepared for the debate.

3. Literature Review

3.1 Willingness to communicate

Willingness to communicate is a construct originally developed by McCroskey and Baer. After observing various talking behaviors of different people, they noticed that there is a personality variable underlying it, which they call "willingness to communicate". To measure a person's WTC, they designed a scale which includes four communication contexts and three types of receivers, the willingness to communicate (WTC--Trait Form) scale as is called [1].

The construct of WTC does not come from nothing; it has a close connection with previous research. As is stated by McCroskey and Baer, the WTC construct proposed by them has three roots [1]: unwillingness to communicate by Burgoon [2], predispositions toward verbal behavior by Mortensen, et al. [3], and shyness by McCroskey and Richmond [4].

It should be noted that WTC was firstly proposed for L1 learning, and L2 WTC is often not in positive correlation with L1 WTC. Thus, a specific definition for L2 WTC was proposed as "readiness to enter into discourse at a particular time with a specific person or persons using an L2" (MacIntyre et al., 1998, p. 547) [5].

In 1990s, scholars applied WTC into the research of L2, and some important models involving L2 WTC were put forward, three of which will be discussed in detail in the following.

3.2 Models related to L2 WTC

In the following, three models involving WTC will be introduced. These models involve a series of variables that can influence WTC. These factors(variables) are essential in the research related to WTC. The variables may vary in each model, but they are connected historically. A close examination of these variables may help to understand the evolution of this concept. A basic idea is that L2 WTC is evolved from L1 WTC, so some variables that will be discussed were actually those already discussed in the context of L1 WTC and related literature concerning similar concepts. Besides, some variables/factors were already discussed in the context of L2 use though without being directly termed as a L2 WTC variable or factor, one example of which is the research of classroom anxiety by Horwitz et al. [6].

3.2.1. MacIntyre and Charos's model [7]

In the late 1990s, WTC was introduced to L2 research. Though WTC was originally put forward for L1 research, L2 WTC was found greatly different from L1 WTC. Nonetheless, the L2 WTC models were closely related to L1 WTC models.

The first L2 WTC model was put forward by MacIntyre and Charos [7]. It was developed from the Gardner's socio-educational model of L2 learning [8] and MacIntyre's model of willingness to communicate [9]. Gardner examined the role of attitudes and motivation in L2 learning and contended that integrativeness and attitudes toward the learning situation are the two basic attitudes that gives rise to a learner's motivation level[8], thus forming his educational model of L2 learning. MacIntyre's model of willingness to communicate was designed for L1 learning. According to this model, a person's WTC is decided by his/her perceived competence at communication and his/her communication anxiety, to which introversion is a root factor --another factor being self-esteem [9].

MacIntyre and Charos's model (see Figure1) is actually a combination and development of the two models mentioned in the previous paragraph. In this model, they listed 6 global traits/elements that contribute to a person's language-related affect. The six elements include intellect, extroversion, agreeableness, emotional stability, consciences and context. In the conclusion, they recognized WTC as a profitable addition to related research and found that it could well suit the L2 context. Global personality traits had influence on WTC, but they are implicated in an indirect way [7].

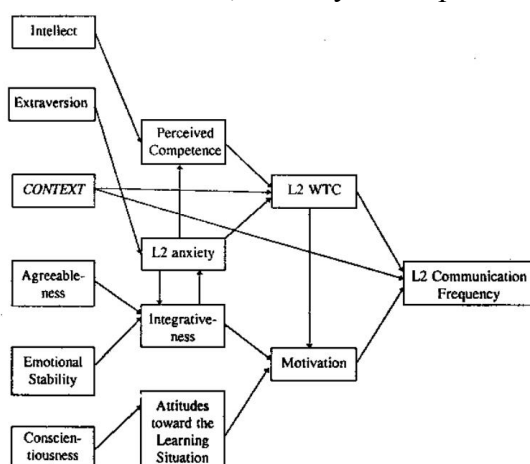


Fig.1 Portion of MacIntyre and Charos's (1996, p. 12) model [7]

3.2.2. MacIntyre, Clément, Dörnyei and Noels' Pyramid Model [5]

In L2 communication, students' willingness vary greatly. To figure out the reasons why students would seek or avoid L2 oral communication, MacIntyre, Clément, Dörnyei and Noels tried to seek out the variables that affect a student's WTC and the interrelations among them. Different from the argument of McCroskey and Baer that WTC was a personality trait rather than a variable which is based on the situation the speaker is in [1], they included situation as a variable to WTC. Furthermore, they found that L2 WTC is highly unlikely to be the same with L1 WTC [5]. With full awareness of these facts, a heuristic model (also called the pyramid model) was proposed by them (see Figure 2). In this model, MacIntyre et al. made a distinction between situational influences and enduring influences. The situational influences include the variables/categories listed in the first three layers, while the enduring influences are listed in the latter three layers [5]. A detailed description of the six layers is given as follows.

