The Dynamics of Language Teacher Belief in Relation to Institutional Context: An Activity Theoretical Approach

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The purpose of this study is to expand on our present knowledge of teacher beliefs in general and particularly to investigate the relationship between teacher beliefs and the context in which teachers work. Specifically, the study addresses the role of context, which has been inadequately theorized in previous studies investigating teacher beliefs. Focusing on the experiences of a single teacher in a college English as a Second Language (ESL) classroom over the course of a 16-week semester, we examined his beliefs about teaching and learning, and the context in which they occurred, using activity theory as a framework for analysis. The results of the study imply that context has a significant effect on the formation and transformation of teachers' beliefs about teaching and learning. The results show how apparent contradictions between departmental expectations and classroom practice can create opportunities to incorporate new tools and explore various teacher-student roles and divisions of labor in the classroom

INTRODUCTION: TEACHER BELIEFS - WHY AND WHENCE?

For teachers, and rational human beings in general, a causal relationship between belief, thought, and action is usually expected. Summarizing classic work in the area of teacher beliefs, Pajares (1992) refers to evidence of "a strong relationship between teachers' educational beliefs and their planning, instructional decisions, and classroom practices" (p. 326). Similarly, Kagan (1992) suggests teachers make pedagogical decisions based on a belief system, which "constrains the teachers' perception, judgment, and behavior" (p. 74). Teacher beliefs are conceptually important for an understanding of teachers as rational decision-makers who act in accordance with a coherent set of values.

One step removed from a connection solely driven by rational considerations, studies exploring the reasons behind teachers' beliefs suggest that they may arise for pragmatic reasons. According to Kagan (1992), teachers develop a set of pedagogical beliefs in response to the "uncertainty and ambiguity" (p. 79) inherent in classroom teaching. Kagan suggests that because of the complexity of the task and the demand on teachers to make on-the-spot evaluative decisions pertaining to their teaching methods, student learning, and classroom procedures, teachers rely on a system of beliefs to make sense of their classroom experience and to guide their practice.

What teachers' beliefs are, where they come from, and how they change is clearly an important area for understanding teaching and teacher development in general, and is a substantial area of research. Previous studies investigating the construct of mainstream (not language teacher-specific) teacher beliefs have focused on the belief-knowledge distinction (Fenstermacher, 1994), the hierarchical structure of beliefs (Phipps & Borg, 2009), the collective nature of teacher beliefs (Breen, 2001), and processes of teacher conceptual change (Gregoire, 2003; Kubanyiova, 2012). At the same time, many observers have commented on the characteristically static nature of teaching overall (e.g., Cuban, 1993), even though the educational research community continues to produce multitudes of studies about how to change and improve teaching. Thus, questions about change in teacher beliefs, in the face of a general lack of change in practice, are important to attempt to connect educational research with educational improvement and professional development. In the area of second language teaching as well, classroom practice shows more evidence of its static nature than change despite vast amounts of research and, in many cases, governmental-level policy shifts.

This paper addresses the dynamics of second language teacher beliefs in relation to institutional context, as this is a growing area of interest and value. Recent studies of language teacher beliefs (LTB) include the investigation of how LTB affect teaching decisions (Mak, 2011), the impact of in-service teacher education programs (Borg, 2011), and the influence of beliefs and socio-educational factors on classroom

practice (Nishino, 2012). In addition to being a particularly important topic, the investigation of LTB can inform pedagogical innovation by generating "grounded alternatives to the 'accepted wisdom' of language teaching methodology emanating from certain academic traditions" that are removed from the actual context of teaching (Breen, 2001, p. 472). On the other hand, Crookes (2011) claims that, in many cases, "language teachers have never been presented with any formal orientation to a major area of relevance for developing statements of values or beliefs" and if asked to outline the pedagogical beliefs that guide their practice, "might not have adequate sources to turn to" (p. 1127) outside of institutionally sanctioned models and approaches.

