Chinese Education and Society, vol. 45, no. 4, July–August 2012, pp. 56–67. © 2013 M.E. Sharpe, Inc. All rights reserved. Permissions: www.copyright.com ISSN 1061–1932 (print)/ISSN 1944–9298 (online) DOI: 10.2753/CED1061-1932450404

4

MINGREN ZHAO

Teachers' Professional Development from the Perspective of Teaching Reflection Levels

Abstract: This paper is a case study based on Habermas's theory of knowledge and human interest. We analyzed the written reflections of four teachers employed at a school and found that the teachers who had experienced advanced professional development tended to engage in practical and critical reflection, whereas those who had experienced average professional development primarily engaged in technical reflection. Further analysis revealed that teachers who engage in technical reflection experience externally controlled professional development; those who engage in practical reflection experience conservative inner growth professional development; and those who engage in critical reflection experience transcending inner growth professional development.

During the past forty years, education reforms have evolved on a global scale, from a sole focus on the implementation of professional devel-

English translation © 2013 M.E. Sharpe, Inc., from the Chinese text, "Jiaoxue fansi shuiping zhong de jiaoshi zhuanye fazhan: Fuquan de shijiao." Translated by Carissa Fletcher.

Mingren Zhao is associate professor in the Faculty of Education, Northwest Normal University, Lanzhou, P. R. China.

This research was supported by the Fok Ying Tong Education Foundation (Project No. 131111).

opment reform programs to a gradually increasing emphasis on the significance of participants' experiences and skill construction. Today, we believe that every teacher can be an agent of change, and this change begins with teachers' inner learning (Fullan 2005). Teaching reflection has become a target for research in the field of teachers' learning, as it exemplifies Habermas's theory and embodies the main characteristics of teachers' learning, which is contextualized, indeterminate, value based, and subjective (Chen 2008). Unfortunately, research on teaching reflection is as yet fairly shallow: there is a lack of empirical research on the internal structure of teaching reflection and its close connection to teachers' professional development.

The Level Theory of Teaching Reflection

Reflection is the process through which teachers comprehend and learn from their teaching experiences and assign significance to their teaching practices. Teachers' different understandings of the definition and objective of teaching and evaluations of their own professional development and capabilities are reflected in varying levels of teaching reflection. Van Manen (1977) was the first to systematically discuss the levels of teaching reflection, which he based on Habermas's knowledge and human interests theory (see Habermas 1971 [1968]). In his discussions of practical concepts in the field of knowledge philosophy, Van Manen stated that there are three levels of reflection: (1) technical; (2) interpretive, or practical; and (3) emancipated, or critical. There are a fair number of other studies that have discussed teaching reflection levels (Day 1999; Valli 1997;Wellington and Austin 1996); however, none have diverged from Habermas's foundational knowledge and human interest theory.

In technical reflection, the teacher's focus is seeking a more economical, efficient way to achieve the expected goal. Much greater attention is given to the polishing of methods than to evaluation of the results. It is assumed that by directly employing the series of theories, principles, methods, and techniques generated by an epistemology of technical rationality, one can promote the implementation of the curriculum and achieve predetermined objectives. Knowledge stems from an external authority rather than from teaching practice.

On the level of practical reflection, it is believed that every teacher is a generator of knowledge; close attention is given to the effect that the environment has on teaching practices. Every choice made in the process

of technical reflection should be founded on a value-based interpretive framework in the course of implementing the curriculum. Such reflection requires the analysis and explication of teachers' experiences, their significance, and assumptions they make in teaching actions. The focus of reflection is the nature and quality of educational experiences. The target of reflection is not only externally on how teachers' knowledge is effectively applied in practice: significance is also given to profoundly understanding and interpreting their own practices.

Critical reflection is the highest level of rational consideration. At this level, it is believed that teaching practices are loaded with value, but this value may have been distorted or repressed due to social, political, cultural, and historical reasons. It is recommended that, through analysis and inspection of a foundational value system and concepts of equity and justice, teachers seek to criticize ideology and expose repression and domination. In addition, teachers are expected to be critically self-aware: their teaching objectives should not be decided by an external authority; teachers should possess self-determination. By reconstructing the environment in which they act, their self-image as teachers, and their habitual teaching assumptions, teachers can reconstruct their experiences.