The first layer of the model is communication behavior. Defined in a broad sense, it can refer to almost any behavior that involves L2 use. According to MacIntyre et al., students should set maximizing communication opportunities as their ultimate goal in L2 use. The second layer is willingness to communicate. Here a formal definition is given to WTC (see 2.1). Basing on the analysis of students with higher WTC, they found some decisive features underlying their behavior, for example, self-confidence and personality. In discussing WTC, intention is placed at the center.

To produce communication behavior, both intention and opportunity are necessary in the process. The third layer is situated antecedents of communication, which include two types: the desire to communicate with a specific person and state communicative self-confidence. They are regarded as the most immediate factors that determine WTC. The fourth layer of the model is the motivational propensities. In this layer, motivation is divided into interpersonal and intergroup motivations. They form the fourth layer together with L2 confidence. For interpersonal motivation, it is closely related to personal traits and temperaments, forming the affective aspect of motivation. In contrast to interpersonal motivation, the source of intergroup motivation is the sense of belonging to a certain group of the speaker (the social aspect of communication). L2 confidence can be taken as an indicator of the relationship between the speaker and the L2. It is made up of the speaker's language anxiety and his/her self-evaluation of his/her L2 ability. The fifth layer is the affective and cognitive context, which seem remote in relation to the particular speaking situation. Variables in this layer include intergroup attitudes, social situation, and communicative competence. The sixth layer is the social and individual context, which include two variables: intergroup climate and personality. It should be noticed that personality does not exert direct influence on L2 communication, so a fixed pattern (or profile) of a good language learner cannot be drawn from a person's personality traits[5].

Though MacIntyre et al. view their model as a starting point to the WTC related constructs, it should not be regarded simply as a starting point. Rather, it is very conclusive, since most of the conspicuous variables are covered and found their place in it. According to this model, WTC is a situational variable in itself and is affected by both enduring influences and other situational influences [5].

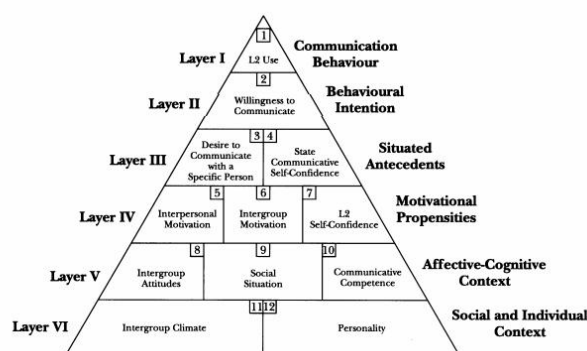


Figure 2. MacIntyre, Clément, Dörnyei and Noels' (p. 547) Pyramid Model

3.2.3. Wen and Clément's model [11]

Though the model by MacIntyre et al. is comprehensive and a wide variety of variables is put into consideration, it is still up to the verification of the real teaching practice, in which culture plays an important role. According to McCroskey and Richmond, group similarities weigh more than individual differences when students from a certain culture are assessed in terms of communication[12]. With a view to the difference between the Chinese and Western culture, Wen and Clément extended MacIntyre et al.'s model based on the characteristics of Chinese culture (see Figure 3).

In the research by Wen and Clément, the cultural origins of unwillingness to communicate are explored and regarded as much more important variables than stated in MacIntyre et al.'s model. They sought out two types of reasons: an other-directed self and a submissive way of learning. In the Chinese culture, people are very sensitive to the moral judgement and attention from other people, so they have a strong awareness of protecting their "face" --their image in the eyes of others. Another aspect of the Chinese culture is that they have a strong sense of group belonging, and they tend to distinguish between those in and outside their own group, thus keeping a social distance from outsiders. These two psychological features are typical to Chinese students and can be termed as other-directed self. The submissive way of learning is rooted in the Chinese culture of respect to authority. In schools, the teacher is considered as the authority and the students tend to obey them;

the students would seek the judgment of the teachers when they speak or write. Another root for their submission to authority is that they attach great importance to grammar, so violation of grammatical rules can often lead to low self-confidence and a feeling that their work is only half done. [11]

