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Externalizing tacit knowledge for improving leadership practices: Experiences from leadership programmes under ESRA

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Abstract

This paper draws upon the experiences gained from a leadership development course held at AKU-IED that included participants from 9 districts from Sind and Balochistan provinces. It describes the attempt, by the course planners, to conceptualize and deliver the course with a focus on externalizing participants' tacit knowledge. The paper shares strategies used during the course, and describes successes and challenges in this respect, and the subsequent impact on participants' learning and practices.

Based on the outcome of the course, the paper suggests that the design of leadership and management development courses should focus clearly on strategies that capture and build upon the tacit knowledge of participants. The paper asserts that this approach helps to add more energy and interaction to the sessions and consequently increases the chances of impacting leadership practices of participants.

Two Dimensions of Knowledge: Tacit and Explicit

The distinction of knowledge as tacit and explicit is based on Michael Polanyi's (1966) pioneering work on knowledge. This classification of knowledge has now become common in knowledge management literature (Lam, 2002 & Spiegler, 2000).

Explicit knowledge can be expressed in words and numbers and can also be shared in the form of data, scientific formulae, product specifications, manuals, universal principles, and so forth. This kind of knowledge can be communicated very easily across individuals formally and systematically through explicit media.

In contrast, tacit knowledge is highly personal and hard to formalize, making it difficult to communicate or share with others (Brooking, 1998; Geyer, 2001; Lee & Yang, 2000; Nonaka & Takechui, 1995). Subjective insights, intuitions and hunches fall into this category of knowledge. Furthermore, tacit knowledge is

deeply rooted in an individual's actions and experiences, as well as in the ideals, values or emotions he or she embraces.

Tacit knowledge has two further dimensions; technical and cognitive. The technical element of tacit knowledge encompasses concrete know-how, crafts and skills. The cognitive dimension includes paradigms, perspectives, beliefs and viewpoints which help individuals to perceive and define their world (Nonaka & Takeuchi, 1995). "the cognitive elements of tacit knowledge refer to an individual's images of reality and vision for the future" (ibid, p. 60). However, they assert that tacit and explicit knowledge are not separate entities per se; they are mutually complementary concepts and are vital for knowledge creation. Stenmark (2000) has integrated both dimensions of tacit knowledge by arguing that they exist in people's hands and minds and are manifested through actions. This suggests that although the technical and cognitive dimensions of tacit knowledge are useful theoretical constructs, they are hard to distinguish during practice.

Knowledge Creation as an Interaction of Tacit and Explicit Knowledge

Nonaka and Takeuchi's (1995) model of knowledge creation is a dynamic interaction of tacit and explicit knowledge in which one converts into the other e.g. tacit into explicit and vice versa. This interaction of tacit and explicit knowledge reveals four modes of knowledge conversion: socialization (from tacit knowledge to tacit knowledge), combination (from explicit knowledge to explicit knowledge), internalization (from explicit knowledge to tacit knowledge) and externalization (from tacit knowledge to explicit knowledge). The following figure shows the four modes of knowledge conversion.

		To	
		Tacit Knowledge	Explicit Knowledge
From	Tacit Knowledge	Socialization	Externalization
	Explicit Knowledge	Internalization	Combination

Figure 1: Matrix of knowledge conversion

Socialization (from tacit to tacit)

Socialization includes the shared formation and communication of tacit knowledge between people. Hargreaves (1999) identified apprenticeship and on-job training as a method to generate tacit knowledge. Apprentices acquire tacit knowledge through observation, imitation and practice during apprenticeships in a subtle way (van Zolingen, Streumer, & Stooker, 2001; Tsoukas 2002). Extending this argument further, Jones & Sallis (2002) observed that the socialization process is essentially what happens in well functioning teams and among good friends. However, Nonaka (2000) asserted that socialization is a limited form of knowledge creation as neither master nor apprentice gains any systematic insight into their craft and most of the learning takes place in an unintentional way.

Externalization (from tacit to explicit)

Externalization is 'the process of articulating tacit knowledge into explicit concepts' (Nonaka & Takeuchi, 1995, p. 64). Kelloway & Barling (2000) explain that articulation means making the 'unknown' known. However, because of its very nature, tacit knowledge is not easily converted into explicit knowledge. Tsoukas (2002) suggests that tacit knowledge can be converted into explicit knowledge through articulation in the form of concepts, models, hypothesis, metaphors and analogies. However, Hargreaves (1999) states that dialogue and collective reflections trigger the process of externalization and Kothuri (2002) notes that only some portion of tacit knowledge can be captured through conceptualization, elicitation and then articulation of knowledge.

