

Pre-service Teacher Cognition on Corrective Feedback: A Case Study

Sasan Baleghizadeh¹ and Saeed Rezaei²

Abstract: Recent research has revealed huge interest in pursuing studies on teachers' cognition. The present paper is a case study designed to investigate a pre-service teacher's beliefs about corrective feedback at the Iran Language Institute (henceforth ILI). To do so, a pre-service teacher called Ali (a fictitious name) volunteered to participate in this study prior to attending his Teacher Training Course (henceforth TTC) held by the ILI. In order to unravel his beliefs about corrective feedback and the sources of such beliefs, a questionnaire developed by the researchers was given to him to complete. Later on, an informal interview was conducted by the second researcher in order to fathom Ali's beliefs and also meet the triangulation criteria. Two weeks later, after Ali was officially employed as an English teacher at the ILI, the second researcher observed his class to see how far Ali's beliefs had altered after the TTC. The observation session revealed a modification and change in Ali's beliefs. The findings indicated that his beliefs had rigorously changed after the TTC. The results are hence reported and discussed fully with possible pedagogical implications and rich areas of research for further exploration.

Keywords: Teacher Cognition/belief, Corrective Feedback.

1- Introduction

In recent years, considerable research has been conducted in the field of general education on teachers' beliefs and cognition as a means of understanding how prospective teachers learn to teach [1-3]. According to [4:23], cognition is defined as "the unobservable cognitive dimension of teaching - what teachers know, believe or think." Not unlike the definition given above, defines teacher beliefs as attitudes, values, beliefs, thinking, images, knowledge, conception, working principles, practical knowledge, and implicit theories embraced by teachers [5]. The proliferation of terminologies such as cognition, belief, knowledge, conception, etc. is only due to the innovative terminologies which refer to similar concepts if not exactly the same concepts. The literature has become replete with these terminologies including pedagogical knowledge, specific pedagogical knowledge, teachers' language awareness, and personal pedagogical systems, to name only a few (see for a comprehensive review) [6-10].

Not surprisingly, the increased interest in teachers' beliefs and subsequently learners' beliefs has spread into the field of English language teaching coinciding with a similar interest in another research area, namely, corrective feedback, as attested by the emergence of numerous studies on this issue [11-18].

Corrective feedback takes the form of responses to learner utterances that contain an error. There are seven main types of corrective strategies identified in the literature (recasts, explicit correction, clarification requests, metalinguistic information, elicitation, repetition, and translation), of which recasts have received the most attention [15].

In the field of language teaching, the focus of early research on teacher's beliefs and practices had been very much on the general issues about pedagogical beliefs. Narrowing down the scope of research on teachers' beliefs and practices to a specific area, e.g. corrective feedback, would make it more possible to follow the development of prospective teachers to see if there is a match, or perhaps mismatch, between their beliefs and classroom behavior.

2- Background

Several scholars have recently reflected on the need to investigate teacher cognition with regard to specific language teaching areas. [10:46] classifies teacher cognition research into three main areas:

- Pre-service teacher cognition including, trainees' prior learning experiences and cognitions, trainees' beliefs about language teaching, trainees' decision-making beliefs and knowledge during the practicum, change in trainees' cognitions during teacher education.
- In-service teacher cognition including, the cognitions of novice language teachers, cognitions and reported practices of in-service teachers, cognitions and actual practices of in-service teachers, cognitive change in in-service

Received 2009/24/10 , Accepted 2010/19/03

¹ Assistant professor, Department of English Language and Literature, Shahid Beheshti University, G.C., Tehran Email: sasanbaleghizadeh@yahoo.com.

² Ph.D. candidate of TEFL, Department of English Language and Literature, Allameh Tabataba'i University, Tehran

teachers, comparisons of expert-novice cognitions and practices

- Specific curricular domains, including teachers' cognitions in relation to teaching grammar, reading and writing

One area of language teaching which is extensively researched is grammar and teacher cognition. For example, Borg examined the beliefs of EFL teachers in private language schools in Malta on the teaching of grammar and their use of grammatical terms [9, 19, 20]. Actually, Borg was the one among others who initially brought up the idea of investigating teacher cognition, especially in grammar and grammar teaching. Likewise, Borg analyzed four experienced language teachers' grammatical explanations in the United States [21]. Their analysis revealed that grammatical rules did not feature significantly in the explanations of any of the teachers. Instead, the teachers laid much more emphasis on giving examples during explanations and on the significance of student input in easing their explanations. Another important feature of explanations shared by all the four teachers was encouragement of student questions and allocation of sufficient time to student-initiated discussions. This was based on the belief that active student involvement promoted the process of understanding language. The findings of this study also suggest that "teachers' beliefs about how learners learn and what they know affect their pedagogical strategies" [21:455].