Besides formal sources and the possible wisdom of teaching traditions, the working contexts of teachers is arguably an important matter bearing on teacher beliefs. If working conditions are poor, this is likely to limit how teachers draw on, express, and develop their views (Crookes & Arakaki, 1999). Adopting a socio-cultural perspective on the development of and change in LTB is one way in which researchers can examine teachers' beliefs and, consequently, classroom practice. This study describes how a language teacher's beliefs changed, or did not, over the course of a semester with the particular goal of exploring how to theorize context as a key factor in LTB.

LITERATURE REVIEW

Socio-cultural Perspectives on Classroom Activity: An Alternative View of Context

Early work in the study of contextual factors influencing LTB include a focus on how teachers account for pedagogical choices in relation to context (Nicholson, 1996), effects of accumulated experience on teachers' beliefs (Crookes & Arakaki, 1999) and additional factors that influenced teacher planning and classroom management decisions (Woods, 1996). These studies began to explore the complex connections between teacher beliefs, institutional and departmental level designations of best practices, and the procedural aspects of planning and implementing classroom learning activities. Contextual factors have been theorized as interfering with teachers' abilities to translate their beliefs into lesson planning and course content decisions (Burns, 1996), preventing teachers from drawing on research findings (Crookes & Arakaki, 1999), and influencing teachers' choice of motivating styles (Reeve, 2009). Some of these studies utilized what Niewolny and Wilson (2009) term the "container view" of context, which "tend[s] to see context as having little to no perceived effect on the action contained; context is viewed as a background or stage on which action unfolds but is not really necessary to understand the action" (p. 32).

One major perspective that allows us to move beyond a container view of context is Activity Theory (Leontiev, 1981). In this approach, activity is defined as a system of relations encompassing individual subjects, their goal-directed actions, and the tools used to mediate the internalization of communal norms and externalization of individual thought. Tools may be real objects like textbooks, class syllabi. dictionaries, and computer programs used in classrooms to mediate student learning. Tools may also be psychological and exist internally as objects of thought such as concepts, theories, or approaches to teaching. According to Kaptelinin (1996), tools are "carriers of cultural knowledge and social experience" (p. 109), and through their specific modes of operation developed through previously determined usage, "shape the way people act and, through the process of internalization, greatly influence the nature of mental development" (p. 109). In other words, the psychological tools that we internalize are dependent upon practical, social, and interactional needs, and these needs may develop and change across time and institutional settings.

In Leontievs' (1981) model of the activity framework, the production of an activity fundamentally involves a subject and an object. Applied to educational activity, subjects can be teachers, students, or a group of individuals engaged in activity, the object of which, from a sociocultural perspective, is both the reproduction of knowledge and transformation of thought through interaction. Here, the object is not a physical object, but rather an objective, purpose, or goal. Therefore, the object of activity can be defined as a specific outcome that motivates activity or, as Gallego and Cole (2001) define it, "the problem or topic that compels the subject into engagement" (p. 96). In the classroom, objects are usually shared, with individual subjects holding variable orientations to a common objective such as improving the grammatical accuracy of their writing. Shared objects are transformed as they are interpreted across differing subject roles (teacher, student, administrator, researcher/observer) and

through interaction with other subjects, classroom rules, and available tools. The analytic function of the activity framework directs the researcher's attention to examining interactions between individual components of the activity system "while simultaneously capturing the situated activity as a whole" (Johnson, 2009, p. 79).

In Engeström's (1987) work, the activity framework, rules, community, and division of labor are the basic categories used to define the context in which specific actions and operations are planned and executed. In the field of second language instruction, despite changes in how language and language teaching and learning have been conceptualized, the basic structure of language teaching activity within most institutional settings has remained static. Classrooms are usually organized according to an accepted division of labor with clear teacher and student roles. However, the extent to which classroom divisions of labor are negotiable and how the negotiation occurs is influenced by the beliefs of the participants, including teachers and students, as well as administrators, curriculum developers, and course designers, who make up the larger community of ESL practitioners.

