

COMMUNITIES OF PRACTICE FOR CONTINUING PROFESSIONAL EDUCATION:  
A CASE STUDY OF EDUCATIONAL CONSULTANTS IN INDIA

by

NALINI DESIKAN

(Under the Direction of SHARAN B. MERRIAM)

ABSTRACT

The purpose of this study was to understand how communities of practice (CoPs) foster continuing professional education (CPE). The investigation was guided by four research questions. First, how did learning occur in this community of practice? Second, what was the knowledge produced in this community of practice? Third, how was an individual's practice influenced by the community of practice? Last, what Indian socio-cultural factors shaped the process of learning, the knowledge produced, and the practice in the community?

A qualitative case study was set in an educational consulting organization in India. The focus of the organization is to work with educators in K-12 environments to improve the quality of education. Data sources were triangulated using interviews, documents and on-site observations. Thirteen face-to-face interviews were conducted with consultants who are employed full-time or part-time in the organization. Data was analyzed using the constant comparative method. Four categories of interrelated findings were inductively derived.

Findings of this study suggest that membership and interaction within a community of practice fosters CPE. Learning of the participants in this study occurred through structured interactions, informal interactions, hands-on experiences, and reflection. The community produced both professional as well as procedural knowledge. Professional knowledge helped the community to gain knowledge and skills relevant to the field of continuing professional education. Professional knowledge included a systems understanding. An individual's practice evolved through membership in the community of practice as members expanded their repertoire of skills and responsibilities, and increased self-knowledge. The community's practice was influenced by socio-cultural factors within the cultural context of India. Factors of age and gender, language, the Indian Education System, and poor infrastructure impacted the community of practice.

Three conclusions were arrived at: (1) Learning is central to the professional advancement of a community of practice; (2) A professional evolves through participation in a community of practice; and (3) Socio-cultural factors in a context impact professional practice. The study revealed that CoPs can be an effective channel for CPE.

**INDEX WORDS:** Communities of Practice, Continuing Professional Education, Professional development of adult educators, Educational consultants, Case study in India

COMMUNITIES OF PRACTICE FOR CONTINUING PROFESSIONAL EDUCATION:  
A CASE STUDY OF EDUCATIONAL CONSULTANTS IN INDIA

by

NALINI DESIKAN

B.A., University of Madras, India, 1973

M.A., University of Madras, India, 1977

B.Ed., Annamalai University, India, 1988

M.Ed., University of Illinois at Urbana-Champaign, 2002

A Dissertation Submitted to the Graduate Faculty of The University of Georgia in Partial  
Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSOPHY

ATHENS, GEORGIA

2009

© 2009

Nalini Desikan

All Rights Reserved

COMMUNITIES OF PRACTICE FOR CONTINUING PROFESSIONAL EDUCATION:  
A CASE STUDY OF EDUCATIONAL CONSULTANTS IN INDIA

by

NALINI DESIKAN

Major Professor:	Sharan B. Merriam
Committee:	Ronald M. Cervero Lorilee R. Sandmann Janette R. Hill

Electronic Version Approved:

Maureen Grasso  
Dean of the Graduate School  
The University of Georgia  
May 2009

## DEDICATION

I dedicate this dissertation to each one of you for being with me on this journey in your own unique way: Jagan, my husband, your drive to take a chance in life and be committed to make it work gave me the courage to face the highs and lows of this doctoral journey; Anna, my dear father, your zest for life and music enthused me to get by many a lonely day, miles away from home; Amma, my mother and conscience keeper, your teaching of our values and traditions kept me rooted to mine as well as taught me to appreciate other's ways of life. Thank you for these precious gifts that you have given me in my life.

.

## ACKNOWLEDGEMENTS

Om Sahana Vavatu Sahanau Bhunaktu, Sahaveeryam Karavavahai, Tejas Vinavati  
 Tamastuma vidhwishavahai, Om Shanti Shanti Shantihi

I begin with this ancient Vedic sloka (prayer) that invokes the blessings of both the guru (teacher) and the shishya (student) for a conducive relationship without which an exchange of any knowledge between the two is difficult. The translation of the prayer: May we protect each other, may we nourish each other, may we work together with great energy, may our journey together be radiant and effective, may there be no animosity between us, Om, Peace, Peace, Peace.

Dr. Sharan Merriam, the Chair of my committee – Thank you for your cheerful guidance, support and encouragement throughout my doctoral program. Every meeting with you was a pleasant opportunity to share and learn something new. Drs. Ron Cervero, Lorilee Sandmann, and Janette Hill, my committee members – my sincere thanks for your support and thoughtful suggestions. My deep appreciation and thanks to all of you too – Tarun and Deepta, my children, for your wise counsel and encouragement as you ‘parented’ me during this journey; my friends, Ram, for your unconditional support, and Mangala and family, for giving me a home away from home. Words cannot do justice to your hospitality and genuine caring. Finally, my participants at EA, I thank you for you willingly gave your time, shared your experiences, and helped me to make meaning of this study.

## TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS .....	v
LIST OF TABLES .....	ix
LIST OF FIGURES .....	x
CHAPTER	
1 INTRODUCTION .....	1
Continuing Professional Education .....	1
Communities of Practice .....	4
CPE and CoPs in the Indian Context.....	6
Statement of the Problem .....	8
Purpose of the Study.....	10
Significance of the Study .....	10
Definitions .....	12
2 LITERATURE REVIEW .....	13
Continuing Professional Education .....	13
Communities of Practice .....	35
Communities of Practice for Continuing Professional Education.....	45
Summary .....	51
3 METHODOLOGY .....	53
Design of the Study .....	53



Sample Selection .....	58
Data Collection .....	62
Data Analysis .....	69
Validity and Reliability .....	73
Assumptions and Limitations .....	75
Summary .....	77
4 CASE DESCRIPTION AND PARTICIPANT PROFILES .....	78
Case Description – Educators’ Academy .....	78
Participant Profiles .....	93
Summary .....	102
5 FINDINGS .....	103
How Learning Occurred .....	104
The Knowledge Produced .....	118
Influence on Individual’s Practice .....	128
Socio-Cultural Factors that Influenced the EA Community .....	134
Summary .....	156
6 CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS .....	158
Conclusions and Discussions .....	159
Implications for Practice .....	188
Recommendations for Future Research .....	191
Summary .....	193
REFERENCES .....	194