With regard to Communicative Language Teaching (CLT) and the role of grammar, the practical understandings of ten teachers of Japanese were analyzed [22]. The data revealed that the teachers held four particular theoretical understandings of CLT, namely (a) it is about learning to communicate in the second language, (b) it draws mainly on speaking and listening, (c) it involves very little grammar instruction, and (d) it uses time-consuming activities. Surprisingly enough, despite teachers' relatively positive beliefs about CLT, the analysis of their actual teaching indicated little evidence of CLT in practice. The observation data showed reluctance on the part of teachers to promote CLT and indicated that many teachers avoided (or at least challenged or mutated) the few conceptions of CLT that they held. Although most teachers reported using communicative activities such as role-play, games, survey, group work, and simulations, unfortunately, these things were rarely observed. There were few observed student-student interactions in most of the classrooms. Only two teachers actually used role-play of any type, while most relied on traditional practices: teacher-fronted, repetition, translation, explicit grammar presentation practice from

textbook, and little or no L2 use or culture integration [22:509-10].

The findings of this study are significant in that teachers do not necessarily practice what they believe to be working. This might be due to contextual constraints in implementation of certain activities (e.g. large classes which discourage group work activities) or institutional policies (e.g. being forced to follow a prescribed methodology).

The relationship between three ESL teachers' stated beliefs about focus on form and its implementation in intermediate level ESL communicative lessons have also lately been investigated [23]. The findings of this study revealed degrees of both congruence and incongruence in the expressed beliefs and actual practices of each teacher. For example, one of them believed that his role in the classroom was to be a resource for the students, not to direct the lesson. This was observed in his practices inasmuch as his students spent a huge amount of time working in groups. Nevertheless, the same teacher admitted that students should be encouraged to self-correct when they made errors and that communicative activities should not be interrupted to address errors unless these interfered with meaning. In this case the teacher's practices were not consistent with his beliefs. Such inconsistencies were between stated beliefs and observed practices existing in the work of two other teachers in this study. This can be justified by drawing a distinction between theoretical knowledge and practical knowledge.

More recently, non-native EFL teachers' beliefs about grammar and grammar teaching were investigated [24]. The participants were from different workplaces, educational background, gender, and teaching experience. The results of this study were based on the data gathered through a belief questionnaire indicating that their workplace, either school or private institutes, their educational background and teaching experience did have a significant effect on their cognition about grammar and grammar teaching. However, gender did not have any significant effect on their cognition.

Investigating teacher cognition and writing, Borg found that the six beginning teachers' practices in Australia were influenced and shaped by a network of beliefs they held about language, beginning language learning, and learners [25]. She argued that the teachers' cognition had an influential effect on the way the teachers taught writing.

The teaching practices of four pre-service MA TESL teachers in the United States and their perception of second language learning and teaching were scrutinized [26]. This study revealed that pre-service teachers' instructional decisions during a practicum originated in images of teachers, materials, activities and classroom organizations generated by their own experiences as L2 learners. Hence, it was concluded

that the pre-service teachers judged the appropriateness of certain theories, methods, and materials in terms of their own firsthand experience as former students. Besides, the extent to which they approved or disapproved of the content of their teacher training courses seemed to lie on their prior formal and informal language learning experiences. In addition, "the most striking pattern that emerged from these data is the apparent power that images from prior experiences within formal language classrooms had on these teachers' images of themselves as teachers, and their perceptions of their own instructional decisions" [26:449].