In an activity system, rules may be unspoken communal rules that provide the general framework for interaction among people occupying certain roles. These could include, for example, who is allowed to speak and when. Or rules may be explicit and directly stated in a course syllabus, outlining specific rules of classroom interaction, learning outcomes, student competencies, and grading procedures. It should be noted that the difference between the two rule types is a matter of interpretation, since explicit rules are often based on interpretations of communal norms and institutional standards, as well as on issues of power and agency in classroom settings where explicit rules are often stated and upheld by the teacher.

Motive is the label given to how the socio-cultural assumptions inherent in an activity setting became manifest in the selection of actions and operations by individuals to be utilized within that particular setting. Hence the motive for activity should not be understood solely in terms of the biological maturation of the organism nor as a result of individual thought processes. Instead, motives must be understood in terms of individuals' formation of goals and the selection of operations appropriate to their realization occurring within the context in which they were intended for use (Wertsch, 1985). Lantolf and Genungs' (2002) analysis of institutional power and language learning success concludes,

"Motives and goals are formed and reformed under specific historical material circumstances. As these circumstances shift, motive and goals... shift as well" (p. 191).

From an activity perspective, teacher beliefs do not initially originate within the individual, but rather from learned communal norms embodied in concepts derived from particular approaches to organizing teaching and learning activity. Being able to communicate with others and act according to implicit norms and rules that organize group behavior is equivalent to becoming a member of a community of practice (Rogoff, 1995). Within particular communities of practice, select concepts act "as objects of attention and desire, as models and ideals to be emulated and attained, as instruments to master . . . making them into the very substance of their practical and mental interactions with other people" (Jones, 2008, p. 79), Wells (1999) characterizes the process of appropriation of cultural artifacts (a category that includes both real and conceptual tools) as a three-stage process of transformation. First, modification of the learner's own cognition occurs; then, the tool or concept itself is transformed as it is used and assimilated into the activity. Finally, when the reconstructed artifact is externalized and used to mediate subsequent actions, the activity itself can be transformed, resulting in changes "in the way in which the artifact is understood and used by other members of the culture" (Wells, p. 137).

The application of the activity framework to classroom practice also exposes contradictions that may emerge between individual goals, collective motives, and outcomes of classroom activity. "Contradictions are historically accumulating structural tensions within and between activity systems" (Engeström, 2001, p. 609). These tensions may emerge due to a multitude of processes: teachers incorporating new objects, tools, or roles that conflict with other elements of the activity system; adopting new methods for achieving previously established goals and objects; and changes in activity that conflict with adjacent activity systems. Examples of these are conflicts between personal and professional activity, or individual and institutional motives. As such, contradictions act as a powerful catalyst for teacher conceptual change within the process of internalization of communal concepts and practices, and the construction/externalization of new tools, roles, and patterns of interaction. If activity theory is an accurate depiction of social reality, or at least a useful heuristic for research, then we would expect contradictions to play a large role in LTB change as well.

Language Teacher Beliefs Based in Activity Theory

Previous research in second language situations incorporating an activity perspective has explored classroom language learning activity and the motives of individual participants (Lantolf & Genung, 2002), as well as teachers' abilities to balance compliance with institutional demands against personal pedagogical beliefs (Olson, 2009). More recently, a handful of studies have applied the activity framework to the study of language teacher beliefs specifically. Kim (2011) investigated teacher responses to curricular reform in South Korea, and Tasker (2011) looked at collaborative teacher professional development activity.

Kim's (2011) study focused on a seventh-grade English teacher and her response to government mandated curriculum reform in South Korea. The teacher expressed resistance to implementing reform policies for several important reasons including a lack of confidence in her own English proficiency (believed to be a prerequisite for effective communicative language teaching), perceived "insincerity" of students when engaged in communicative tasks, and uncertainty if the mandated communicative language teaching techniques and textbooks were beneficial or relevant to student language learning in the exam-oriented setting. In cases of conflict between teacher beliefs and curricular reform efforts, we would expect some change in classroom practice and teacher beliefs, especially if teachers are provided with the tools to initiate such change. However, in this case, Kim concluded that change did not occur because there was "no supportive community to scaffold [the teacher's] learning and/or teaching" (p. 237).