Combination (from explicit to explicit)

Combination results from the interaction of explicit knowledge with explicit knowledge. The combination of different bodies of knowledge results from systemization and elaboration of explicit knowledge by different people (Hargreaves, 1999). Combination involves the transmission of explicit knowledge between individuals and can best be illustrated by the activities that constitute formal education (Kelloway & Barling, 2000; Tsoukas, 2002). Combination can take place by exchanges between individuals, through documents, meetings, telephone conversations or electronic communications (emails, bulletin boards). Reconfiguration of knowledge may take place through the sorting, adding, combining and categorizing of explicit knowledge that can lead to new knowledge.

Internalization (from explicit to tacit)

Internalization refers to the conversion of explicit knowledge into tacit knowledge. Explicit knowledge is converted into tacit knowledge when it is internalized by the persons involved (Tsoukas, 2002). In order to act on information, individuals have to understand and internalize it, thus resulting in a conversion from explicit knowledge to tacit knowledge (Kothuri, 2002). The process of internalization is triggered by learning by doing or using (Nonaka, 1996; Hargreaves, 1999) and internalization develops shared mental models or technical know-how (Nonaka & Takeuchi, 1995).

Externalization

From the four kinds of knowledge conversions mentioned above, externalization has received the least attention in organizational theory. For example, a number of theories about the process of socialization exist, including literature on group processes and organizational culture. Similarly, combination has its roots in information processing and internalization is connected with organizational learning.

In education the focus is primarily on those three kinds of knowledge creation. Externalization is usually ignored, even in the development and delivery of professional development programmes for educational leadership and development. Wassink, Sleegers & Imants (2003) noted that the tacit knowledge of educational leaders has not received much research attention. We interviewed one of our colleagues to get some background for this paper. He was of the opinion that leadership and management development courses largely focus on theories of leadership and management, the differences between leadership and management and on different leadership styles. These courses are mostly 'reading-driven' and most readings have low relevance to the local context (Interview with AKU-IED faculty, 2006). This focus leaves little space to attend to the real issues such as perceptions and values, which are cognitive components of tacit knowledge. With an overall focus on explicit knowledge, leadership development programs either undermine or do not value tacit knowledge, especially externalization of tacit knowledge. This ignorance towards externalization of tacit knowledge and its affect on knowledge creation and subsequently on enhancing leadership skills is a common feature of most leadership development programmes that we have observed and delivered and this feeling is shared by some of the colleagues we formally interviewed.

This realization led us to reconceptualise some of the forthcoming leadership development courses by explicitly taking into account the tacit knowledge of course participants. In the remainder of this article we will share the process of reconceptualisation of the course and the strategies that were used for externalization of tacit knowledge. This will be followed by discussion, challenges and conclusion.

Focus on Externalization

Aga Khan University, Institute for Educational Development (AKU-IED) has been engaged in designing and delivering leadership development courses for both public and private education sectors since its inception in 1993. Currently, in partnership with the Government of Pakistan, it has been engaged in the professional development component of the USAID-funded 'Education Sector Reforms Assistance' (ESRA) programme. Training programmes for educational leaders and managers was one component of this programme and was initiated in nine districts in two provinces in Pakistan (Sindh and Balochistan). This was done through the offering of field-based certificate programmes comprising three phases: (a) face-to-face teaching for three weeks; (b) a field component spread over six weeks; and (c) face-to-face teaching for three weeks.

The reflections of the teaching team after the first programme revealed that on average, our participants had more than ten years of experience in their management positions, adequate qualifications as available in the country and enough official authority to work effectively in their positions. However, they generally held narrow viewpoints and stereotypes about their work places and people higher up in the hierarchy. Some common perceptions were: parents are not interested in their children's education, formal authorities do not want to improve quality in education, resources are scarce and politicians are there just to interfere in our work. We noted that such perceptions created a feeling of 'disempowerment' and led them to behave in a reactive rather than a proactive manner in their work places. This understanding drove us to devise a different focus for the course, a focus on changing their attitudes rather than on contents to be covered. We considered demonstrating to them how much knowledge they already possessed and building on it to introduce additional concepts. We thought this would help to reduce their feeling of disempowerment.

Realizing this, we thought about strategies that could further help participants in articulating their tacit knowledge. Rowley (2000) argued that articulation of tacit knowledge makes personal knowledge available for larger use. Nonaka & Takeuchi's (1995) model for knowledge creation suggests that externalization

follows socialization. With this perspective, we reconceptualised our course for the second cohort by creating more space for socialization and introducing several strategies to externalize the tacit knowledge of the participants. We significantly moved from our framework of 'contents to be covered' (explicit knowledge) to the framework of perception to be broadened or modified (tacit knowledge). In the following paragraphs, we will discuss the strategies employed to externalize the tacit knowledge of the participants.

