The Use of Expert Tacit Knowledge in Staff Development Workshops for Elementary School Teachers Learning How to Teach English as a Foreign Language.

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Introduction

The Japanese Ministry of Education (MEXT) has recently revised the curriculum for elementary schools to include 70 hours of English as a foreign language (EFL) instruction in the 5th and 6th grades (MEXT, 2009). All full-time teachers will be required to teach these classes as of April 1st, 2011. However, with few exceptions, none of these teachers have had EFL methodology during their initial professional education at university. Thus, MEXT (2009) has initiated a staff development (SD) plan to train them: All elementary schools must provide at least 30 hours of EFL to 5th and 6th graders over each of the next two years so they can gain experience using the knowledge and techniques learned in SD.

I train teachers in SD programs in eight municipalities in Yamaguchi Prefecture. Boards of education (BsOE) ask me to share my "expertise" with teachers so they can gain skill and confidence in teaching EFL ; they request workshops be practical: knowledge and techniques should be easily transferable to the classroom.

In October, one of my colleagues in the doctoral program in which I am enrolled posed a question that caused me to reconsider my role in SD. She wondered who should train newly graduated nurses (Horn, Personal communication, 10/8/2009). Her answer surprised me: "NOT the expert," she replied, "The expert has the ability to eat the apple whole... and has difficulty making all she knows explicit" (10/8/2009). I began to wonder whether I, as an "expert" in EFL, was the best person to train teachers new to it; whether I had the ability to make what I know explicit to them.

I want to gain a clearer understanding of the issue of making expertise explicit. Doing so will help me meet the expectations of SD providers. More important, it will help me give teachers insight into EFL. Ultimately, I hope it will help me find out whether I am "the best person for the job" of helping elementary school teachers learn to teach EFL.

Problem Statement

One way that novices can learn about their practice is by learning from experts. However, the knowledge and expertise experts possess are said to be tacit in nature, making them difficult to share (Jeris, Personal communication, 10/11/2009; Shim & Roth, 2008; Nash & Collins, 2006). In order for novices to access this knowledge, experts must make their expertise explicit (Shim & Roth, 2008).

Am I an expert? Is it possible for me to make my "expertise" in teaching EFL explicit so I can share it with teachers new to the field? For the sake of this paper, I will assume that I am an expert for reasons I will describe briefly below and focus primarily on trying to answer the latter question.

In my experience, university professors in Japan are regarded as experts in their fields. My research and practical experience (13 years of research and 200 plus classroom hours teaching at the elementary school level) combined with my status as a professor make me an excellent candidate for BsOE looking for "expert" trainers. There is a very strong expectation for me to share my expertise during SD: I am given the most amount of time to speak, all questions are directed to me, and administrators ask me for recommendations on directions school districts should take on EFL in the future.

Thus, the issue of making my expertise explicit is primarily one of practice. In working with teachers, I am expected to share what, how and why I do what I do. Teachers are looking not only for techniques, but also theories and principles that guide my actions and choices: they want to know how to think and make decisions like an EFL teacher.

However, questions raised in SD sessions about practice often lead to ones of policy, e.g., "how much do I need to follow MEXT's guidelines"; "what does MEXT mean by 'experiential approaches appropriate for children'," etc. I must be aware of MEXT's policies. At the same time, I am expected to comment on issues that may affect local policy, e.g., involving junior high schools in curriculum and practice issues.

Theoretical Framework

"Expertise" is a word that is associated with tacit knowledge (Imel, 2003). Horn (Personal communication, 10/8/2009) and Groebner (Personal communication, 10/10/2009) point out that expert nurses are unable to articulate individual steps of processes novices need to understand, i.e., make their expertise explicit. Furthermore, both scholars agree that experts inadvertently intimidate novices, making them feel inferior. Horn (10/8/2009) posits that advanced beginners or proficient nurses have a more recent recollection of novices' tensions and needs. Therefore, they are able to not only articulate individual steps in processes novices are trying to learn, but also help novices make incremental gains in confidence and proficiency.