Tasker's (2011) study of three EFL teachers in the Czech Republic focused on teacher attempts to confront limited student improvement and a perceived lack of student responsibility for their own language learning. Collaboratively, the participating teachers attempted to understand and redirect student learning through the development of new mediating artifacts. According to Tasker, "the dialogic process of teacher reconceptualization of student responsibility, triggered by a collective exploration of a contradiction between teacher and student expectations for English language learning" (p. 220), resulted in the transformation of how teachers conceptualized student learning. These two studies exemplify how an activity theory perspective allows the researcher to productively theorize the role of context in cases of teacher belief change, and of failure to change.

Overall, examining the current perspectives on language teacher beliefs and their relationships to both those of other teachers and to institutional contexts, it seems important to further explore the development and change in beliefs as affected by such contexts. If teacher beliefs drive teaching, but are themselves subject to any, let alone substantial, fluctuation as a result of a teacher's employment context and his/her peers, this is therefore important for understanding teacher development and classroom practice. Activity theory has particular potential to focus inquiry on key elements within institutions and aspects of beliefs shared by institution members. In addition, it has a built-in disposition to emphasize change and institutional improvement through engagement with contradictions (Engeström, 1987).

METHOD: THE CASE STUDY

"A case study is an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (Yin, 2009, p. 18). This case study was bounded by the time in which the study occurred, the institutional context, and one specific teacher. As such, it constitutes a snapshot of institutional policies and procedures reflecting the overall mission of the institution and the department during the time of the study. Based on Nardi's (1996) recommendation that the investigation of activity systems focus on a broad spectrum of interaction with a long enough time frame to understand teacher and class objectives as they unfold, this study focused on a 16-week, semester-long course. A 16-week semester unit was selected because it was an institutionally constructed artifact providing a time frame within which both student and teacher goals were constructed and evaluated.

Crater Community College's (CCC) campus, located in an urban center in the western region of the United States, was where the study was conducted. At the time of the study, CCC had nearly 650 international students (roughly 7% of the total student population) from 53 countries enrolling in various programs of study. The course selected for the study was, a 16-week, for-credit ESL academic writing course designed to serve both international and resident immigrant students.

Students enrolled in the course were allowed to simultaneously enroll in other credit courses at the college and begin working towards their degree.

The ESL department at CCC consisted of eleven full-time faculty with relevant graduate degrees and international teaching experience. The department designed and taught all courses utilizing a content-based approach, and department teachers' understandings of content-based language instruction were consistent with long-standing positions such as that of Brinton et al. (2004, p. 5): "the integration of particular content with language teaching aims . . . the concurrent teaching of academic subject matter with second language skills."

In addition to following a content-based approach to course design, the department had developed its own conception of curriculum, known in-house as the "opportunities model." According to the opportunities model, underlying curriculum and classroom instruction was a prescribed "learning cycle" in which learners were provided with opportunities to receive input in English, produce written and spoken output, participate in interactions, and get feedback from teachers and peers on their work. According to the model, opportunities also had to be provided by the teacher for students to understand how to learn best and how to study language more efficiently.

DATA COLLECTION AND RESULTS

The data collection procedure was conducted in three parts, occurring over the course of a 16-week academic semester, and consisted of bi-weekly observation of classroom activity; teacher interviews conducted at the beginning, middle, and end of the semester; and an initial description of context and departmental objectives relying on document analysis. All interviews and classroom observations were audio-recorded, and then transcribed and labeled for later analysis. Data analysis focused on comparing teacher descriptions of classroom activity, observed practices, and data gathered on departmental and institutional expectations of teaching and learning behavior. There was an ongoing dialogue between the principal author and the teacher participant that increasingly gained depth over successive meetings. The collaborative discussions were a result of incorporating new classroom activity events

selected by both the teacher and researcher from observed classroom practice, which were used to elaborate on the participating teacher's individual sense of pedagogical concepts and how they were connected to classroom activities. A constant comparative approach (Charmaz, 2006) was used to construct a picture of the teacher's beliefs in combination with an in-depth description of the context as new data were incorporated over the course of the semester-long study.