Writing Recipes

A recipe is commonly understood as a set of step-by-step instructions for producing a dish. Course participants (CPs) were encouraged to develop 'recipes' of concepts like effective leadership, pedagogy, patience and supervision. The participants were explained the process of developing recipes, they were shown that recipes consist of two basic parts: ingredients and processes. The ingredients were explained as elements needed to make a recipe; key elements and optional elements (required to add flavour, colour and taste). Preparation processes like heating, steaming and chopping were also discussed with the participants. This proved a very powerful structure to elicit the ideas they took for granted on a variety of topics. For example, one recipe was named 'Leadership *Biryani*' (see figure 2). The key elements identified in this recipe were: vision, clear thinking, decision power and personal knowledge. The recipes were written in Urdu and selected recipes were included in *Qiyadat Naama*, a magazine produced by CPs. The CPs found this strategy a challenging and creative task. "It was good way to express what we already knew but were unable to articulate" (Interview with CP, 2006). The faculty member who developed this strategy stated that writing 'recipes' was a powerful tool to access the personal knowledge of the CPs as it combined metaphors with the concrete structures of commonly known food recipes (Collective reflections of faculty, 2005).
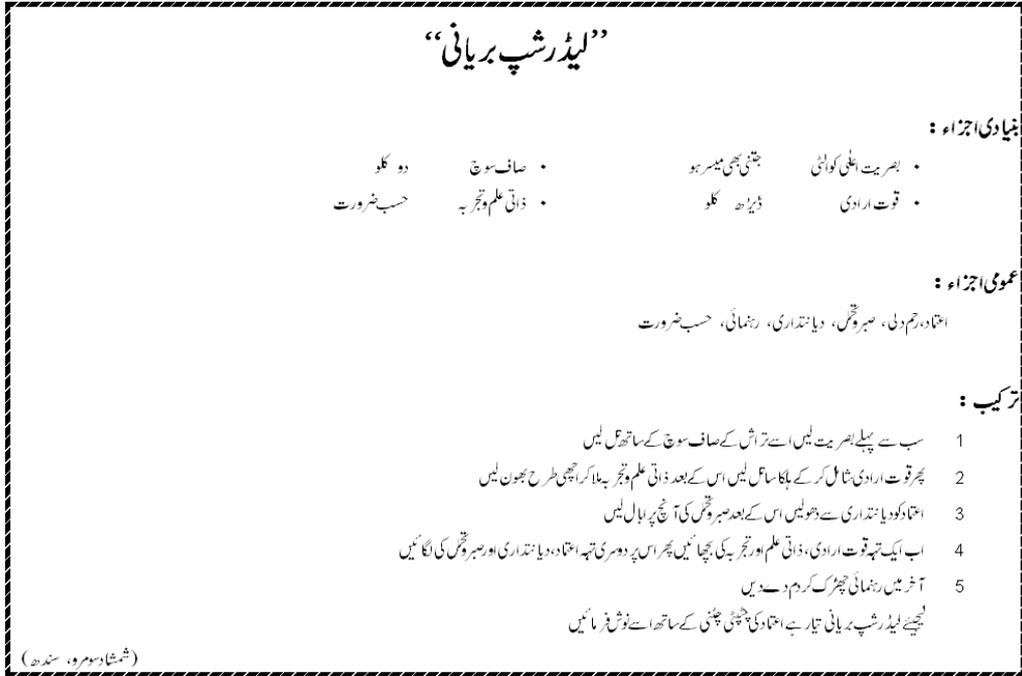
Figure 2: Example of recipe developed by one of the course participants

Sharing Stories and Jokes

Course participants were encouraged to share their success stories and crack jokes to explain situations and their point of view. We defined jokes as a very short story with a surprising outcome. The process of story sharing was very simple; share it as it comes to your mind. Stories are a powerful way of understanding what happened and why (Brown & Duguid, 2000; Sen, 2002). After initial encouragement and tone setting, almost all course participants narrated their stories verbally and also entered the same in their reflective journals. For example, one of the participants shared the story of one of his students who participated in a national creative writing competition and won a prize. The student attributed her success to the encouraging feedback of her teacher on a creative writing assignment, several years back. Such reflective stories were gathered and analyzed by a group of CPs with the assistance of faculty members and key messages were noted in *Qiyadat Namma*. Reflecting on the process of sharing stories, one of the CPs said that mostly the messages of stories were in his mind but he could not express them because of a lack of such opportunities (Interview with CP, 2006).