Research Methods

Since reflection is a highly individualized and contextualized process, the researchers chose to conduct a case study (Yin 2003). To display different levels of teaching reflection, teachers were selected on the basis of headmasters' recommendations, peer review, teachers' self-perception, and the researchers' judgment; they were comprehensively evaluated from the perspectives of conceptions of education, teaching design, classroom teaching ability, teaching experience, and depth of thought. We invited four Chinese language teachers from an elementary school in a city that was part of the first group to participate in the pilot program for the new curriculum reforms to participate in the study: two teachers of the highest level (Ms. Zhang and Ms. Tian) and two teachers of average level (Ms. Song and Ms. Li).

The researchers conducted a two-month survey at this elementary school. We collected all the written reflections that these four teachers had produced over the course of four years, which amounted to seventy-eight texts in total. We observed and recorded each teacher over the course of ten lessons in the classroom, and also combined the written reflection texts and classroom observations with ten individual interviews with each teacher. We transcribed the video records of the interviews and classroom observations for analysis. In the process of collecting and analyzing the data, we conducted triangulation of the materials obtained through observation, interviews, and reflection texts, as well as of the data from various time intervals.

Teaching Reflection Levels and the Process of Curriculum Implementation

Ms. Zhang: "Liberate myself, liberate the students."

Ms. Zhang has been teaching for over ten years. She is extremely enthusiastic about teaching, delights in intensive studying, and feels fairly satisfied about her ability to play the role of teacher leadership. She believes that she has already "made some changes and acquired a new life" in implementing the curriculum reforms, and can now "liberate [her]self, liberate the students." Her teaching style is "simple": unlike the previous focus on "trivial" things like characters, words, and sentences, she tries to create an environment in which the teacher and students can all speak. In her teaching practice, she believes that students should be able to think freely and express themselves, on the basis of teaching objectives and the students' practical needs; at the same time, she believes she should provide guidance and help the students experience the process of realization and creation. Among the thirteen written reflection texts that the researchers collected from Ms. Zhang, none belonged to the category of technical reflection; nine belonged to practical reflection and four belonged to critical reflection.

The practical reflection texts demonstrated Ms. Zhang's close attention to practical circumstances. Whether in formal interviews or informal chats, the researchers uniformly found that Ms. Zhang's reflections were closely linked to her own life as a teacher. She likes to illustrate her opinions through examples and related interesting stories from her teaching career. The critical reflection texts showed Ms. Zhang's attention to the students' right to make learning decisions: she thinks it is important that students have an opportunity to ask questions and solve problems through self-guided thinking; she believes that in the process of discovering and solving problems, students can obtain a feeling of self-direction and responsibility in their studies.

Ms. Tian: "Students cannot be spectators of education."

Ms. Tian has been teaching for six years. Her teaching style is simple and flexible: she likes to think things out for herself and has a candid nature. She excels at identifying problems in education and is good at designing educational activities from the perspective of the students. She says that prior to the curriculum reforms, she had already begun to apply the teaching concepts and methods advocated in the reforms. She has her own position with regard to education, which is to do whatever is best for the students, even if this requires the use of some methods that the new curriculum or the school have not yet implemented. She believes that the students can contribute the most to their own growth. Her written reflection was characterized by close attention to practical circumstances. Of Ms. Tian's thirty-four written reflection texts, none belonged to the category of technical reflection; thirty-two belonged to practical reflection and two belonged to critical reflection.

Many of the practical reflection texts demonstrated Ms. Tian's heartto-heart interaction with the students. These texts fell into two main categories. Fifteen texts empathetically considered and analyzed the students: we labeled this type of reflection "sympathetic" practical reflection. In addition, seventeen texts contemplated teaching based on specific circumstances: we labeled this type of reflection "contextual" practical reflection. Although Ms. Tian's written reflection contained very little critical reflection, we found that in interviews and our observations of daily life at the school, Ms. Tian was characterized in an outstanding way by her tendency to engage in critical thinking. Since she began teaching, Ms. Tian has consistently sought to establish a relationship of equality in the classroom, has aimed to maintain independence of thought, and has explored emancipated education.

Ms. Li: "Distant water cannot quench a present thirst."

Ms. Li has five years of teaching experience: she is very devoted to her work and likes to study theory, but is relatively lacking in practical experience. She admits to often feeling that she has "lofty goals but low abilities." She also acknowledges that she is accustomed to thinking passively: she is good at learning, but not necessarily good at creating. Of the fifteen written reflection texts that the researchers collected, ten belonged to the category of technical reflection; four belonged to practical reflection and one belonged to critical reflection. In the technical reflection texts, Ms. Li makes an effort to seek out effective teaching strategies. In her reflection, Ms. Li primarily concentrates on how to efficiently teach subject-related knowledge, how to better manage the classroom, and looks for strategies on how to conduct educational activities in an orderly fashion. In the practical reflection texts, Ms. Li focuses on the students and the teaching environment. Ms. Li believes that in teaching, one should pay attention to students' individual differences and the teaching process, and use encouraging methods to help students correct their mistakes; she also believes that education should be linked to the students' daily lives. In the critical reflection text, Ms. Li realized that giving students an opportunity to engage in self-guided learning and discovery can make them more proactive in the learning process and promote deeper comprehension. [She therefore came to believe that] empowerment is inherently necessary to the learning process: students must have self-determination.