Author Positionality

Similar to the participant (i.e., teacher) selected for the present study. the principal author possesses a graduate degree, has experience teaching English in a foreign country, and for five years prior to the study, taught ESL writing courses at CCC. This background positioned the author as an insider already possessing a general orientation to institutional requirements, departmental perspectives on learning and curriculum, and the types of approaches teachers were using in their classrooms. In fact, the author had observed one particular teacher's class several times when first employed at CCC in the process of being inducted into the teaching position. It was through these observations that the author was introduced to the departmental opportunities model and the learning cycle approach to teaching and learning. The author's rapport with the participating teacher was excellent, and therefore both participant and researcher were willing to reflect openly and carefully on teaching practice, including teaching practices that contested departmental norms. The relationship was a peer relationship; thus, power asymmetries between researcher and participant (Talmy, 2010), including differences in status, social class, and age, were limited.

The Teacher: Roles, Beliefs, and Course Goals

In this section, the focal teacher and his initial views of the course at the outset of the semester are described. The teacher is a Caucasian male in his early forties. He began teaching in the 1990s, working part-time at several university ESL programs; in 2001, he began his current job teaching ESL courses at CCC. He had been teaching at CCC for 10 years at the time of the study. Although he had taught the same courses and the same content for ten years, he indicated that he liked

to experiment with new approaches and do things differently every couple of years.

During the period of this study, the teacher divided the course content into four topics related to the semester's content theme of environmentalism. He used the program-mandated textbook readings together with an online quiz to introduce topics related to food, goods and services, housing, and carbon consumption (carbon footprint). Since he had taught this particular ESL course many times before, he had most of the course already planned before the semester began. Towards the beginning of the semester, the teacher stated that because the overall course structure was already in place, he did not "have to create anything or be creative," which allowed him to "focus on grammar, language level, and other things." He believed that his students were motivated by the interesting course content and were therefore able to "see that they can learn and make progress."

The teacher explained that his ideal role in the classroom was as a resource who could "confirm or disconfirm [student] hypotheses" about the language and their understanding of course content. Several classroom activities that he had designed allowed him to attempt to fulfill his ideal role as a teacher, serving as a resource for students, but he stated that overall his principle role in the class had been reading student papers and editing them. He believed it was important for him to "correct all the errors so (students) know where they are," but also believed that this function was not a "good role for the teacher" and ideally preferred students to be "exploring" the language on their own. In addition, he stated that he was spending too much time correcting errors on students' multiple essay drafts. He believed such attention to grammar correction was necessary because students continually made the same grammatical errors and the overall clarity of their writing was not improving.

The learning cycle approach requires that students have the opportunity to produce extensive written and spoken output in order to receive feedback. Thus, the teacher aimed to create an environment where students could "safely take risks" with their developing language and progress through the learning cycle, while also meeting the departmental requirement of producing twenty pages of revised texts.

The teacher had found, in the past, that giving students grades on their essays early on in the course changed their attitudes and their interaction with other students, especially when they had lower proficiency and their grades were low. He did not want to penalize students for weak writing initially because he believed it was not fair to expect them to be good writers at the beginning of the semester. Improvement was more important. Instead of focusing on giving grades, the teacher saw student papers as opportunities for providing feedback and decided to use an "accuracy formula" as a tool to communicate with students about their progress. The accuracy formula provided a number telling students exactly the percentage of error-free sentences in their papers. At the beginning of the semester, the teacher was confident that the accuracy formula was "gonna be enough to get [students] to see where they are or at least make them aware of how far they have to go."

Overall, the teacher's goal for the ESL course was to have students improve in their ability to listen, speak, write, and interact in English. The overall goal of student improvement was further divided into two objectives: (a) students understanding the process of the departmental learning cycle and (b) the development of accuracy in student writing. As a consequence, feedback from the teacher and from peers was an essential tool in students' development of language and for maintaining student interest in learning and improving their English.