Nonaka and Konno (1998) point out there are two types of knowledge: explicit and tacit. Explicit knowledge (EK) can be expressed through language and numbers and is easily shared in formal and systematic ways, e.g., data, scientific formulae, manuals, etc.. Tacit knowledge (TK), however, is "highly personal and hard to formalize" (p. 42). Furthermore, as TK is firmly rooted in action and procedures, it requires a type of "simultaneous processing" (Nonaka, Toyama & Konno, 2000, p. 7), which makes it difficult to communicate or share TK with others.

For Nonaka et al. (2000), knowledge is created through interaction of TK and EK, and not just from one or the other. Their model of knowledge creation consists of three elements, the SECI process, *ba*, and knowledge assets. SECI refers to four modes of knowledge conversion, or interaction between TK and EK in knowledge creation: 1) Socialization (TK to TK); 2) Externalization (TK to EK); 3) Combination (EK to EK); 4) Internalization (EK to TK). Apparently, TK can only be acquired through shared experience, e.g., spending time together (Socialization). However, when TK is made explicit, e.g., through metaphor, analogy or model, it can be shared and becomes the basis for new knowledge (Externalization). EK can be collected and combined, edited or processed to make new knowledge; it can be disseminated (Combination). When EK is shared, it can be converted into TK through actualization. It then becomes part of the TK base (Internalization). The motion of this process is spiral-like in nature (2000).

The creation of knowledge requires context (Nonaka et al., 2000). *Ba*, the Japanese concept of shared context, provides it. *Ba* is defined as a "shared context in which knowledge is shared, created and utilized" (p. 14). There are four types of *ba* that correspond with SECI: 1) Originating *ba*, where experiences, emotions, and mental modes are shared (Socialization); 2) Dialoging *ba*, where mental models and skills are shared, converted into common language, and voiced as concepts (Externalization); 3) Systemizing *ba*, where EK and information are disseminated effectively and efficiently (Combination); 4) Exercising ba, where individual and virtual interactions and reflection through action take place (Internalization). Like the dynamic interaction of TK and EK, *ba*, too, exist at many levels and connect to create larger *ba*.

Knowledge assets are the "inputs, outputs and moderating factors of the knowledge-creating process" (Nonaka et al., 2000, p. 20). Again, there are four types of assets that correspond with SECI and the four *ba*: 1) Experiential knowledge assets (shared TK built through shared experience); 2) Conceptual knowledge assets (EK put into images, symbols and language); 3) Systemic knowledge assets (EK systemized and packaged for easy transferability); 4) Routine knowledge assets (TK that has become embedded in the actions and practices of the group).

Organizations create new knowledge via the process of SECI, which takes place in ba; this knowledge becomes part of the knowledge assets of the organization, which in turn support new spirals of knowledge creation (2000).

Schon (1987; 1983) provides another perspective on tacit knowledge. He (1983) posits that competent practitioners exhibit a way of knowing in practice that is primarily tacit; this type of competence is not much different from the types of competence we

exhibit every day, e.g., walking, riding a bicycle, etc. (Schon, 1987). None of these competencies depend on the ability to describe our actions. Schon calls these types of spontaneous and skillful action, knowing-in-action. Knowing-in-action works as long as what is considered a normal situation continues.

Reflection-in-action happens when something unexpected occurs in knowing-in-action (Schon, 1987). Surprise leads to instantaneous reflection or reflection-in-action, which questions knowing-in-action and leads to "on-the-spot-experimentation" (p. 28). Experimentation produces satisfactory results and resumption of knowing-in-action or to other surprises which start the process again.

Schon (1987) acknowledges that reflection-in-action is rarely as distinct as his description and that differences between knowing-in-action and reflection-in-action can be subtle: neither need to be articulated to be done. Schon describes reflection-in-action as a "reflective conversation with the materials of the situation" (p. 31); as with knowing-in-action, it is possible to reflect on reflection-in-action. However, Schon (1987) cautions that descriptions resulting from reflection on knowing- and reflection-in-action are constructs that attempt to describe knowledge that is tacit and spontaneous. As such, we need to be vigilant in testing them against observations of the original actions. Reflection on reflection-in-action may indirectly influence future actions and lead to more skillfulness in knowing-in-action (1987).