Finally, there is a meta-analytic study which is revealing in the field of teacher cognition [3:324-6], based on which it was found that:

- Beliefs are formed early and tend to self-perpetuate even against contradictions caused by reason, time, schooling, or experience.
- Beliefs are prioritized according to their connections or relationship to other beliefs or other cognitive and affective structures.
- The earlier a belief is incorporated into the belief structure, the more difficult it is to alter. Newly acquired beliefs are most vulnerable to change.
- Belief change during adulthood is a very rare phenomenon, the most common cause being a conversion from one authority to another or a gestalt shift.
- Beliefs are instrumental in defining tasks and selecting the cognitive tools with which to interpret, plan, and make decisions regarding such tasks.
- Beliefs strongly influence perception, but they can be an unreliable guide to the nature of reality.
- Individuals' beliefs strongly affect their behavior.
- Beliefs about teaching are well established by the time a student gets to college.

However, despite the importance of researching teachers' beliefs in the field of second language teaching, little, if any, has been empirically done on teachers' assumptions and beliefs with respect to the role of corrective feedback. While proponents and practitioners of CLT have reduced the focus on overt error correction in language lessons, the general consensus in the field is that corrective feedback is important to student achievement. The issue of which corrective feedback techniques are most effective, however, still eludes the field. Proponents of implicit corrective feedback techniques claim that recasts (i.e., teacher's correct reformulation of an erroneous utterance) are effective in getting learners to notice and focus on the form and meaning of the error without breaking the communicative flow or

raising the affective filter [27]. Recent research, however, suggests that recasts often carry ambiguous connotations, especially in CLT classrooms, where fluency takes a front seat to accuracy, and as a result, go unnoticed by learners [28]. Such questions as the following have not until recently been explicitly addressed and answered in teacher preparation programs:

1. Should learners' errors be corrected?
2. When should learners' errors be corrected?
3. Which errors should be corrected?
4. How should errors be corrected?
5. Who should do the correction?

Yet, somehow, teachers deal with their learners' errors in the classroom in one way or the other, whether or not the strategies they use conform to what the research literature suggests they should do. Moreover, given a dearth of studies on the role of teacher cognition in reacting to learner errors, there is clearly a need for studies that delve into this issue. Thus, the purpose of the present case study is to examine what a pre-service teacher, fictitiously named Ali, believes about the role of corrective feedback prior and after a teacher training course (TTC). To this end, the following research questions guided the study:

1. What does Ali as a pre-service teacher believe about corrective feedback in an English language classroom?
2. What are the sources of these beliefs?
3. Do Ali's beliefs about corrective feedback change after the TTC?

3- Methodology

3-1 Participant

Among all the pre-service teachers who were attending the training course held by the ILI as part of its recruitment procedure in winter 2009, Ali volunteered as a case study participant to help the researchers. He was a 25 year-old young man with an inexhaustible supply of energy for teaching. He had no experience in formal language teaching. However, in response to the question why he had opted to teach English, he said, "I LOVE IT."

3-2 Questionnaire

This Questionnaire (see Appendix 1) was designed by the researchers to elicit the following information: demographic information (e.g., age, gender), educational background, training, and any teaching experience the participant might have had. Prior to the present study, this questionnaire was administered to one of the researchers' colleagues at the ILI as part of a pilot study. Possible misunderstandings and vague questions were discarded or modified partly or totally. This questionnaire was mainly designed to discover

teachers' beliefs about the role of corrective feedback. It specifically sought to find teachers' beliefs about the following items:

- Self-Correction: items 1-3
- Peer Correction: items 4-6
- Error Correction Techniques: items 7-11
- When to Correct Errors: items 12-17
- Oral/written Corrective Feedback: items 2.2-19
- Sources of Teachers' Beliefs: item 20

4- Qualitative Data Analysis and Results

This case study was based on data collection through a questionnaire designed by the researchers and piloted in a similar context. The researchers gave the questionnaire to Ali before the TTC started. He filled out the questionnaire instantly and returned it to the second researcher. Following the administration of the questionnaire, the second researcher conducted an informal interview to fully unearth Ali's beliefs about corrective feedback and where the sources of such beliefs lay. In response to the questions raised in the questionnaire and the second researcher's questions as part of an informal interview the following pieces of information were unraveled:

With regard to self- and peer-correction, i.e. questions number 1-6, Ali believed that the teacher should correct the errors himself rather than let the students correct themselves or a more competent peer correct their classmates' errors. As part of the interview session, he maintained that since there is a time limit in class, having the students correct each other might take too much time. On the other hand, he stated that peer correction might make the students *jealous* (exact word used by Ali) of each other and is not psychologically appropriate for Iranian English classes.