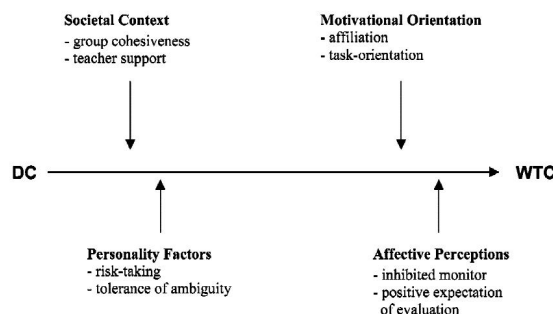


Figure 3. Wen and Clément's (p. 25) model [11]

Basing on the exploration of the Chinese cultural traits, Wen and Clément proposed some changes to the second and third layers of MacIntyre et al.'s model. To be specific, a series of variables (intervening factors) between WTC and desire to communicate with a specific person (DC) are defined and specified. These variables include four general types, which include societal context, personality factors, motivational orientation, and affective perceptions. In terms of societal context, in the Chinese setting, the classroom atmosphere is decided by group cohesiveness and teacher support. The personality factors may influence language learning, whether positively or negatively. In the Chinese culture, Chinese students tend to avoid risk so as to save face, and they are less likely to tolerate ambiguity. These two aspects are the personality factors that are specific to the Chinese setting. As to motivational orientation, the Chinese students tend to take part in group activities because they feel secured when they are close to other group members and because they want to avoid disapproval of their group or classmates [11]. A big difference between the model by MacIntyre et al. and that by Wen and Clément is the place of affective-cognitive perceptions in the two models. In the former model, it is placed in the fifth layer while in the revised one it is placed in the second layer.

In the revised model by Wen and Clément, social-psychological factors are included in the range of WTC, and more variables are included in the conceptualization of it [11]. This offers a more comprehensive understanding of the cultural factors in the enhancement of WTC, which is conducive to L2 teaching and learning in the Chinese context.

4. Problems

Though seemingly obvious, there should be a distinction between the problems of students in speaking and the problems of teachers in teaching. These two problems are closely related yet structurally different. They converge into the same sphere of classroom teaching. To the teachers, they should be able to figure out the problems of the students, and adjust their classroom teaching based on them. The problems of the students are diversely oriented, since there are many factors contributing to them. In this paper, the principle perspective is WTC, so the problems, causes and suggested solutions will only be discussed within this perspective.

Before the class I'm teaching was assigned to me, the former teacher had a choice to choose between two classes. It's hard to say whether she had some preference over the other one because she did not reveal the reason for her choice. After this class was assigned to me, some features of this class were found, which I will illustrate in the following.

4.1 Reticence in class

A typical phenomenon in my oral English class (and maybe in all the oral English classes in my college, as is discussed and agreed by other oral English teachers) is students' reticence to speak. In

the oral English class I'm teaching, only a small amount of students are very active in speaking (around 20%). When I expect volunteers to finish a task that involves only one student, most students would keep silent. Some students would give up speaking chances when the chances are easily available; some students would be reluctant to speak even when the task is not difficult to them; and some of them would try to "hide behind others" when there is a group task assigned to them. When asked about why they were not so willing to speak, some students would just give a smile and some of them would answer by saying that somebody else can do better (so he/she quits).

4.2 Low L2 self-confidence

The students' low level of L2 self-confidence is prominent in my class. Many students don't feel confident enough when answering questions from teachers or when they are making a presentation in class, especially when there is a crowd of people at presence (stage fright). In such a situation, they may forget what they have already prepared, and even some familiar lines would be forgotten. If this kind of failures repeats, their confidence may be severely damaged.

Another aspect of low L2 self-confidence is that some students don't seem to have sensible evaluation of their own level of oral English. Some may overestimate their level; others may do otherwise. A typical example is a female student I met in the English corner (a place where English learners gather together regularly to practice oral English). She used to be quiet in my class, so I thought she was probably a low-achiever in oral English. But when she was forced to talk with me because of the arrangement of this activity, she was found to be competent to make meaningful communications. When asked why she was quiet in my class, her answer was that she was not confident and she was afraid of making mistakes.