Reflection for the practitioner helps "surface and criticize the tacit understandings" of "repetitive experiences of a specialized practice" or knowing-in-action (Schon, 1983, p. 61). Through reflection, practitioners allow themselves to become confused about subjects they are supposed to 'know'...to think differently" about their practice (p. 67).

Reflection-in-action is the key to professional artistry, the competence displayed in unique and unknown situations by outstanding practitioners (Schon, 1987). Artistry is what helps professionals meet the unknown. Fostering it, therefore, is an important goal of initial and continuing professional education (1987). Reflection on reflection-in-action by the practitioner can help students see this artistry at work (Schon, 1983); students can learn artistry by "practicing the making or performing at that which they seek to become adept" (Schon, 1987, p. 16). They can be helped by senior practitioners who provide "the right kind of telling" (p. 17). Observation and practicums are ways to accomplish this.

Discussion

Although Nonaka et al. (2000), Nonaka and Konno (1998), and Schon (1987; 1983) never specifically refer to expertise, their descriptions of tacit knowledge and knowing- and reflection-in-action, respectively, coincide with descriptions of expertise and its implicit nature given by several scholars (Shim & Roth, 2008; Dreyfus & Dreyfus as cited in Dall'Alba & Sandberg, 2006; Nash & Collins, 2006). Thus, knowledge creation (Nonaka et al., 2000) and knowing-in and reflection-in-action (Schon, 1987; Schon, 1983) have given me a clearer understanding of the tacit nature of expertise and subsequent difficulties in making it explicit. While Horn (Personal communication, 10/8/2009) may be correct in her analysis that experts are further away from their tacit knowledge or expertise than less experienced practitioners, the expert, through reflection on knowing- and reflection-in-action appears to be able to reach this information (Schon, 1987).

Based on Schon's (1987; 1983) descriptions of knowing- and reflection-in-action, it appears that there is much for novice practitioners to learn by observing experts if explicit descriptions accompany observations. This is similar to making TK into EK in the externalization mode of the SECI process (Nonaka et al., 2000) where TK is converted into EK via metaphor, analogy, and modeling via dialog in dialoging *ba*.

Nonaka et al. (2000) in their discussion of the role of *ba* in knowledge creation and Schon (1987, 1983) in his discussion of practicums and observations make it clear that there must be interaction between the possessor of TK and the persons who want or need to get TK. However, neither mention power issues inherent in these interactions nor do they describe the role of these issues in the contexts they give. These issues are of particular importance given the perspectives of Horn (Personal communication, 10/8/2009) and Groebner (Personal communication, 10/10/2009).

Finally, on a related note, the role of give and take appears to be important in the conversion of TK to EK in *ba* as well as in becoming knowledge assets (Nonaka et al., 2000). Jeris (Personal communication, 11/21/09) points out that the process of making TK explicit depends to some extent on partnership between learners and expert. However, culture as well as power issues may

play some role in learners' willingness to "help" experts. Furthermore, using the word "expert" may make it difficult to invite others to share their own expertise (Jeris, Personal communication, 11/21/09), a possible problem in the continuing professional education (CPE) context Schon (1987) mentions.

Conclusions and Recommendations

CPE practitioners need to realize and understand the tacit nature of expertise and the complexities in making it explicit. The roles of the expert practitioner and the learners in this process need to be clarified. Reflection by the expert, in particular, is necessary. CPE providers need to realize that the process of making expertise explicit needs a context that provides time for the process to work. Practitioners *and* providers need to be aware of power imbalances or cultural issues that can impact the reflection and interaction necessary in making TK explicit, particularly when participants are asked to reflect on a model provided by the expert: Certain cultures may view this as criticism of the expert, something to which they are unaccustomed and unwilling to do.

In my context, the model that Nonaka et al. (2000) propose for knowledge creation may provide me with a framework for designing workshops for elementary school teachers learning how to teach EFL. However, workshops would have to be considerably longer than the 90 to 180 minute framework in which I currently work. Dialog about lessons I have taught and participants have collectively observed along with further modeling by me could form the basis of our work. The knowledge creation model would be particularly appropriate in promoting organizational-type learning at schools I visit on a regular basis, where a number of teachers are involved in planning and implementation of EFL lessons. I could participate from time to time, using those opportunities to convert my TK into EK to form the basis for new knowledge creation. The results of our work might become knowledge assets (2000) for the school.