APPENDICES .....	211
A    INTERVIEW PROTOCOL .....	211
B    OBSERVATION PROTOCOL .....	212
C    CODES AT DIFFERENT STAGES OF DATA ANALYSIS .....	213

## LIST OF TABLES

	Page
Table 2.1: Key ideas of major leaning models in CPE .....	23
Table 3.1: Sample of open coding from the data .....	71
Table 3.2: Sample of development of final categories .....	72
Table 4.1: Participants' Profiles.....	94
Table 5.1: Summary of the Research Findings.....	103
Table 5.2: How learning occurred .....	104
Table 5.3: Knowledge produced .....	119
Table 5.4: Influence on individual's practice .....	129
Table 5.5: Socio-Cultural Factors that influenced the EA community .....	134

## LIST OF FIGURES

	Page
Figure 2.1: A model of reciprocal determinism, reproduced from Bandura, 1986 .....	36
Figure 4.1: Map of India showing cities where EA offices are located.....	81
Figure 4.2: A busy road in Bangalore .....	84
Figure 4.3: Floor plan of the EA office.....	85

## CHAPTER 1

### INTRODUCTION

The knowledge economy in the 21<sup>st</sup> century has changed perceptions of both practice and professions. Work in today's world demands a new kind of knowledge, competence, and performance as well as new expectations, roles and responsibilities. Additionally, the workplace nowadays plays both the roles of a major provider and a beneficiary of professional learning – it provides various training programs for employees and in turn benefits from the employees' training through their increased productivity. These developments make continuing professional education (CPE) crucial as well as a major concern at the workplace.

#### Continuing Professional Education

CPE embodies both professional learning and professional growth. Historically, CPE has been considered as imparting skills that better human life as well as skills to survive in a profession (Bickham, 1998). Throughout time practitioners have resorted to some form of learning in their professions to enhance their practice – “through books, discussions with colleagues, formal and informal education programs, and the rigors of everyday practice” (Cervero, 1988, p. 1). CPE is any educational activity, formal or informal, that professionals undertake to help them understand their profession and perform better at their work. However, there has been a dramatic increase in formal continuing education programs especially for relicensure and recertification as every profession, whether licensed or certified, uses some form of mandatory CPE (Cantor, 2006; Cervero, 2000, 2001). Cantor (2006) argues that CPE is perceived today more as “a means to an end for regulating the practice, often in combination

with licensing bodies and professional societies” (p. 15). As a result CPE programs have become highly structured, catering to updating information, recertification, and relicensure.

Simultaneously, the widespread use of mandatory programs in the field has also led to a popular misconception and restrictive usage of the term CPE with reference only to formal and mandated continuing education.

As major providers of CPE, it is customary that workplace and professional associations don the responsibility of guiding what professionals in a field need to learn and translate these perceived needs as CPE programs. However, according to Beckett (2001), research emphasizes two major concerns with the programs: one, often traditionally adopted methods for CPE are used which are in reality “inert formal education and training” (p. 73), and two, there is little evidence of transfer of learning between the classroom and workplace. On the other hand, research also points to a high correlation of skills in learning-by-doing as well as that workplaces are sites of powerful learning (Beckett, 2001; Fenwick, 2001). Therefore, it is important to explore alternatives to the traditional methods of promoting CPE, and learning at the workplace. It is also critical that these alternative routes should actively include professionals in designing their learning agendas to optimize the various ways in which professionals can learn.

Schon (1987) emphasizes that professionals’ learning occurs in the swamp of practice and not through application of scientific research that he refers to as *technical rationality*. In accordance with Schon’s view, CPE literature espouses key roles of situating learning in the context of practice, and involvement of participants (Cervero, 1988, 2003; Daley, 2000, 2001; Nowlen, 1988; Daley & Mott, 2000). In addition, the recent literature in CPE notes that collective learning may influence CPE (Cervero, 2003; Cordingley, Bell, Rundell, & Evans, 2003; Garcia & Roblin, 2008; Gellert, 2008; Mott,

2000; Sandars & Langlois, 2006; Woodall, 2006). Learning in practice and learning collectively are congruent with adult education perspectives on learning from experience, learning informally, and learning with others, in addition to formal learning. According to Stein and Imel (2002), adults create learning spaces outside of formal educational boundaries in naturally forming communities around educational, work, social, and other situations. Hansman (2001) claims that the social environment shapes individuals' learning depending on the degree to which the individual shares or participates in collective activity. Therefore, an alternate route for CPE is to look at opportunities for, and the potential of, informal social networks commonly found at formal as well as informal meeting places of professionals at work.

Most professionals interact informally at workplaces with colleagues (Wenger, 1998). Informal interactions may include, to name a few, periodic informal yet planned meetings in or out of the workplace, hallway encounters, luncheons, and gatherings after formal work-related sessions or conferences. These interactions often play the important role of promoting learning, and creating learning environments that enhance knowledge of professional practice and professional judgment. Learning gained from such a dynamic way of knowing emphasizes the social or communal aspects without discounting the individual aspect. Learning occurs with others, more than from others. Opportunities for reviewing one's own practice occur through participation of members who are fully engaged in the process of creating, refining, communicating, and using the knowledge. However, this way of working with, and learning from others is often not recognized by the employer or by the participating employees themselves (Wenger, 1998) and results in the overlooking of a critical venue of learning.

Workplaces, currently drawing conscious attention, are new sites of powerful learning and practical reasoning as both practice and informal learning occur in them (Beckett, 2001; Livingstone, 2001; Eraut, 2004). In an age where individuals at work are constrained by busy schedules it is imperative for spaces to be created by and in workplaces, possibly within work-time, to enable people to meet and allow for learning to occur through informal modes of inquiry. These loosely structured spaces allow for members to grow together in their practice and benefit from more than mere incidental learning. In other words, such learning becomes “purposeful and strengthens a group’s ability to learn from and apply wisdom to everyday life situations” (Stein & Imel, 2002, p. 94). One concept that incorporates both views, learning from practice and learning with others, and which may also serve as a route for successful CPE, is the framework of communities of practice (CoPs) (Lave & Wenger, 1991; Wenger, 1998).