Ms. Song: "My skills are no good."

Ms. Song has been teaching for ten years. She is very diligent in her work, but acknowledges that she doesn't feel she teaches effectively. She is very familiar with the conceptions of education introduced in the new curriculum reforms and can discuss them ably. In the classroom, she also makes a visible effort to put these conceptions into practice. Unfortunately, her ability to control such teaching methods is extremely deficient: when she hands the power of learning over to the students, she doesn't know how to act as a teacher and guide. Among the sixteen written reflection texts that the researchers collected from Ms. Song, ten belonged to the category of technical reflection and six belonged to practical reflection.

Ms. Song's reflections on the content of teaching are essentially technical. This demonstrates that Ms. Song's reflections on the content of teaching are limited to a focus on teaching materials: she does not attach importance to developing or utilizing the students' daily lives as a curriculum resource, nor does she consider the knowledge and experiences that the students gain through other channels. In addition, she does not value the interaction of knowledge between the students and the teacher or between the students themselves. The practical reflection texts still show that Ms. Song's main teaching objective is to instruct the students on the content of the teaching materials; however, her understanding of

how the students learn the material differs somewhat from the ideas shown in the technical reflection texts in that they demonstrate a consideration for the students' foundation of knowledge, interest, and abilities. In teaching reflection, Ms. Song's primary focus is still how to effectively make the students comprehend the materials. The experience and knowledge that are formed through interaction between the teacher and students and in the students' daily life experiences are of secondary importance; Ms. Song does not reflect on topics such as the power relationship between the teacher and the students, or between the students and the teaching materials.

Technical Reflection and Externally Controlled Teacher Professional Development

Conceptually and within the classroom, Ms. Song attempts to give the students the power of learning, but her insufficient abilities mean that she cannot put into practice the concepts she upholds. In this regard, accumulated experience and training in practical skills are the keys to her professional development. However, she is still unable to effectively improve her professional skills through reflection. Since her reflection is primarily technical, her thoughts on teaching methods get bogged down in the quandary of "methods for the sake of methods." As a result, her reflections become chains binding herself and the students rather than a means by which to liberate herself and the students, using the new concepts of the curriculum reforms.

According to Schön (1983), practical reflection is a form of critique that transcends technical reflection: it leads to the liberation and empowerment of teachers. Within Ms. Li and Ms. Song's reflection texts, however, the scene was quite different. In their technical reflection texts, Ms. Li and Ms. Song did not discover the inner significance of teaching: the texts demonstrated that the teachers are externally dominated by the curriculum reforms. Their concerns are focused on what methods they can adopt to achieve predetermined teaching objectives and accomplishing set teaching tasks. However, they often ignored practical circumstances such as the students' knowledge background and skill sets.

The nature of these practical reflection texts demonstrates the predicament in which these teachers find themselves in terms of professional development. In the case of Ms. Li and Ms. Song, reflection that was originally meant to empower the teachers merely serves to discipline them. Although they are employed at a school that values teaching and research, uses various methods to provide an environment of free interaction between teachers, and has been implementing the curriculum reforms for four years, these two teachers still have not firmly established a new foundation of professional development. Perhaps the fact that the tempestuous tide of the new curriculum reforms has forcibly washed them from place to place is partly to blame for their predicament. In the case of Ms. Li and Ms. Song, the new expectations placed on teachers following such an abrupt reform differ completely from their previous professional experiences: they must thoroughly depart from the past and transform their thinking and behavior. Since the implementation of the curriculum reforms, it seems that they have truly forgotten the past and attempted to remodel themselves using the revolutionary new methods. However, this process is long and difficult. In examining the reasons for this, though it is valid to critique the excessively fast pace at which the curriculum reforms have been implemented and other external factors, we should also examine the tactical errors that teachers have made in their responses to the reforms. Ms. Li and Ms. Song's blind acceptance of the reforms shows their lack of practical, rational reflection on their own professional lives. Without such reflection, the teachers could not amass the theories and experiences needed for professional development: since their foundation was unstable, it was easy to drift with the tide of the reforms. As a result, they feel that their teaching is ineffective, and have little professional autonomy.