4.3 Pronunciation mistakes

The students make a number of pronunciation mistakes in the oral English class. These mistakes roughly fall into three types. The first type is those made because they don't know the right pronunciation for different reasons. Some students would read the words which they do not know their pronunciation for in a guessing way, making a lot of pronunciation mistakes. Others may make mistakes because they are in a nervous state. For example, in a sound recording, I found a student read break as /brek/, but when I asked her to read this word again, she read it as /breik/, and she was very sure that /breik/ is the only correct pronunciation for this word. This case is not the only one of this type in my teaching experience. The third type of mistake is that they would add the pronunciations of /-s/ and /-d/ to their speaking (mostly after a noun, a verb, or an adjective). Some students would do so randomly in their speaking. When asked about why they would do so, they were not able to figure out the reason, and some of them were even unaware of it.

5. Cause Analysis

Though the three problems listed in the previous part are closely related to WTC, it's not appropriate to say WTC is the only reason for these problems. Actually, speaking is related to many factors. When examined from a different perspective, some other reasons may be sought out. But in the following, the problems discussed in the previous part will be examined in the framework of WTC.

5.1 Causes to reticence in class

The reasons for students' reticence vary from person to person, but it is generally agreed that the Chinese cultural traits play a distinctive role in the reticence of Chinese students. As is concluded by Wen and Clément, the Chinese have a strong awareness of their own "face", they tend to protect their "face" and would avoid the risk of losing face. Besides, the Chinese have a strong sense of "being in a certain group", and would keep away from people who are not in the group [11]. These reasons have led to their hesitation and unwillingness to communicate. Apart from the reasons related to the psychological or cultural traits of the students, the reason from the class or the teacher

should not be ignored. The class I'm teaching, which is made up of 35 students, is not a small one, so the chances for the students to talk with the teacher is actually rather small, and subsequently they cannot always get the feedback and correction from the teachers. Since the students are very expectant of the teacher feedback (a psychology that is typical of the Chinese, as is concluded by Wen and Clément), they can easily get frustrated about their situation[11]. In some cases, they would even think it useless to speak, because they can't get the feedback from their teachers.

5.2 Causes to low L2 self-confidence

Many reasons contribute to the low L2 self-confidence of my students. According to MacIntyre et al., the concept of L2 self-confidence is the combination of language anxiety and self-evaluation [5]. Anxiety is an oft-discussed reason that leads to low L2 confidence. Though scholars have different understanding to the nature of anxiety, it is generally agreed that it is one of the most important factors. As a kind of subjective feeling, it is closely related to one's feeling of uncertainty. The second reason that leads to low L2 self-confidence is the low self-evaluation of students. It seems that the students' judgement of their oral English level is influenced by the score of their written tests. Since the Gaokao score of my students is at the shallow end of the Gaokao system, the students seem to have made a low evaluation of themselves in their oral English based on their Gaokao score. The result of other written tests (e.g. final exams) may also exert influence on students' perception of their own oral English level. They would assume that students with high scores from written tests are naturally better in oral English--a myth which should be shattered. Shyness is another important factor, which has also been discussed by many scholars. When being watched by their classmates or the teacher, they would feel embarrassed and nervous. This may lead to reduced confidence in L2 use.

5.3 Causes to pronunciation mistakes

The main reason for students' pronunciation mistakes is their unfamiliarity with the new words. When the students cannot clearly remember the pronunciation of a word that they have tried to memorize, they would try to speak out this word in a guessing way as a kind of substitute. This would lead to pronunciation mistakes. So, in nature, this is largely a problem of vocabulary rather than speaking. But these mistakes would occur when speaking is made, and the students are not always aware of these mistakes, so this is not merely a vocabulary problem. Besides, as is previously mentioned in 3.3, some students would add the pronunciations of /-s/ or /-d/ to the end of some words (mostly nominal words). At the root of this problem is the anxiety of students. According to my own observations, the occurrence of such mistakes is more conspicuous in the final exam. So, reducing anxiety in speaking can be a good solution to this problem.