#### Communities of Practice

“Communities of practice are groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis” (Wenger, McDermott & Snyder, 2002, p. 4). CoPs, a social learning concept, focus on learning that occurs through practice and participation in informal networks (Lave & Wenger, 1991; Wenger, 1998; Wenger, et al., 2002). This concept traces its roots to constructivism (Johnson, 2001), situated learning (Wenger, 1998; Johnson, 2001; Wenger et al., 2002), and social learning (Lave & Wenger, 1991; Wenger, 1998).

The CoPs theory of learning begins with the assumption that engagement in social practice is the fundamental process by which we learn (Wenger, 1998). CoPs are the building blocks of a social learning system because they are the social silos of the competencies that make up such a system (Wenger, 1998). Focused on tasks and set within a familiar peer-group with



frequent interaction, CoPs consider the social process of learning as integrated with practice that occurs at the time and place in which the actual tasks are performed. Wenger (1998) describes CoPs as an evolutionary process for learning and continued personal development rather than mere accumulation of skills and knowledge in groups.

Although the idea of a community sharing and learning from its practice is not new, the concept of a community of practice has received much attention recently in the fields of learning, education and business management (Hung, Chen & Koh, 2006). Retaining the aspect of communal learning, the concept of CoPs now extends and includes deliberately created and nurtured communities, deliberate only to the extent of creating a nucleus for a community to develop and grow on its own in the course of time. The field of management uses CoPs as a knowledge management tool recognizing the importance of more subtle, *softer* types of knowledge that needs to be shared rather than merely structured data that is captured, codified and stored (Hildreth & Kimble, 2004). Softer types of knowledge refer to both tacit and explicit knowledge often shared within networks of relationships. These networks are perceived as critical open spaces for learning at the workplace. CoPs have been identified as groups where such types of knowledge are nurtured, shared and sustained; these knowledge networks share best practices and serve as engines for development of social capital in an organization (Hildreth & Kimble, 2004). According to Chindgren and Wiswell (2006), other fields have borrowed the term, sometimes loosely interchanging with terms such as learning communities, professional learning communities, communities of learning, and communities of inquiry. Hung et al. (2006) mention that in spite of variations in the usage of the above terms “the tenets are in the same vein as the kinds of orientations that CoPs aim to foster” (p. 301).

The concept of innovative knowledge communities (Hakkarainen, Palonen, Paavola & Lehtinen, 2004) extends the idea of CoPs. Innovative knowledge communities are intentionally created communities with a focus on advancing knowledge that can transform practice. Wenger et al. (2002) introduced the concept of deliberately creating and nurturing CoPs where employees learn in the process of sharing what they do in their daily routine. Hakkarainen et al. contend that the expertise needed in the knowledge society of today requires “an integration of psychological, sociological, and educational approaches ...to understand individual, collective, and organizational aspects of learning and human development” (p. 8). These communities use “higher-level cognitive competencies that arise, in appropriate environments, from sustained collaborative efforts to solve problems and build knowledge together” (Hakkarainen et al., p. 9). Key to this view is knowledge-creation which results in a simultaneous advance in conceptual understanding and transforming practice. Learning occurs in the process of inquiry. New ideas and practices are created individually or as a community and the initial knowledge is either substantially enriched or significantly transformed in the process.

#### CPE and CoPs in the Indian Context

Although CPE exists in India it is embedded within the professions and not acknowledged widely as a separate field. Renewal of certification or re-licensure is commonly on the validity period given for a license or a certificate. For some professions validity is a one-time registration for life as in the case of doctors, with no need for renewal. In certain other professions, as in the case of architects and chartered accountants, registration for re-licensure is required to be renewed periodically (Khanijo, 2004). This form of periodic re-licensure is by payment of annual fees with or without stipulated hours of attendance of CPE sessions. Mandated CPE for salary increment, promotion and some form of service regulations are usually

linked to those in government jobs which raises the question of the quality of these programs as well as whether there is any change or influence in practice.

The private sector which is the higher employing sector in India does not take much onus to encourage CPE perhaps due to resource constraints or perhaps because they do not see much return of investment. Only the big corporations provide in-service training and other opportunities for professional learning. Thus Gupta and Gupta's (2006) comment on the practice of Indian clinical psychiatrists that continuing professional development depends upon personal initiative can be extended across most professions. However, with globalization and increased collaborations with companies abroad there is an emerging need and trend for professional accountability and alignment of practice either with international professional standards that are accepted by other countries, or through mutually recognized systems (Khanijo, 2004). CPE in India seems to lean towards the Western route of mandated requirements to regulate practice. Indian organizations as well as professionals will do well to also recognize that currently CPE practice in the West is exploring alternate routes. Therefore, as the field of CPE in India grows, the disadvantages of mere mandated CPE may be circumvented by simultaneously giving due weight to informal and alternate routes. CoPs may be a good route to explore.

CoPs have been a way of life since ancient times in India. Socially, the concept of joint families is still a common practice across the country. Joint family refers to an extended or complex family which often includes multiple generations in the family, such as parents and their children's families, living in the same house. The notion of joint families and community structures foster a sense of belonging through practice and informal participation. Additionally, joint families, for instance those of businessmen, priests and artisans, form CoPs based on professions passed down from one generation to another. Learning and practice in these CoPs

occurs from close and frequent interactions across generations as well as among close relatives. Establishing norms or any change in practice is achieved through negotiations by the practitioners among themselves and within the context of their practice. Thus, practice is preserved as well as perpetuated within the social system of a family which also is a professional community. As an extension of this concept, CoPs in the workplace may be construed as a social learning system that may already exist or has evolved into a professional community driven by interaction and inquiry with, and among the members of the community who define the community's practice.