Practical Reflection and Conservative Inner Growth Professional Development as a Teacher

Ms. Zhang's written reflections do not contain any technical reflection, only practical and critical reflection. This demonstrates that within her reflections, Ms. Zhang is not attempting to directly implement an external "theory" into practice through the method of technical rationality; rather, she is attempting to practically understand her experiences in the context of a certain situation. As a result, throughout the curriculum reforms, she has had a place on the pinnacle of the wave: she was able to maintain a stable foothold and fully comprehend her experiences; thus, she has realized her own significance as a teacher. Her view that one cannot change if one does not understand led her to experience inner growth by means of reflection. During this process of inner growth, facing the challenging and

ceaseless demands of the new curriculum, Ms. Zhang earnestly sought to learn, practice sound methods, and absorb new ideas: her teaching thus gradually became highly effective. From the perspective of autonomy, however, Ms. Zhang's process of growth was strongly characterized by "disciplined professionalism" (Lai and Lo 2005). Her explorations of teaching methods are always in service to the conceptions of education propounded by practical experts, and her views are subordinate to the experts' preaching. Although she is able to faithfully implement the ideas introduced in the new curriculum in her own teaching practice, she is unable to discover new paths and methods.

Critical Reflection and Transcending Inner Growth Professional Development as a Teacher

Unlike Ms. Zhang, who is repeatedly bowled over by the waves of curriculum reform, Ms. Tian appears calm and at ease. Throughout the curriculum reforms, she has always been relatively confident. She is self-aware of her own teaching practices. She believes that her own teaching will not be too fettered by the curriculum standards and teaching materials: she will guide the students to learn whatever she feels to be beneficial for and acceptable to them. Her confidence is inseparable from her regular reflection on her teaching practice. Only through reflection can she see clearly whether or not her methods are valid and lay a proper foundation for her own practice: her confidence is tied to this attitude. Ms. Tian has always critically sought to discover new things, and consciously seeks to learn what she does not know about teaching. Within her reflections, she strives for change and shows concern for "every student"; as a result, she has realized that because the students are [all] different, they will cope in different ways, even when faced with the same educational content. Her efforts to fulfill the learning requirements of every student mean that she faces the challenge of unceasingly improving her teaching.

In the thirty-four written reflection texts that the researchers collected from Ms. Tian and analyzed, nearly one-quarter reflected on teaching objectives. This demonstrates that Ms. Tian is very interested in the fundamental question of what education is meant to accomplish: in addition, her reflections on teaching objectives all belong to the category of practical reflection. That is to say, her reflections did not center on how to implement the experts' preset objectives to the letter, without regard for practical circumstances, but rather explored what teaching objectives might be suitable for her specific situation. This is precisely the core of teachers' professional autonomy: having one's own understanding and judgment of the value and direction of education.

Improving Teachers' Inner Feelings of Empowerment Through Practical and Critical Reflection on Learning

Neither Ms. Zhang nor Ms. Tian engaged in technical reflection: this demonstrates that their reflections did not center on how to imitatively implement external theories and other people's experiences in practice; rather, based on their own concrete experiences, they emphasized analysis of teaching circumstances and context, and maintained an alert and critical attitude with regard to topics such as equality and democracy. However, Ms. Zhang's [reflections] differ from [those of] Ms. Tian; although Ms. Zhang's reflections are based on and devoted to comprehending and improving her practice, they are also always in the service of achieving the experts' preset objectives. Therefore, although her teaching reflections are practical and emancipated, as a whole, they are somewhat technical and instrumental in nature. By engaging in this type of reflection, Ms. Zhang is able to creatively implement the experts' concepts, but she cannot creatively find her own path. In comparison with Ms. Zhang's conservative reflections, Ms. Tian is differentiated by her transcending reflections. The direction and objective of education is an important component of Ms. Tian's reflections. She is often able to determine teaching objectives based on the needs of the students rather than the stipulations of the curriculum standards. This is why we referred to Ms. Zhang's process of learning through practical reflection as "conservative inner growth professional development," whereas Ms. Tian's process of learning through practical reflection was referred to as "transcending inner growth professional development."