6. Suggestions and Solutions

6.1 Utilizing teacher talk to overcome reticence in class and to enhance L2 confidence

Teacher talk is essential not only to classroom organization but also in the acquisition process of students [13]. In the teaching process, the teacher should optimize teacher talk so as to overcome reticence in class and enhance L2 confidence. First, teacher talk should be improved in terms of tone, language quality, feedback and reducing sense of authority. The emotion of students can be influenced by the tone of the teacher. A teacher can better infect his/her students with his/her enthusiasm and cheerful tone. Second, the teacher should improve his/her language quality while reducing the total amount of his/her speaking time. Many students would be less active in a class where the teacher talks too much. Besides, it is suggested that the teacher should give prompt and direct feedback to the students while protecting the face of the students. Feedback from the teacher can help students to identify their own problem in speaking, build greater confidence when positively evaluated, and establish stronger emotional connection between the teacher and students. Fourth, teachers are suggested to reduce his/her sense of authority in the teacher talk. Interrogative sentences like "Understand?", "Clear?" should be reduced. It is hoped that in doing so, the students can change their submissive way of learning.

6.2 Less intervening in students' oral presentation

When the students are making a presentation or having communication of any kind, it is advisable not to intervene in the L2 production. As is discussed by Wen and Clément, the Chinese students attach great importance to their "face", public intervening into the presentation or conversation would make the students feel they have lost face, thus making him/her nervous or even frustrated [11]. Teachers should be aware that grammatical mistakes should be tolerated to a certain degree, and they should pay more attention to the real communication in the process. In addition, most mistakes made in the conversation or presentation are transient and situation-specific, and the students may not be able to recall them when they are referred to. What's more, over emphasis on grammar or "the right way" may reduce the WTC of students because they may over-consider the "risk" involved. So, a better approach to the "mistakes" is to let them go. Instead, the teachers should focus more on the information conveyed in the communication.

6.3 Choosing topics familiar to students

It is generally agreed that familiarity with the topic can strengthen students' L2 confidence and lead to better oral performance. According to the research by Chang, students showed better performance in word amount, speaking time, and fluency when the topic is familiar to them[14]. Thus, it is advisable for teachers to choose proper topics so as to boost WTC and oral production. To get higher involvement, the teachers can even invite the students to get involved in choosing the topics, if possible. In my own teaching in this term, the topics for debate which are decided by my students by voting are more popular than the topics I planned. The performance of my students in these debates are better than expected in general. One thing that should be warned against is that the students tend to choose easier topics, but according to Chang, the less familiar topics is conducive to student's language ability [14]. Therefore, the teacher should have a clear idea about what to teach and make a plan to ensure the teaching goals can be achieved.

6.4 Maximizing learning opportunities both in and after class

The teacher should maximize learning and practicing opportunities both in and after class so as to enhance WTC. Since the students are eager to get the evaluation and feedback from the teacher because the teacher is the authority in the class, it is important for teachers to maximize learning opportunities in and after class to give the students chances they need. According to Kumaravadivelu, learner involvement and teacher questioning have huge impact on enhancing learning opportunities inside the classroom[15]. The previously discussed suggestions like teacher talk and topic familiarity are in line with these two aspects. Kumaravadivelu also suggested maximizing learning opportunities outside the classroom by connecting the classroom with other communities [15]. In terms of learning opportunities outside the classroom, an effective way is to build up virtual communities. In an empirical research by Zhu & Wang, it is found that the students have a positive attitude towards the MT-based online learning and their level of engagement is improved in the virtual context[16]. In the time of the Covid-19, many schools have applied MT or similar online teaching platforms to support their teaching, which has been proved successful in many ways. So online communities can be a promising way to enhance the WTC of students.

6.5 Other possibilities

There are some other ways which can also be effective in enhancing the WTC of students. The first way is to have small groups in class. It is generally agreed that when the groups are comparatively smaller, the students can get more chances to talk within the group. So smaller groups are suggested when the class is not big. But when the class is a big one, the teacher can adjust the size of the group according to practical needs. For example, the teacher can divide the class into a certain number of big groups, and split the big group into two or three smaller groups when a small group is possible so as to enhance communication. The second way is to give psychological guidance to students. The teachers should try to improve students' ideas about "face" and self-esteem, and encourage students to attach less importance to authority and grammatical rules so as to break away from their psychological constraints. Another workable suggestion is that

teachers should present themselves in a less authoritative way to the students so that the students can communicate with the teacher in a more equal posture. The fourth way is forming a de-centered class. The Chinese students are submissive to authority [11]. Because of this, some students would think the group leader or some excellent students are naturally better than themselves, and give up some chances subsequently. This kind of attitude would hinder the full development of individuals. So, it is advisable for the teacher to set up certain mechanisms to stop the over performance of these leader students and give equal chances to those students who are used to keeping silent. It is hoped that a de-centered class can fully stimulate the silent majority and help the class to have bigger improvements.