#### Statement of the Problem

Professional practice is characterized by “the indeterminate zones of practice – uncertainty, uniqueness and value conflicts” (Schon, 1987, p. 6). Practitioners require professional competency and capability to make discretionary professional judgment. CPE learning models advocate learning in, and from, practice which integrates multiple forms of knowledge. Literature advocates reflection-in and on action, scientific knowledge, practitioner research, collective action through creating colleague relationships, networks, and dialogues. According to Houle (1980), for CPE to achieve its potential it needs to “be truly continuing – not casual, sporadic, or opportunistic. This fact means essentially that it must be self-directed” (p. 13). However, the reality of CPE reflects a different story as Guskey (2000) captures the sentiment of educators who “participate in professional development primarily because of contractual obligations but often see it as something they must ‘get out of the way’ so that they can get back to the important work of educating students” (p. 4).

CPE has often come to denote only formal education especially to get accreditation and relicensure (Cervero, 2000, 2001; Cantor, 2006) ignoring the potential of intrinsically motivated

professionals who can enrich their professional skills through self-directed learning. But, as Stern and Queeney (1992) state, simply requiring professionals to participate in educational activities offers no guarantee that learning takes place, or that the practice improves. Of the same view, Guskey (2000) adds, professionals tend to ask about how to account for their stipulated hours rather than on what they need to improve their practice, and how to get it. Moreover, providers assume professionals need to acquire knowledge solely to problem-solve predictable issues at work (Cervero, 1988; Nowlen, 1988; Schon, 1987; Young, 1998). Therefore CPE is dominated by the information update model (Cervero, 2003; Nowlen, 1988; Young, 1998) which does not engender skills that professionals truly need in the *swamp of practice* (Schon, 1987).

Additionally, the workplace influenced by competitive relations in a marketplace economy (Fenwick, 2000) often prioritizes organizational needs in its educational strategies overlooking the learning needs of the employees. These strategies result in programs that the organization perceives will give it a competitive advantage but which employees may not value or consider as necessary for their practice. This misalignment of needs results in lack of “buy in” of CPE programs from the employees.

The gap between the advocated and existing situation in CPE discussed above has deterred the field from achieving its mission. Therefore it is imperative that CPE should explore alternative routes to translate advocated ideas of contextual, participatory, and communal learning into practice. CoPs may be one route to investigate. In my study, a community of practice is defined as a social learning system that may already exist in the form of a group or team that has evolved into a community or is created with core members within an organization. Interaction and inquiry with, and among the members of the community define the community’s practice.

Research is abundant in management literature applying the framework of deliberately creating and nurturing CoPs (Wenger et al., 2002). Literature on CoPs for CPE involving educators is predominantly in academic settings such as universities, and K-12, or partnerships between the two. Adult educators also require CPE. CoPs of adult educators, for example professional developers, facilitators, and trainers, play a significant role not only in helping their clientele stay current in their area of expertise, but also can promote professionalism within their own members as well. Little is known about the role of CoPs in CPE of professional developers, and none in the field of education as a business venture in India. Further, the literature on CoPs tends to focus on outcomes of nurturing CoPs rather than on the process of knowledge sharing and co-construction. The nature and extent of the influence on practice that ensues from interactions in CoPs is also not discussed much in literature.

#### Purpose of the Study

The purpose of this study was to understand how communities of practice (CoPs) foster continuing professional education (CPE). The community of practice selected for this study was Educators' Academy (EA), an organization which works predominantly in K-12 settings. The study addressed the following research questions: (1) How did learning occur in this community of practice? (2) What was the knowledge produced in this community of practice? (3) How was an individual's practice influenced by the community of practice? (4) What Indian socio-cultural factors shaped the process of learning, the knowledge produced, and the practice in the community?

#### Significance of the Study

This study has theoretical as well as practical significance to the field of CPE, as well as about Adult Learning and CoPs. Theoretically, understanding how knowledge is shared and co-

constructed within a community of practice adds to the existing knowledge base of adult learning. Further, collective learning has been advocated in the field of CPE (Cervero, 2003; Daley & Mott, 2000) but has not been explored much. Next, CoPs for CPE offers a unique opportunity to incorporate and understand both social and professional learning embedded in each other that contributes to developing new perspectives for designing CPE programs.

From a practice oriented view, according to Cervero (2000), “continuing education has a great advantage over other stages of professional education in seeking to promote effective practice. It occurs when professionals are most likely to be aware of a need for better ways to think about what they do” (p. 9). Given the ever-changing context in which professionals practice, maintaining current practices alone is not sufficient. Being ahead in one’s field is critical to keep pace with competitive times. Moreover, educational consultants need to investigate and be aware of their own learning through a deliberate process of collective inquiry and reflection if they are to initiate the same into the populations they serve. Also, the application of the theoretical framework of CoPs to social learning in CPE of educators who pursue education as a business venture in India has not been investigated. The findings of this study will make a significant contribution in helping CPE providers to understand how non-traditional learning environments as well as how sociocultural aspects can influence professional learning and influence practice.

Second, there are no issues of relicensure or re-certification for the individual professional developer in India; professional developers are often chosen by CPE organizations based on their strong content knowledge or facilitation skills. Certification for the organization may come through domestic and international affiliations with specific boards and universities to conduct an examination. For example, a few CPE organizations working in the field of education

in India are affiliated to the Cambridge International Examinations in the United Kingdom which gives them permission to conduct their programs and related exams. Hence, the organization's standing in the field of CPE plays a bigger role to capture lucrative clientele. The onus then is on the organization to encourage and give opportunities for its employees to grow professionally. This study sheds light on how the organization, EA, as a community of practice encourages members to test new ideas and take risks individually as well as collaboratively.

Finally, the findings of this study will be of direct value to current CPE practices. This study investigates a deliberate mode of collective learning and inquiry within the community of practice that can lead to a positive change in members' practice.

### Definitions

#### Communities of Practice (CoPs)

For the purposes of this study, a community of practice is defined as a social learning system that may already exist in the form of a group or team of educators at a workplace that has evolved into a community engaged in professional interactions.