Schon's (1987, 1983) concepts of reflection on knowing- and reflection-in-action appear to be best suited for the time limits imposed on SD in most of the contexts where I work. I usually incorporate a sample lesson into those sessions; by adding a joint reflective session in which both the teachers and I reflect on the lesson, I might be able to make my knowing- and reflection-in-action explicit for them. Although the time available (usually around 60 minutes) would limit the extent and amount of expertise I could make explicit, this type of activity has been successful in the past and doing it might promote similar reflection by teachers on their own lessons or in other opportunities for observing experts. Regardless, I need to follow the advice of Boud and Walker (1998) when asking teachers to reflect on their experiences, i.e., promoting critical reflection in an environment that is conducive to it.

Another aspect for exploration is putting my reflections on knowing- and reflection in action into written form for dissemination in a way similar to the combination and internalization modes of SECI (Nonaka et al., 2000). Another way of combination (Nonaka et al., 2000) may be to create a small portfolio of readings that I have internalized and that have become part of my TK. This portfolio could be disseminated to teachers after reflection sessions on model lessons. These two activities, writing out my reflections and putting together a portfolio, may create an opportunity for me to engage in what Rodgers (2002) calls "slowing down" (p. 853) to further explore what I already know. At the same time, I may possibly make new meanings of my knowledge and foster my own self-development (Moon, 2000).

Finally, I need to be more cognizant of teachers' roles in the process of making my expertise explicit. I need to realize a way of doing what is expected of me as an expert, while at the same time inviting teachers to share in the process of making my expertise explicit. A major part of this process may be acknowledging teachers' greater experience with working with Japanese children. This might create *ba* (Nonaka et al., 2000) conducive to the process. Another part of this process may be asking teachers to share their insights on teaching EFL as non-native speakers of English. As a native speaker of English I have issues with my tacit knowledge of the language, so these insights would be helpful.

Reflection

Prior to Horn's (Personal communcation, 10/82009) comment, I had never questioned whether I was the "right person" to teach teachers learning to teach EFL. I was confident in my abilities to reach them and in the expertise I brought to that situation. Horn's

question was one of those surprises that Schon (1987) says begins the process of reflection-in-action. In a way similar to what Schon (1983, p. 67) mentions, her question caused me to doubt what I thought I knew. This led me to reconsider my role in SD.

Writing this paper has given me a greater understanding of the issues involved in trying to make my expertise more explicit and some concrete ideas about how to go about doing so in SD contexts. Furthermore, Schon's (1987) emphasis on the role of senior practitioners in IPE and CPE has helped me regain some of my confidence. I plan to begin integrating this work into my practice almost immediately (in some ways the process has already started.)

However, exploring how to make expertise explicit has left me with a number of questions to which I still do not have answers and more important, that I did not have before I began the paper: What expertise do veteran teachers bring to SD that can help them learn to teach EFL?; What can I do to ensure equal partnership between teachers and me in making *our* expertise explicit?; What constitutes expertise and artistry and how do I know the extent to which I and others have it? How will reflection on reflection-in-action and making my expertise explicit affect my own practice? Though I finish with more questions than I began, I have greater confidence in my ability to answer them through scholarly reading, personal reflection, and reflection with my colleagues.

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　2011年度より今まで小学校でしてきた外国語活動（英語）が正式に教科化されることになっている。そのための準備として2009年度及び2010年度において現場教員に対して約30時間の研修時間が義務付けられている。本論文ではこのような研修において外国語としての英語教育（TESOL）の専門家の係り方及び役割について野中氏、富山氏と今野氏（2000）らが提案されたSECIやSchon氏（1987、1983）が提案されたReflection-in-Actionに照らし合わせ、検討したものである。TESOLの専門家が現場職員の研修に係る際の課題及び注意点を具体的に指摘し、このような研修をもっと有効かつ効果的に図るための提案もしている。