7. Conclusion

In conclusion, this paper collected and analyzed the relevant literature about students' willingness to communicate. Then it analyzed the problems in the author's own teaching, the causes for the problems. Basing on the analysis of his teaching situation, the author offered some solutions to his own teaching context (and possibly to teaching in similar contexts). The role of the teacher is a key issue in the suggestions. Teacher talk is highly valued as a key method. The teacher is supposed to intervene less in the oral communication, and maximize learning opportunities in the teaching. What's more, topics which are familiar to students are suggested.

It is hoped that this research can help teachers to better comprehend the significance of WTC in the oral English class and help teachers in similar teaching contexts to figure out the possible reasons for low WTC and enhance the WTC of students.

Acknowledgments

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References

- [1] J. C. McCroskey and J. E. Baer "Willingness to communicate: the construct and its measurement," [R]. (Paper presented at the annual convention of the Speech Communication Association, Denver, CO.1985.)
- [2] J. K. Burgoon, "The unwillingness to communicate scale: Development and validation," Communication Monographs, vol. 43, Jun. 1976, pp. 60-69, doi:10.1080/03637757609375916.
- [3] D. C. Mortensen, P. H. Arnston, and M. Lustig, "The measurement of verbal predispositions: Scale development and application," Human Communication Research, vol. 3, Dec. 1977, pp.146-158, doi:10.1111/j.1468-2958.1977.tb00513.x
- [4] J. C. McCroskey and V. P. Richmond, "Communication apprehension and shyness: Conceptual and operational distinctions," Central States Speech Journal, vol. 33, Fall 1982, pp. 458-468, doi: 10.1080/10510978209388452
- [5] P. D. MacIntyre, R. Clément, Z. Dörnyei and K. A. Noels, "Conceptualizing willingness to communicate in a L2: A situational model of L2 confidence and affiliation," The Modern Language Journal, vol. 82, Winter 1998, pp. 545–562, doi:10.1111/j.1540-4781.1998.tb05543.x
- [6] E. K. Horwitz, M. B. Horwitz, and J. Cope, "Foreign language classroom anxiety, " The Modern Language Journal, vol. 70, Summer, 1986, pp. 125–132, doi:10.1111/j.1540-4781.1986.tb05256.x
- [7] P. D. MacIntyre and C. Charos, "Personality, attitudes, and affect as predictors of second language communication," Journal of Language and Social Psychology, vol. 15, Mar. 1996, pp. 3-26, doi: 10.1177/0261927X960151001
- [8] R. C. Gardner, Social psychology and second language learning: The role of attitudes and motivation. London: Edward Arnold, 1985.

- [9] P. D. MacIntyre, "Variables underlying willingness to communicate: A causal analysis," *Communication Research Reports*, vol. 11, 1994, pp. 135-142, <https://doi.org/10.1080/08824099409359951>
- [10] L. R. Goldberg, "The development of markers for the big-five factor structure", *Psychological Assessment*, vol. 4, 1992, pp. 26-42, <https://doi.org/10.1037/1040-3590.4.1.26>
- [11] W. P. Wen and R. Clément, "A Chinese conceptualisation of willingness to communicate in ESL," *Language, Culture, and Curriculum*, vol. 16, 2003, pp. 18-38, <https://doi.org/10.1080/07908310308666654>
- [12] J. C. McCroskey and V. P. Richmond, "Willingness to communicate: Differing cultural perspectives," *Southern Communication Journal*, vol. 56, 1990, pp. 72-77, DOI: 10.1080/10417949009372817
- [13] D. Nunan, *Language teaching methodology: a textbook for teachers*. New York : Prentice Hall, 1991.
- [14] Y. Chang, "The influence of content knowledge on NNS-NNS conversations," *Jalt Journal*, vol. 30, Nov. 2008, pp. 153-172.
- [15] B. KUMARAVADIVELU, *Beyond methods: Macrostrategies for language teaching*. New Haven and London: Yale University Press, 2003.
- [16] Q. Zhu and M. Wang, "Team-based mobile learning supported by an intelligent system: Case study of STEM students," *Interactive Learning Environments*, vol.28, 2020, pp. 543-559. <https://doi.org/10.1080/10494820.2019.1696838>