#### Continuing Professional Education (CPE)

CPE, in this study, encompasses formal and informal educational activity that can further professional practice.



## CHAPTER 2

### LITERATURE REVIEW

The purpose of this study was to understand how communities of practice (CoPs) foster continuing professional education (CPE). Four research questions guided the study: (1) How did learning occur in this community of practice? (2) What was the knowledge produced in this community of practice? (3) How was an individual's practice influenced by the community of practice? and, (4) What Indian socio-cultural factors shaped the process of learning, the knowledge produced, and the practice in the community? This chapter has three major sections – CPE, CoPs and the relationship between the two discussing CoPs for CPE.

#### Continuing Professional Education

This section of the review begins with a synthesis of a few key terms that are important to my study, needs and goals, link to other fields, professional learning and approaches. Next, I consider a few empirical studies and conclude the section with current trends, issues and a new vision for the field.

#### *Defining Key Terms in CPE*

Important terms in the field, *CPE*, *professional*, and *professional practice* have no one authoritative definition in the literature. Besides, the terms are embedded in each other making it difficult to separate them without repetition. However, the defining characteristics serve the purpose of understanding the concepts.

Overall consensus exists in literature that CPE is “an area of educational practice devoted to continuing education for the professionals” (Cervero, 1989, p. 514). Additional definitions and

elucidation help to understand other facets of CPE. While some definitions consider CPE as professional learning in any form other definitions consider only formal education. Speaking of the occupational lifespan of the individual professional, Houle (1980) comments that continuing education “implies some form of learning that advances from a previously established level of accomplishment to extend and amplify knowledge, sensitiveness, or skill” (p. 77). Thus, Houle encompasses all forms of learning as befitting to fit under the umbrella of the term CPE. On the other hand, other definitions imply or explicitly refer only to formal education. Hunt (1992) emphasizes organized learning experiences as well as recognition as the defining characteristics of CPE as they convey achievement of goals for both provider and the learner. Bickham (1998) defines CPE as imparting skills that better human life and which people need to survive in a profession. Queeney (2000) states,

[CPE] refers to the education of professional practitioners, regardless of their practice setting, that follows their preparatory curriculum and extends their learning ...throughout their careers. Ideally this education enables practitioners to keep abreast of new knowledge, maintain and enhance their competence, progress from beginning to mature practitioners, advance their careers through promotion and other job changes, and even move into different fields. (p. 375)

O’Sullivan’s (2003) definition adds a new perspective that reflects today’s work needs.

This definition retains the focus on the individual but at the same time emphasizes that CPE undertaken by a professional influences, and is influenced by, other stakeholders:

“Continuing professional development is the maintenance of knowledge, expertise and competence of professionals throughout their careers according to a plan formulated with

regards to the needs of the professional, the employer, the profession and society” (O’Sullivan, 2003, p. 108).

Despite variations, definitions of CPE focus on the educational activity, formal or informal, which professionals undertake to understand their profession and perform better at their work. Three characteristics define CPE today: (1) an intentional process, (2) an ongoing process, and (3) a systemic process (Cervero, 2003; Guskey, 2000). This study takes into consideration all the above three characteristics.

A *professional* is a practitioner of a particular profession with a distinguishing mark of mastery of specialized bodies of knowledge (Bickham, 1998; Cervero, 1988; Houle, 1980; Nowlen, 1988; Schon, 1987) that gives them special rights and privileges (Schon). Schon also ascribes *professional artistry* as a unique intelligence, a kind of knowing that professionals gain from practice. Personal action, personal choice, and professional discretionary judgment are key attributes (Cervero, 1988; Houle, 1980; Schell & Schell, 2008; Wilson, 2000). Flagello (1998) describes that a professional is not “a label, title or rank, but rather an attitude about how one does one’s chosen vocation...that also carries with it a moral element of action beyond self-service and toward social good” (p. 45). While training differentiates a professional from a non-professional (Bickham, 1998), Queeney (2000) agrees and adds, “Professional practitioners increasingly are viewed not in terms of the job they hold, but in term of the competencies they possess” (p. 383).

Practice is an ambiguous term and is interpreted in several ways. *Professional practice* is a more appropriate term to use with CPE. Brown and Duguid (2001) describe professional practice as “undertaking or engaging fully in a task, job, or profession” (p. 202). Bickham (1998) comments, “specialized knowledge remains essential for professional practice” (p. 61). In

Schon's (1987) view, professionals "share conventions of action that include distinctive media, language, and tools" (p. 32) which not only defines professional practice but also sets it apart from other human endeavor. To Schon (1987), professional practice is "made up of chunks of activity, divisible into more or less familiar types, each of which is seen as calling for the exercise of a certain kind of knowledge" (p. 32). Tacit but central to professional practice are "the indeterminate zones of practice – uncertainty, uniqueness and value conflicts" (Schon, 1987, p. 6) which require professional artistry.

### *Need and Goals*

The rapid social changes, the explosion of research-based knowledge, and technological innovations have given rise to a critical need to prepare people through continuing education throughout their professional practice (Cantor, 2006; Cervero, 1988; Houle, 1980; Nowlen, 1988). Cervero posits that ever since professions were organized into groups it has been rightfully assumed that practitioners would continue to learn throughout their working lives (1988). Nowlen (1988) perceives an increase in formal education as reason for the need for CPE while Mott (2000) considers escalation in the number of professions, and accountability, as the reasons. Flagello (1998) points to the fact that the thrust for specialization has resulted in highly skilled specialists who have specific specialties but are not often skilled in other required aspects of work such as communication, and skills in team work. Livingstone (2001) and Cantor (2006) are of the view that knowledge management has added value and heightened the need for CPE. The field of knowledge management, in turn, views individuals as the primary drivers of value creation and hence there is a new thrust to recognize and promote knowledge acquisition and exchange through learning in the work-life of adults (Hildreth & Kimble, 2004). Guskey (2000), on the other hand, sees the need for CPE rising as new policies and reforms require change in

different areas - structure of organizations, roles, ways of working, and in the culture of workplace.