Beliefs: Context and Change

In this section two aspects of the teacher's classroom activity are discussed and the beliefs he held associated with the planning and implementation of the classroom activity. First, the teacher's implementation of the learning cycle approach as a way of clarifying his purpose with regard to his planned classroom actions and operations is described. Here, the teacher accepted the department's model, and his views did not change over the course of the semester. Second, the teacher's attempt to re-conceptualize feedback on student writing is described, incorporating the teacher's own needs and experiences in conjunction with departmental expectations.

The Learning Cycle

The learning cycle was the main theoretical tool utilized by CCC language teachers to emphasize the process of learning as a student-learning objective and draw students' focus to this. The individual components of the learning cycle, summarized by the teacher as "do work, get feedback, rehearse, and make progress," were explicitly

presented by him to students at the beginning of the semester, using a series of PowerPoint presentations created by the ESL program director. The teacher used several tools to monitor student understanding of the learning cycle model. Students completed daily written reflections, which they handed in at the end of class. The teacher believed that for most students the goal was often "to get the information at any cost," which conflicted with the course goal of improving different literacy skills through focusing on the process of learning. The teacher provided the following example describing how students often chose the easiest or quickest solution to conveying information when working in groups with their peers:

They will show their paper to their partner . . . They'll read the sentence or they'll memorize the sentence, and they'll explain it, but if their pronunciation is off, or if their listener has a weaker vocabulary, or if there's just words they don't know, the listener won't understand, and so instead of working that out through listening and speaking strategies, they just show the answer and say, "Here it is" . . . Or they write it down for them.

The teacher wanted students to understand that the purpose of classroom activities was not to get the correct answer but to interact in English, and specifically to provide peer feedback to other students through the use of clarifying questions when breakdowns or difficulties in communication occurred. According to the teacher, and consistent classroom observations, students responded positively collaborative peer revision group activities following the process of the learning cycle and, over the course of the semester, became more engaged and more focused on improving their language while working in small groups with classmates.

In-Class Feedback

Starting at the beginning of the semester, the teacher had questions about feedback, and was concerned about students' limited improvement and increased departmental demands for providing feedback. Prior to the period of this study, the teacher's position on feedback on ESL writing was more or less consistent with what Truscott (1996) calls "a widespread, deeply entrenched belief that grammar correction must be part of writing courses" (p. 327). However, the teacher had also experienced comparatively little success with his feedback practice. As a way to address his own questions about the effectiveness of teacher feedback on student writing, he decided to use the accuracy formula as a way of providing feedback to students on their grammar errors and to show improvements in written clarity in a more objective way. The accuracy formula had been developed by him in conjunction with the ESL program coordinator the previous semester as a tool to talk with students about the accuracy of their language, as a way for teachers to reflect on the effectiveness of their teaching, and as a possible substitute for letter grades on student papers.

In the teacher's class, several actions were related to his objectives for student progress: utilizing both feedback and the accuracy formula as tools. First, starting at the beginning of the semester, which was a change from his previous practice, he gave students limited feedback on their assignments. Instead of the teacher "figuring out what the student needs and trying to correct it for the student or decide if you're going to try to lead them to the answer," he simply checked to see if whole sentences were correct or not. This was partly due to departmental demands for increased student written output outlined in the course competencies. Instead of correcting all student errors, which took time and had a negligible impact on student progress in the past, the teacher began to mark whole sentences as incorrect without specifying what the individual errors were. Here the teacher was challenging a common departmental practice of providing more explicit types of error correction as feedback on multiple drafts of student papers (and challenging a default setting in the field).