Throughout the top-to-bottom, comprehensive wave of curriculum reforms, rather than focusing on practical circumstances, Ms. Li and Ms. Song's teaching reflections centered on how to effectively apply external theories and experiences to their teaching practices; their reflections show strong technical rationality. This type of reflection can also be seen as a self-improving learning process that teachers may adopt in order to increase their efficacy as educators. However, their educational ideals and thinking are dominated by external theories as a result. In the above analysis of the significance of teaching reflection with regard to teach-

ers' learning, we found that there are two types of relationships between the curriculum reforms and teachers' professional development. In the first case, the reforms give teachers a chance to learn, offer them new knowledge that they need for professional growth, provide them with a new understanding of their past experiences, and strengthen their professional judgment and ability to take action. The teachers' professionalism is thus reinforced, whether in terms of knowledge, ability, or autonomy; and the implementation of the reforms is ultimately accelerated as the teachers experience professional growth. We call this type of reform wherein the teacher's evolution as a person promotes the evolution of the curriculum the human-centric model. The professional growth that Ms. Tian experienced through her teaching reflections is a key example. The most fundamental characteristic of Ms. Tian's reflections is that she has her own idea of where she is heading. Her ideas may align with the objectives of the curriculum reforms: however, she does not blindly endorse the reforms, but rather adopts them when they complement her own objectives.

In the second case, the promotion of teachers' learning is seen as a method through which curriculum reforms can be successfully implemented. Teachers are treated as a powerful tool for achieving curriculum reform objectives, and there is an emphasis on the idea that teachers must change to adapt to the demands of curriculum reform.

This idea stresses the expansion of teachers' knowledge and the improvement of their skills, but neglects their feelings and autonomy. We call this type of reform wherein the teacher is changed as a person for the sake of promoting the curriculum, the instrument model. The most fundamental characteristic of this model is that the teachers' professional autonomy is restricted: as a result, their knowledge and skills are low. In the initial stage of the curriculum reforms, Ms. Zhang entered the first phase of professionalization: after two or three years of tempering, she is now undergoing reprofessionalization to adapt her professional beliefs, knowledge, and skills to the needs of the curriculum reforms. However, if Ms. Zhang could strengthen her ability to engage in critical reflection, expand and diversify her understanding of teaching, and gain a foothold based on a deeper understanding of how to discover and resolve practical problems, she would achieve more rapid professional development. After four years of curriculum reforms, Ms. Li and Ms. Song are essentially still in the first phase of professionalization, and are still struggling to reprofessionalize themselves. From the perspective of the theory of teaching reflection levels, these teachers should reduce technical reflection and instead seek to accumulate practical knowledge through practical reflection and create a more open space for teaching and development for themselves and for their students through critical reflection.

References

- Chen, X.M. 2008. "Lilun zai jiaoshi zhuanye fazhan zhong de zuoyong" [The Function of Theory in Teachers' Professional Development]. *Beijing daxue jiaoyu pinglun* [Peking University Education Review] 6, no. 1: 39–50.
- Day, C. 1999. "Professional Development and Reflective Practice: Purposes, Processes and Partnerships." *Pedagogy, Culture, and Society* 7, no. 2: 221–33.
- Fullan, M. 2005. "The Meaning of Educational Change: A Quarter of a Century of Learning." In *The Roots of Educational Change: International Handbook of Educational Change*, ed. A. Lieberman, 202–16. Dordrecht: Springer.
- Habermas, J. 1971 [first published in German, 1968]. *Knowledge and Human Interests*. Boston: Beacon Press.
- Lai, M.H., and N.K. Lo. 2005. "Hugang liangdi jiaoyu gaige xia de jiaoshi zhuanyexing" [Teachers' Professionalism Under the Education Reforms of Shanghai and Hong Kong]. *Jiaoyu xuebao* [Education Journal] 33, nos. 1–2: 63–88.
- Schön, D.A. 1983. *The Reflective Practitioner: How Professionals Think in Action*. New York: Basic Books.
- Valli, L. 1997. "Listening to Other Voices: A Description of Teacher Reflection in the United States." *Peabody Journal of Education* 72, no. 1: 67–88.
- Van Manen, M. 1977. "Linking Ways of Knowing with Ways of Being Practical." *Curriculum Inquiry* 6, no. 3: 205–28.
- Wellington, B., and P. Austin. 1996. "Orientations to Reflective Practice." Educational Research 38, no. 3: 307–16.
- Yin, R.K. 2003. *Case Study Research: Design and Methods*, 3rd ed., 13–14. Thousand Oaks: Sage.

To order reprints, call 1-800-352-2210; outside the United States, call 717-632-3535.

Copyright of Chinese Education & Society is the property of M.E. Sharpe Inc. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.