The key objective of CPE is to help practitioners improve their professional competency and reach their full potential through discretionary judgment (Schell & Schell, 2008), or prudent action (Cervero 1988; Wilson, 2000). Others perceive outcomes that indicate the goals for CPE. Houle (1980) aspires that “every professional should be able to carry his or her duties according to the highest possible standards of character and competence” (p. 7). To Azzaretto (1992), professionals need CPE to prevent obsolescence, career enhancement, and knowledge integration and collaboration. Cervero, in the preface of Schell and Schell’s (2008) book on occupational therapy, captures the essence of CPE goals in his observation that “Education is demonstratively more effective when it seeks to improve the ways that professionals actually reason and make decisions in their daily practice.”

#### *Link to Other Fields*

With the basic understanding of CPE discussed till now, it is not a wonder that CPE is often considered as an extension service to other fields and professions as the needs and goals are in conjunction with several other disciplines and businesses. Literature demonstrates that CPE is an emerging independent field though closely related to Adult Education, Human Resource Development (HRD), and in recent times, Knowledge Management for organizational learning and development.

*CPE, Adult Education, and HRD.* Adult education is reflected in the growth of workplace education and training. As participants in CPE are adults who work in a specific work setting “many of the educational processes used in continuing education of professionals are the same as used in adult and continuing education and HRD and training” (Cervero, 1988, p. 16). Cervero

(1988) adds that research and theory on adult education shed light on adults' learning and motivation, which in turn help to develop and implement evaluation of programs in CPE. The importance of contextual and collective learning advocated for CPE in recent years (Cervero, 2003; Daley, 2000; Fenwick, 2001; Mott, 2000) support adult education perspectives on learning from experience, learning informally, and learning with others. Woodall (2006) argues that CPE models rest upon "implicit humanistic and experiential models of learning which have the individual at the core" (p. 153).

The relationship between HRD and CPE is so close that most often in current organizations CPE is subsumed within HRD. Cervero (1988) cites a visible link between the two fields: HRD research and theory provides a useful set of concepts and procedures for practice of CPE with topics such as performance assessment, relating education to performance, and organizational development. While Cervero's comment may be two decades old, literature still dwells on the close link between the two fields. Many advocate a complementary support and coalescence between HRD, CPE, and workforce development as they strive towards similar goals (Bierema & Eraut, 2004; Daley & Jeris, 2004; Dirkx, Gilley & Gilley, 2004; Roth, 2004; Sleezer, Conti & Nolan, 2004). Such a supportive paradigm can help each field to benefit mutually besides gaining new insights (Roth, 2000). According to Sleezer, et al. (2004) HRD and CPE share a focus on improving adult knowledge although each has different theoretical roots, outcomes and processes. Dirkx et al. (2004) call the rapid change at work today as the *permanent white water*. The authors analyze the assumptions about change implicit in the practices of CPE and HRD especially in the workplace and how the two fields are so intricately embedded and charged with facilitating and fostering the required change at the workplace. Bierema and Eraut (2004) warn of the need for both CPE and HRD to shift the prevailing assumption that learning

and working are separate activities: “This may sometimes be true, but very often learning and working occur at the same time and sometimes, as in problem solving, they are identical” (p. 55).

*CPE and Knowledge Management.* In the past two decades Knowledge Management has grown rapidly as a new field in business and management. This growth has also changed perceptions of, and need for, CPE as there is increased pressure on employees and workers to stay current and skilled (Cantor, 2006). Two occurrences pervade current discourses about work and learning in relation to knowledge management. One, the knowledge based economy recognizes the need to maintain a technically up-to-date talent base and to invest in that talent (Hildreth & Kimble, 2004). Two, employees consider CPE as a necessary benefit to be provided by their employers while employers in turn, have focused on preparing their workforce for current job skills as well as for future needs (Cantor, 2006). An increased need for highly skilled professionals has made the creation of a learning society imperative to survive in this new economy (Livingstone, 2001). Knowledge management views individuals as the primary drivers of value creation and sees an urgent need to recognize and promote knowledge acquisition and exchange through learning in the work-life of adults. Hence there is a new thrust to facilitate the workforce to learn continuously which indicates an impact on lifelong learning as well as CPE.

Adult education’s focus develops beliefs and attitudes about adult learning, HRD’s focus is literally training for-the-job, and Knowledge Management’s focus is encapsulating the know-how for the organization. CPE, on the other hand, focuses on professional practice which enables effective practice that impacts the individual, the profession itself, and the workplace. So does CPE merit an independent status? It does, because CPE has its own audience which may be a conglomeration of other businesses but is yet unique.

### *Professional Learning and Instructional Approaches in CPE*

The key focus of CPE is to enhance professional practice through professional learning. To Flagello (1998), learning is the catalyst that empowers professionals and propels change in beliefs, attitudes and practice. While professionals as learners are key actors in CPE, approaches in CPE programs are predetermined by educators based on how they perceive learning occurs (Cervero, 1988; Nowlen, 1988). Cervero (2003) draws attention to the shift in today's needs for CPE that has necessitated a shift in focus from *what* and *how* to *where* professionals learn. However, what and how questions still rule the CPE field and understanding them will help to trace reasons and types of change necessary in the field. Therefore, a review of a few perceptions on how professionals learn in CPE precedes the discussion on the various approaches. I use the term learning models for convenience although each perspective may have been discussed under other headings related to how professionals learn. All the proposed models stress on learning in, and from, practice using different lenses. The learning models are listed in chronological order to see the continuum in views on learning.

*How professionals learn.* According to Houle (1980), professionals learn in three ways: instruction, inquiry, and performance although often these modes overlap. Learners learn passively in the *instruction* mode as they receive predetermined knowledge and skills that the educator decides what a professional is required to know. Learners explore and learn new techniques or concepts using cooperative methods in the *inquiry* mode. In the *performance* mode learners learn through practice in the actual work setting. From Houle's (1980) broad spectrum of professional learning other models focus on specific aspects of practice. For example, Dreyfus and Dreyfus (1986) focus on competence in their skill acquisition model. Inherent in this model is the interaction of experience in a specific situation with the rules, in other words, empirical



knowledge and theory (Mott, 2000; Daley, 2000). This model views expertise as a five-step process in acquiring skills as a novice, advanced beginner, competent, proficient, and expert. As practitioners mature in their skills they are less dependent on rule-guided behavior by using their increased perception and intuitive recognition of systems within practical situations.