Developing Metaphors and Analogies

Another strategy used to articulate the tacit knowledge of participants was the development of metaphors and analogies during the leadership development course. To facilitate the process, the faculty members shared and explained metaphors that could relate to different notions of educational leadership and management. Developing metaphors was a regular activity of the course and they provided easy access to the participants' perspective. For example, one of the participants used the metaphor of a 'water well' to describe leadership. Because of the shortage of water in his area, a well represents a rare jewel. Ambrosini & Bowman (2001) acknowledged the worth of metaphors in eliciting tacit knowledge, as metaphors help in expressing what is not easily expressible. By extending the same argument, Jones & Sallis (2002) and Sharma (2004) acknowledged the utility of metaphors and analogies in externalization. However, one colleague noted that it was difficult to 'find' and 'handle' metaphors (Interview with Faculty, 2006). Another faculty in his interview (2006) shared his experience of how a metaphor for the principal's office impacted the practices of a school principal. However, the same faculty member acknowledged that it was not an easy task for CPs to develop metaphors.

Cognitive Maps

Cognitive maps are a graphical representation of cognitive processes (Wassink et al). Examples of graphical representations include sketches, cartoons and mind maps. Course participants were urged to draw sketches, cartoons and causal maps of different situations and issues. These activities were mostly done in groups and later presented to the whole class. One year after completing the course, participants referred to this set of activities as 'group work', 'chart-making and presentations' and felt that this was useful for 'information sharing', 'removing shyness' and 'developing confidence' (Interview with CPs, 2006). The concept map is also useful as a tool for capturing practical knowledge (Meijer & Zanting, 2002) and this could be seen in our course.

Figure 3: Example of cognitive map

Skits and Other Performances

Role-plays of true situations from participants' contexts were another feature of the course. "Role plays were instrumental in motivating the CPs as those were about real situations and were expressive of participants' experiences and practices" (Interview with Faculty, 2006). Role plays and skits captured the way the CPs handled different situations in their own contexts. These performances helped CPs to externalize through action what was difficult to verbalize otherwise. Performances were done on how supervision is done in schools and how meetings of School Management Committees are conducted. One of the CPs commented that skits helped to bring out the 'inner person' from each participant (Interview with CP, 2006).

Individual and Collective Reflections

Wassink et al. argue that tacit knowledge is usually acquired through reflection on previous experiences. Course participants were asked to write their reflective journals daily and were given feedback regularly. Collective reflections over social events were also carried out. For example, after a recreational visit the whole group reflected over the leadership and management processes observed during the visit. They also discussed their roles and issues in terms of leadership practices. Key learning was articulated and was written in the *Qiyadat Nama*. Such collective reflection can help groups externalize their tacit knowledge (Thompson, Warhurst & Callaghan, 2001). One of the faculty members felt that in general, all courses include a component on reflective practice but real reflection can only happen in a reflective environment. This environment was

provided by the faculty members in the course through socialization processes and everyone was engaged in it (Reflections by faculty, 2005). One of the graduates felt that questions for reflections were helpful in the process (Interview with CP, 2006).

Discussion

Atherton (2002) has argued that the process of acquiring knowledge for mature practitioners is little understood and its relationship to formal training still remains problematic. However, Chisholm & Holifield (n.d.), have noted that current research in tacit knowledge is motivated by the acceptance that tacit knowledge is linked to professional performance. In this paper, we argue that the externalization of tacit knowledge is of critical importance to the enhancement of professional practices.

In our course, the process of externalization served two purposes: (a) At an individual level, CPs were assured of what they already knew; and (b) at a collective level, a wealth of contextually relevant knowledge was presented for discussion and reflection. This process and focus made the course very interesting and relevant for the CPs and consequently helped in improving their work performance.

The teaching team observed CPs at work during the field-based component and reflected back on the process. A faculty member stated, "It was heartening to see the motivation of the CPs for their field assignments" (Reflections of faculty, 2005). After one year of course completion, nine course participants (seven men and two women) were selected randomly to find out their views about the course and the perceived impact it had on improvement in their practices. They were interviewed telephonically. The graduates responded very warmly about the course. Interestingly, most of the graduates said that the course helped them tap their hidden potential and made them confident in their abilities. "I understood the value of other people's point of view and my potentials became visible to me" (Interview with CP, 2006). Interestingly most of the respondents while talking about strategies employed in the course, labelled those strategies as 'co-curricular' activities. In all likelihood, the label of co-curricular activities symbolizes participants' attempt to describe the tacit aspect (not explicit part) of the programme by using profession-specific terminology.