Once the process of giving feedback had been simplified, it took much less time to correct student work, and the teacher began giving "feedback" on everything students wrote. The purpose of student group work activity also changed as a result of changes in the feedback students were receiving. He began experimenting with group grammar correction and peer editing of student papers. In one recurring classroom activity, students were assigned to small groups and asked to discuss their recently corrected drafts. Students had to find the errors in the marked sentences by communicating with group members and asking the teacher questions directly. As a result of the teacher only providing limited feedback by checking sentences as correct or incorrect, it was up to the students to figure out their own errors and how to fix them. According to the teacher, several student groups understood the purpose

of the peer feedback activity, discussing grammar and interacting with each other in English, while other groups simply traded papers with little discussion or sat quietly reading their own papers. Regardless, the teacher believed the activity was a success and received positive comments from students during class and in student's weekly reflection papers.

They really like (correcting each others' papers in class). A lot of students write in their weekly reflections how helpful it is. Learning from other students in the group is helpful and reading other students' papers and looking at their errors is helpful to learn more about grammar and trying to go through the process of figuring it out themselves.

At the end of the semester, the teacher remarked that the accuracy formula was, at one level, very effective as a way to communicate with students about their errors, and at another level, effective for him to reflect on his own teaching practices, particularly the success or failure of correction and feedback on student writing accuracy. However, accuracy scores on student writing increased only slightly during the semester (from 18% to 20%, on average).

DISCUSSION

Several preconditions are necessary for teacher belief change to be initiated. First, in complex classroom activity systems, belief change does not occur without teachers being cognizant of contradictions and/or limitations of their present practice, even when change is mandated by authorities (cf. Kim, 2011) and teachers are given the possibility to "learn to know and understand what they want to transcend" (Cole & Engeström, 1993, p. 40). In addition, teachers must have models and tools available that offer possible solutions to the contradictions they are confronted with. In this way, "new qualitative stages and forms of activity emerge as solutions to the contradictions of the preceding stage or form" (Engeström, 2011, p. 609). Alternatively, it is also possible that teachers may resist change when there are no apparent contradictions within the current activity system. For example, South Korean language educators resisted curricular and conceptual change despite access to

advanced communicative teaching models and tools, while the object of high-stakes grammar testing remained in place (Kim, 2011).

In this study's teaching context, the composition and direction of actions and choice of tools were rooted in conditions emerging from particular demands of the institutional setting and perceived teacher-student roles and responsibilities. These conditions directed the teacher's classroom actions towards accepted practices within the departmental framework of the learning cycle, but also resulted in actions and operations initiated by the teacher to confront contradictions apparent in the classroom activity system.

The initial contradiction that prompted change in this teacher's case was between the consistent lack of improvement in the accuracy of student writing in previous semesters of the course and the course objective of students' language development utilizing explicit feedback on student written work. In addition, the teacher was having difficulty balancing demands for providing explicit feedback on an increasing amount of required student writing with his own free time. The teacher's response was to adopt a new tool and change the way he provided feedback to accommodate both departmental requirements and his own teaching objectives. According to Engeström (2011), "When an activity system adopts a new element from the outside, it often leads to an aggravated secondary contradiction where some old element (e.g., the rules or the division of labor) collides with the new one. Such contradictions generate disturbances and conflicts but also innovative attempts to change the activity" (p. 609). As a result of the teacher changing his feedback practices through the accuracy formula, subsequent changes took place in the classroom division of labor leading to further changes in teacher and student roles. Overall, students were asked to be more involved in the process of finding and correcting their own errors and the errors of their classmates, resulting in classroom actions in which students were encouraged to work together to identify and correct errors in their written work, and explore language on their own. As a result, the teacher was doing less reading and editing of students' papers and structuring class activities so that he could perform in a manner that was closer to his ideal role as a resource, answering student questions as they arose. According to Engeström (2011), the transformation of activity that compels conceptual change "is driven by an expansive reconceptualization of the object and the motive of the entire activity. But such transformations are both initiated and

implemented in daily work actions, in deviations from the prescribed course of actions and in mundane innovations" (p. 608).