Learning from experience is central to Schon's (1983, 1987) view but he interprets professional practice through the lens of practical reasoning. Schon claims that *technical rationality*, meaning theoretical knowledge, is inadequate for the realities in professional practice. Instead, theoretical knowledge must be incorporated with reflection-in-action. As learning occurs from the realities of the learners' experiences, reflection-in-action in-situ helps to convert indeterminate situations of practice into determinate ones so as to successfully complete the problem-setting activity. This is *professional artistry* that Schon claims all professionals need to develop. Professional artistry consists of "the competences by which practitioners actually handle indeterminate zones of practice" (Schon, 1987, p. 13).

Eraut (1994) and Daley (2000) consider knowledge as situational, meaning it differs from time to time and from one situation or context to another. Eraut warns that routine learning on the job rarely contributes to general professional knowledge. Instead, Eraut advocates a consciously designated time and place with the right people and attitude to reflect on the significance or relevance of the situation in a disciplined manner. On the other hand, Daley (2000) claims her model uses "a constructivist-transformative approach to practice development" (p. 40). In this model learners *construct* meaning from their experiences as they are being engaged in a *particular situation* and with others and *transform* their prior beliefs through reflecting on current situations.

In his earlier model, Cervero (1988) argues that in addition to professional artistry and research-based knowledge, practical or procedural knowledge as well as reflection-in-action and reflection-on action are also critical. Moreover, Cervero (1988) asserts that these processes should be open to public evaluation and improvement. With rapid changes at work and in practice Cervero (2003) modifies his model to include a systems approach because professional decision-making takes place within a highly complex system. Often, professionals today make decisions that are shaped by innumerable factors. Thus, the political, economic and social factors as well as processes within the system where practice occurs shape learning making it a social act. Cervero (2003) politicizes professional practice and warns that for any change in practice to happen it is imminent that there is a shift in the focus of change from the individual and how professionals learn to a wider context of where they learn.

Unlike the models just discussed, collective learning is not elaborated by any one individual author. However, the concept has been acknowledged in relation to an individual's practice. Schon (1987) affirms that professionals need to reflect on their tacit theories of practice with others. Daley (2000) mentions the social nature of practice and advocates developing an occupational community and fostering involvement in professional work as such groups influence learning. Daley and Mott (2000) suggest ways of collective action. Cervero (2003) suggests understanding the importance of CoPs in practice and learning. Finally, Cantor (2006) observes the flexibility that the online medium affords is a favorable platform for collective learning in CPE.

All the above learning models emphasize learning in and from practice and stress the importance of the context of practice. While the major focus is on the individual's learning process the shift has occurred to be aware of others as well as other environmental factors that

play a role in an individual's practice. Additionally, collective learning proposes a further shift to see learning as occurring with others. Table 2.1 summarizes key ideas in the individual learning models that have been discussed.

Table 2.1 Key ideas of major learning models in CPE

<b>Author</b>	<b>Proposed model in</b>	<b>Key ideas in model</b>
Houle	1980	Learning occurs through instruction, inquiry, and performance
Schon	1987	Learning is by making professional judgments in real-time; and by reflection-in-action.
Dreyfus & Dreyfus	1994	Learning is acquiring skills in five stages – beginner, novice, advanced competent, proficient, and expert
Eraut	1994	Learning is by doing, and through deliberate reflection on that action with others
Daley	2000	Learning is understanding one's own process of meaning making within the unique setting of practice, and making changes in prior beliefs
Cervero	2003	Learning is from research, one's own practice, reflection-in action, reflection-on practice with others, and a system's perspective of where practice occurs

*Instructional approaches.* How educators perceive learning in conjunction with the perceived goals of CPE plays a critical role in how they structure instruction. The approaches or models discussed are those that are most frequently used as well as those that are espoused. Indisputably dominated by informational update, the *Update Model* is the prevailing model in CPE (Bucher & Strauss, 1961; Cervero, 1988, 2000, 2001, 2003; Schon, 1987; Nowlen, 1988). *What* professionals learn is of utmost importance in this model, as Nowlen (1988) explains, it is

because knowledge has been viewed for long as certain and hierarchical, and its relative value determined by the extent it can be mathematically validated. However, Queeney's (2000) reason is because "Knowledge is the easiest to address" (p. 377). The key purpose of CPE in the Update Model is to help professionals gain expertise solely to problem-solve (Cervero, 1988; Nowlen, 1988; Schon, 1987; Young, 1998). Expertise is thus viewed as possessing a repertoire of research-based know-how and skills which can be applied to solve any problem in practice. Therefore, the central aim of this model is to keep professionals up-to-date in their knowledge-base for use in their practice (Cervero, 1988; Nowlen, 1988; Schon 1983, 1987).

The Update Model is heavily criticized in literature for its undue reliance on scientific research and its assumption that problem solving is firmly grounded in the world of certainty, stability, and rigor (Cervero, 1988, 2003; Daley, 2000, Nowlen, 1988; Schon, 1983, 1987). Practical problems in practice are least predictable and scientifically derived professional knowledge is not only ill suited to remedy these problems, but also confining to research-based techniques is inadequate for the professional to deal with problems in the real world (Schon, 1987). Wilson (2000) and Cervero (2003) attribute the inadequacy of the Update Model to a society that is rapidly becoming more complex with interrelated problems which in turn affects practice. Hager (2004) and Mott (2000) criticize the approach for considering learning as acquisition of facts outside of the practitioners and their practice and views professionals as consumers of the commodity called knowledge.