Six out of nine respondents shared that they were conducting co-curricular activities with the help of teachers and in some cases with the help of the community after their return. "Now, we have separate in-charge to conduct co-

curricular activities every month" (Interview with CP, 2006). It can be argued that broadening the curriculum base, in consultations with stakeholders, can be considered a useful initiative taken by school leaders as a result of attending the programme.

CPs also mentioned changes in their attitudes as a result of the programme in terms of increased confidence and interpersonal skills, increased willingness to share and consult with others and improved patience. These aspects were consistent with the stories they narrated about their practices. "Tacit knowledge plays a key role in the way people work, both alone and, perhaps more importantly, in collaboration with others." (Chisholm & Holifield, n.d.; Strenberg, 2004).

Nonaka & Takeuchi's (1995) model of organizational knowledge proposes socialization (sharing tacit knowledge) prior to externalization. Socialization provides an environment conducive to externalization. The model has also been thought to help shift the focus of knowledge creation from individual to group process (Beemish & Armistead, 2001) and for its applicability beyond business management (Hargreaves, 1999). The intention of the programme was to tap into participants' tacit knowledge and participants felt that the programme brought about a change in their attitude and practices. Referring to the importance of an appropriate environment for externalization a faculty member said, "It [externalization] requires safe, non–threatening and non-judgmental environment. It is [a] very complex process and requires heart-to-heart relation" (Interview with Faculty, 2006). The continued interpersonal communication between CPs and faculty to date is indicative of strong bonds developed during the course and validates the presence of a non-threatening environment.

Challenges

Externalization of tacit knowledge requires a threat-free and emotionally secure environment based on trust and mutual respect. Course participants came from diverse academic backgrounds and multicultural orientations and maintaining an emotionally secure environment in the face of such diversity was very challenging and required more hours and energy from facilitators. The teaching team realized that they spent a lot more hours than their official workload for the programme.

It is also important to note that a major part of the externalization strategy is the effective use and interpretation of metaphorical discourse. High order thinking ability is needed to interpret metaphors, the ability to probe and direct

discussion and the ability to synthesize and create linkages across various disciplines is needed. A colleague at AKU-IED (2006) noted in her interview that most of the leadership development courses had been 'theory-ridden' unlike this course, and she realized that those courses were easier to teach as they only dealt with explicit forms of knowledge.

The third key challenge also resulted from the use of metaphorical discourse instead of traditional academic discourse. Traditional academic discourse relies heavily on well-defined terms and reasoning through established principles of logic. In contrast, externalization of tacit knowledge involves a lot of 'fuzziness' that can distract CPs as they might assume that this kind of discourse is 'less academic'. One of the colleagues in her interview (2006) noted that it was challenging to develop a 'taste' for different discourse.

Conclusion

Educational leadership and management development programmes commonly focus on explicit knowledge through transmission or combination of knowledge. In some good examples, the course design allows for socialization through recreational visits and dinners, however in most cases very little attention is given to the 'externalization' of the tacit knowledge of participants. One reason for this practice may be the difficulty in making tacit knowledge explicit. The difficulty arises because of the elusive nature of tacit knowledge. Stenmark (2000) gave two reasons for the elusiveness of tacit knowledge: (a) it is hard for us to know what we implicitly know; (b) lack of incentives for making tacit knowledge explicit.

Despite being elusive in nature, the articulation of tacit knowledge remains critical for improving practices. Therefore, we may attempt to develop strategies that can be useful in sharing and capturing tacit knowledge. Thus, it is argued in this paper that leadership and management development courses require some strategies to externalize tacit knowledge, which is very crucial in developing leadership practices. We shared the examples from a course where we employed some strategies to externalize the course participants' tacit knowledge, with the aim to improve interaction during the course and subsequently to impact their practices in their context. Those strategies were: writing recipes, sharing stories and jokes, developing metaphors and analogies, developing cognitive maps, performing activities and individual and collective reflections. The CPs found these strategies interesting and engaging, which made sessions lively and interactive and this interaction continues even after their graduation.

The strategies adopted to externalize their tacit knowledge seem to have a positive impact on the quality of their field assignments compared to the previous cohort. However, use of these strategies added to the workload of the faculty as they required more time in planning and care in execution along with other challenges mentioned in the paper. Despite these challenges, the resultant learning among course participants was immense and thus we recommend the use of such strategies more often, if not always.

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