Regarding corrective feedback (error correction) technique, i.e. questions 7-11, Ali believed that reformulating learners' errors is the best way for correcting the errors. He reasoned that learners are not able to correct themselves and other techniques of error correction are not suitable.

In response to the question when to make corrections, i.e. questions 12-17, Ali believed that teachers should correct all the learners' errors immediately after the error is made even if such error correction might disturb the flow of communication. He argued that if errors are not catered to immediately, it will lead to fossilization. The source of this belief, as he later revealed, was his friends and teachers' beliefs and the classic books he had read on language teaching.

Regarding oral vs. written corrective feedback, i.e. questions 2.2-19, Ali acknowledged that both oral and written corrective feedback are facilitative. He expressed that such a belief was part of his own experience as a language learner.

Finally, Ali mentioned that the main sources of all such beliefs as made evident in the questionnaire and

interview session were partly from his own experience as a language learner, confirming the previous research [26 and 29], and partly through his studies, friends, peers, and fellow language teachers' suggestions and ideas.

All the above-mentioned points were elicited through the questionnaire and informal interview. However, two weeks later when Ali was officially hired as an English teacher at the ILI, the researchers decided to observe his class in order to perceive if there were any differences between his beliefs prior to and after the TTC. It is important to note here that as Ali himself confirmed, he followed the routine method and techniques while the second researcher was present in the class. The second researcher intentionally kept Ali in the dark about the main purpose of his observation in order to diminish possible observer's paradox. The observation by the second researcher unveiled drastic differences in Ali's beliefs system after the TTC in comparison to his belief system prior to the TTC. In this observation session, the second researcher only focused on the corrective feedbacks and error correction techniques and beliefs manifested in Ali's performance as a teacher.

5- Results and Discussion

The answers given by Ali to the questionnaire and the interview questions were very conducive to the answers of the research questions raised in this study. In response to the first research question, it can be concluded that Ali had a certain set of beliefs about corrective feedback (as reported in the data collection procedure), which are partly in contrast to what the current literature on corrective feedback advocates. Such beliefs, as Ali himself maintained, were primarily rooted in his experience as a language learner and partly gleaned from his friends and teachers (research question 2). The observation made two weeks after the TTC, demonstrated that Ali's beliefs system about corrective feedback had rigorously changed after the TTC.

Thus, two major conclusions emerge from the present study. First, novice teachers carry beliefs from their own language experience into their teaching. Second, as a group, novice teachers possess limited knowledge of corrective techniques. The overwhelming conclusion one gets from this study of a novice teacher is that although such novice teachers bring certain beliefs about teaching in general and error correction in particular to their practice, these experiences are limited and they require more training in corrective feedback pedagogy. In addition, such beliefs are usually not in line with the current research in language teaching and hence need to be catered to carefully in TTC classes; otherwise such wrong beliefs might influence their teaching career and result in wrong teaching practice.

The findings of this study signal to the importance of longer training courses. One cannot expect short

training courses of no more than a few days, similar to the one Ali took part in, to bring about radical changes in the belief structure of pre-service teachers. Research, however, suggests that this can be achieved through longer training courses such as the CELTA (Certificate in English Language Teaching to Adults), a practice-oriented training course developed by UCLES (University of Cambridge Local Examinations Syndicate). Five trainees were studied and changes in their cognitions were traced in relation to (a) their conception of their role in the classroom, (b) their knowledge of professional discourse, (c) their concerns for achieving continuity in lessons, (d) common dimensions of the teaching they found problematic, and (e) the manner in which they evaluated their own teaching [30]. The trainees did not change homogeneously and there was variability in the extent to which each of them had mastered the underlying principles of the course. Therefore, it is possible to expect change in novice teachers' beliefs with long training courses even if they are practically oriented.