In the case examined here, the teacher had already taken the first steps towards changing his own beliefs about the effectiveness of feedback on student writing. However, the conceptual framework of the learning cycle, which provided the blueprint for the overall organization and goals of classroom activity, were never openly questioned. Perhaps because the changes he made still fit well within the boundaries of the learning cycle and general course object of improving language accuracy. Whether or not the deviations and innovations he implemented regarding feedback on student writing will eventually contribute to a transformation of teaching and learning activity within this particular context depends upon a multitude of factors often beyond the control of individual teachers, including access to real and conceptual tools that enable change; colleagues' willingness to collaborate on pedagogical innovation; and teachers', students', and administrators' willingness to accept doing things differently.

Backhurst (2009) concludes that activity theory can be divided into two strains: Vygotsky's original conception of a "fundamental explanatory category that is the key to understanding the nature and possibility of mind" (p. 205) and the further development of activity theory as a method for analyzing activity systems with the objective of facilitating both understanding and practice embodied in Engeström's research on expansive learning and organizational change. Several recent criticisms have been aimed at this second strain of activity theory regarding its cohesion with the philosophical roots of the first strain (Avis, 2009) and its usefulness as a data-generating and interpretive framework (Backhurst, 2009). In this final section, we discuss several criticisms relevant to the application of the activity framework to teacher beliefs and educational contexts in general.

Unlike other types of analyses rooted in Marxist social theory, Avis (2009) recognizes activity theory as a framework transcending mere description of capitalist social relations and their reproduction by including the possibility of transformation of individuals and institutions. Teachers, in response to contradictions between their current beliefs and practices, "begin to question and deviate from established norms" (Engeström, 2001, p. 137), and then the possibility of "a deliberate collective change effort" (p. 137) emerges. According to Avis (2009), even if collective change efforts are successful, if connections between local practices and larger social structures are not addressed. transformation remains "located on the terrain shaped by those who have power to determine the change agenda" (p. 152).

One way to address the relationship between individuals, institutions, and larger social structures within the activity framework is to examine the primary contradictions that initiate change in teacher actions and beliefs. Although contextual factors such as institutional requirements and poor working conditions are generally believed to interfere with teacher development, in our study, asking questions about current and ideal teacher roles and the classroom division of labor resulted in a discussion about the work duties the participating teacher was required to perform, the amount of hours required to perform his job effectively, and the pay he was given. One of the reasons that the teacher initially began to openly question and change his feedback practices was the need to complete schoolwork during unpaid personal time. Thus, systemic contradictions should not necessarily be seen as roadblocks to development, they can act as an impetus for teacher solidarity and large-scale change of teaching practices as well.

Backhurst's (2009) critique is aimed at the activity framework as a research tool. According to Backhurst, the activity framework only has explanatory value when applied to certain activity types that have "a reasonably well-defined object, a pretty good sense of desirable outcomes, a self-identifying set of subjects, [and] a good sense of what might count as an instrument or tool" (p. 206). In addition, Backhurst warns activity researchers to beware of relying on "given, stable, structural" frameworks when the goal is to understand "dynamism, flux, reflexivity, and transformation" (p. 207). As shown in this study, the activity framework is a good fit for investigating the context of formal classroom activity and the investigation of individual teacher thought and actions within larger object-oriented activity systems. The activity framework is particularly suitable for illuminating change or lack of change in teacher thinking and practices within certain contexts, "even when those changes differ from case to case" (Grossman, Smagorinsky, & Valencia, 1999).

CONCLUSION

The purpose of this study was to investigate the relationship between teacher beliefs and the context in which teachers work. The study addressed the role of context, which has been inadequately theorized in previous studies investigating teacher beliefs. By examining the experiences of a single teacher in a college ESL classroom over the course of a 16-week semester, the study showed that context has a significant effect on the formation and transformation of teachers' beliefs about teaching and learning. The results revealed how apparent contradictions between departmental expectations and classroom practice can create opportunities to incorporate new tools and explore various teacher-student roles and divisions of labor in the classroom through the use of the activity framework. However, additional studies are needed to investigate how teacher beliefs about teaching and learning differ both within and between different activity systems across a variety of institutional contexts.

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