Finally, the results obtained from this study suggest that there is still a lot of ground to cover when investigating the link between teachers' stated beliefs and their observed classroom practices. Future research on the topic may study different populations (i.e., experienced teachers) and more participants. Researchers can also draw comparisons between novice and experienced teachers. The issues outlined here may also be examined through other research methodologies (i.e., experimental and introspective studies). Interested researchers can also approach this issue critically by uncovering possible sociopolitical and cultural ideologies inherent in teacher-training courses that might shape the prospective teachers' beliefs and cognition with regard to corrective feedback or other areas of language instruction. In other words, enthusiastic researchers can adopt a critical applied linguistic approach to weed out possible wrong ideologies inculcated by western scholars concerning how to teach, how to correct, when to correct, etc. Another line of research that might be interesting to explore is to inquire if there is any relationship between reflective teaching and teacher cognition and beliefs and how TTC might modify teachers' cognition about creativity and reflectivity in language classrooms. Others might be interested to explore language teachers' cognition/beliefs concerning computer/technology literacy or online distant language education.

References

- [1] Fang Z., *A review of research on teacher beliefs and practices*, Educational Research, Vol.38, 1996. pp. 47-65.
- [2] Kagan D. M., *Implications of research on teacher belief*, Educational Psychologist, Vol.27, 1992, pp. 65-90.
- [3] Pajares M. F., *Teachers' beliefs and educational research: cleaning up a messy construct*, Review of Educational Research, Vol.62, 1992, pp. 307-332.
- [4] Borg S., *Teacher cognition in language teaching: a review of research on what language teachers think, know, believe, and do*, Language Teaching, Vol. 36, 2003, pp. 81-109.
- [5] Woods D., *Teacher cognition in language teaching*, Cambridge University Press, Cambridge, 1996.
- [6] Gatlinton, E., *Investigating experienced ESL teachers' pedagogical knowledge*, Modern Language Journal, Vol.83, 1999, pp. 585-616.
- [7] Spada N. and Massey M., *The role of prior pedagogical knowledge in determining the practice of novice ESL teachers*, in Flowerdew J., Brock M. and Hsia S. (eds.), perspectives on second language teacher education. City Polytechnic, Hong Kong, 1992, pp. 23-37.
- [8] Andrews S., *The language awareness of the L2 teacher: Its impact upon pedagogical practice*, Language Awareness, Vol. 10, 2001, pp. 75-90.
- [9] Borg S., *Talking about grammar in the foreign language classroom*, Language Awareness, Vol.7, 1998, pp. 159-175.
- [10] Borg S., *Teacher Cognition and Language Education*, Continuum, London, 2006.
- [11] Burnaby B. and Sun Y., *Chinese teachers' views of Western language teaching: Context informs paradigms*, TESOL Quarterly, Vol.23, 1989, pp. 219-238.
- [12] Hua L., *Reflection can change EFL Teachers beliefs and teaching practice*, Chinese EFL Journal, Vol.1, 2008, pp. 62-77.
- [13] Kern R. G., *Students' and teachers' beliefs about language learning*, Foreign Language Annals, Vol. 28, 1995, pp. 71-92.
- [14] Mullock B., *The pedagogical knowledge base of four TESOL teachers*, Modern Language Journal, Vol.90, 2006, pp. 48- 66.
- [15] Ellis R. and Sheen Y., *Reexamining the role of recasts in second language acquisition*, Studies in Second Language Acquisition, Vol.28, 2006, pp. 575-600.
- [16] Lyster R. and Izquierdo J., *Prompts versus recasts in dyadic interaction*, Language Learning, Vol.59, 2009, pp. 453-498.
- [17] Nassaji H., *Effects of recasts and elicitations in dyadic Interaction and the role of feedback explicitness*, Language Learning, Vol.59, 2009, pp. 411-452.
- [18] Russell V., *Corrective feedback, over a decade of research since Lyster and Ranta (1997): Where do we stand today?*, Electronic Journal

- of Foreign Language Teaching, Vol.6, 2009, pp. 21-31.
- [19] Borg S., *Studying teacher cognition in second language grammar teaching*, System, Vol. 27, 1999, pp. 19-31.
- [20] Borg S., *Self-perception and practice in teaching grammar*, ELT Journal, Vol.55, 2001, pp. 21-29.
- [21] Johnston B. and Goettsch K., *In search of the knowledge base of language teaching: Explanations by experienced teachers*, The Canadian Modern Language Review, Vol. 56, 2000, pp. 437-468.
- [22] Sato K. and Kleinsasser R.C., *Communicative language teaching (CLT): Practical understandings*, Modern Language Journal, Vol.83, 1999, pp. 494-517.
- [23] Basturkmen H., Loewen S. and Ellis R., *Teachers' stated beliefs about incidental focus on form and their classroom practices*, Applied Linguistics, Vol.25, 2004, pp. 243-272.
- [24] Moini M.R., *The impact of EFL teachers' cognition on teaching foreign language grammar*, Pazhuhesh-e Zabanha- ye Khareji, Vol.49, 2009, pp.141-164.
- [25] Burns A., *Teacher beliefs and their influence on classroom practice*, Prospect, Vol.7, 1992, pp. 56-66.
- [26] Johnson K. E., *The emerging beliefs and instructional practices of pre-service English as a second language teachers*, Teaching and Teacher Education, Vol.10, 1994, pp. 439-452.
- [27] Long M. H., *Problems in SLA*, Lawrence Erlbaum, Mahwah, NJ, 2007.
- [28] Carpenter H., Jeon S., MacGregor D. and Mackey A., *Recasts and repetitions: Learners' interpretations of native speaker responses*, Studies in Second Language Acquisition, Vol.28, 2006, pp. 209-236.
- [29] Numrich C., *On becoming a language teacher: insights from diary studies*, TESOL Quarterly, Vol. 30, 1996, pp. 1,11-53.
- [30] Richards J. C., Ho B. and Giblin K., *Learning how to teach in the RSA Cert*, in Freeman D. and Richards J.C. (eds.), *Teacher learning in language teaching*, Cambridge University Press, Cambridge, 1996, pp. 242-259.

Appendix 1
BELIEFS QUESTIONNAIRE

Thank you for agreeing to complete this questionnaire. The information you provide will be very useful in helping us understand your views on language learning and language teaching. We ask you to feel free to express what you really think and to answer ALL the questions. Thank you for your time.

Age: _____ **Sex:** Male Female

Language Teaching Experience: _____

Indicate how well you agree with each of the following statements. Please circle your answer on the scale to the right of each statement, where 1=STRONGLY DISAGREE and 5= STRONGLY AGREE. Please use the entire scale in making your decisions.

SD: Strongly Disagree

D: Disagree

UD: Undecided

A: Agree

SA: Strongly Agree

Questions	1	2	3	4	5
	SD	D	UD	A	SA
1. Teachers should let the learners self-correct rather than correct the errors themselves.					
2. Self-correction reduces the stress and anxiety among learners.					
3. Self-correction helps the error to be eliminated in the learners' later production in comparison to teacher correction.					
4. Teachers should let other competent students correct their peers' mistakes.					
5. Peer-correction brings less anxiety in comparison to teacher correction.					
6. Peer-correction is more facilitative than teacher correction.					
7. Teachers should reformulate students' errors by correcting the erroneous part themselves and give them as a corrective feedback.					
8. Telling the learner that there is an error and vocally stressing the correct form helps learners notice the difference between what they know and what they don't know in a L2/FL.					
9. Teachers should give metalinguistic feedback, i.e. use grammatical terms such as past, present, future, adjective, verb...in their corrective feedback.					
10. Teachers should ask for clarification when an error arises through clarification requests such as 'I don't know what you mean'.					
11. Teachers should prompt their learners to self-correct.					
12. Teachers should correct all the learners' errors immediately after the error is made.					
1.1. Teachers should treat learners' mistakes in separate lessons or as part of homework.					
14. Teachers should postpone their error correction to the end of the class.					
15. Teachers should not disrupt the flow of communication by interrupting the learners and correcting their errors.					
16. Teachers should correct a learner's error IMMEDIATELY after the error has been made.					
17. Error correction during communicative activities is disruptive to the flow of learners' speech.					
2.2. Teachers should provide learners with oral rather than written corrective feedback.					
2.2. Teachers should provide learners with oral rather than written corrective feedback.					
19. Written corrective feedback is more instrumental to learners' eradication of errors.					
20. What I think about error correction techniques is based on					
a) My own experience as a language learner					
b) My experience as a language teacher					
c) The teachers training course					
d) The books and articles I have read on language teaching methodologies					

Thank you for filling out this questionnaire!