It is not as if the Update Model has absolutely no support. Houle (1980) advocates the use of instruction and inquiry in education programs at the workplace. His belief is that without the infusion of new knowledge through inquiry into research-based organized instructional experiences, improvement is likely to be limited. Cervero (1988, 2003) and Nowlen (1988) note

the update model, like other education approaches, has uses as well as drawbacks; hence the model must be used with discretion.

A natural response to the criticism of the update approach to problem solving is problem definition or construction (Cervero, 1988; Nowlen, 1988) and learning through participation. Practice-based models portray a situated knowledge of practice from practice “made meaningful by the context by which it is acquired” (Cervero, 1992, p. 95). However approaches vary in how and on what aspect they focus within practice. Schon’s (1987) reflective practice focuses on improving the competence of a professional by cultivating professional artistry to deal with the unique problems of everyday practice. Bickham (1998) states, “In this process of reflection, professionals’ use of their body of knowledge enables them to think critically about what they do and why they do it” (p. 64).

According to Nowlen (1988), performance is central to practice which is entwined in the individual and the organization. While a competence model focuses exclusively on the individual’s knowledge, skills and ability to perform a role or task its implicit assumption is that performance is entirely an individual affair. However, Nowlen advocates a performance model which is a function of both individuals and ensembles. His double helix model includes the “*learning relationships*” (p.125) of the individual and the organization to focus on job functions and other variables that strongly influence performance. Nowlen’s performance approach seems to be a precursor to the systems model discussed next as it takes holistic view of the individual professional within the organization.

The move to systems dimension by Cantor (2006), Cervero (2003), Queeney (2000) and Wilson (2000) emphasizes the change in the perspectives of, and expectations from, the field of CPE. Cervero’s (2003) systems approach is expansive as well as inclusive of all influential

factors in practice than the previous models and is concurrent with current approaches in Organizational Development, Organizational Change, and Strategic Human Resource Development. The organization being where practice occurs, CPE must align with the mission and vision of the organization to benefit both the field as well as the professional. Besides, practice occurs and is shaped at the intersection of the individual judgment and the systems dimension of the work context (Cervero, 2003). A focus on where a practitioner makes a professional judgment leads to the question of who should reflect and what should be the focus of reflection.

While Cervero (2003) considers a system's perspective as the whole organization where the individual's practice is set, Cantor (2006) looks at systems through the lens of the profession, regulated practice and standards in relation to competence and performance. Cantor (2006) argues, regulated practice has become the norm today in CPE programs and is often guided by standards. To set standards in practice, Cantor (2006) suggests that benchmarks must be derived from the practice itself if it is to be acceptable to the professions, as "Key to effective regulation of skills competency through PCE [professional continuing education] rests in identifying the appropriate benchmarks on which performance is based" (p. 33).

This part of the review traced education models or approaches in CPE that are prevalent or espoused in the literature. These models mirror beliefs about learning which was discussed earlier. Key ideas of six models in the last three decades are captured in a table. While no one model can fulfill the needs of the field and the practitioner one must make a prudent choice that will benefit the field, the professional, the profession, as well as the organization which serves as the context for practice.

### *Empirical Studies in CPE*

The review of empirical studies is brief but gives a snapshot of the scenario in CPE from 2001-2008. Review of different professions and from several countries enables to understand the direction towards which CPE practices veer presently. Change is a constant theme in these studies as is in most CPE literature. Two broad areas emerge from the studies reviewed – one, learning resulting in explicit or implied change in practice, and two, perceptions of CPE, its content and delivery.

*Learning resulting in explicit or implied change in practice.* Collaboration, inquiry, and reflection occur as isolated themes or in combination with each other as seen in the studies by Garcia and Roblin (2008), Karlsson, Anderberg, Booth, Odenrick and Christmansson (2008), Kwakman (2003), Stralen (2002), and Zelman (2002). One of the first tasks for CPE is to facilitate the development of practitioners' ability to engage in critical reflection. Without this ability practitioners are disempowered and dependent upon outside forces to control their practice (Garcia & Roblin, 2008). But for Kwakman (2003), the other above mentioned studies emphasize that it is essential to have clarity and agreement in the intention of the process of inquiry with all who are involved. Negotiation for full engagement and commitment is crucial as the process involves a high investment of time and energy. Despite concerns of resistance, low participation and loss of interest (Zelman, 2002), the studies advocate the use of collaboration, inquiry, and reflection. The emergent nature of learning that ensues generates creative energies that engender and sustain change.

Garcia and Roblin's (2008) study considered learning and change in practice as self initiated. The authors, with three other colleagues, adopt inquiry through the mode of action research. While reflection led to continuous adjustments and readjustments in their curriculum

and teaching of undergraduates, reflection also raised questions about their conceptions and beliefs leading to transforming educational practices. Just as Garcia and Roblin's (2008) study emphasized the merit of self-initiated study for stimulating change, Stralen (2002) found external facilitation introduced new perspectives and thus overcame a tunnel vision of six nursing managers who worked for the same hospital. Learning occurred through a four-step process of reflection on experiences: experiential, presentational, propositional, and practical knowing that helped in the gradual change in participants' beliefs and attitudes. Learning became an empowering tool in Zelman's (2002) study as it helped the collaborating team of administrators and professors to take risks that they might not have considered previously. However, Zelman points out that learning always occurred in the context of practice which can either be a support or a hindrance. The investigation carried out for the Swedish National Institute for Working Life by Karlsson, et al. (2008) adopted a multidisciplinary approach to explore learning through collaboration between academia and industry-practitioners. Similar to Stralen's (2002) findings, Karlsson et al. (2008) identified five categories of learning that impacted change in practice, namely: deepened awareness of perspectives and concepts; practical development; new awareness of one's competences and professional learning process; flexible professionalism and practical usefulness; and insights into research and development processes.

The strong link between learning, context, and practice is emphasized by both Kwakman (2003) and Daley (2001). While learning is context-bound it also raises a question on whether knowledge or learning can be transferred. Daley's (2001) study of four groups of professionals showed a lack of transfer of knowledge but pointed to the importance of the context where practitioners practiced. Kwakman's study of 542 teachers in the Netherlands confirmed that most learning occurred from, and in, performing daily activities. However, Kwakman (2003) pointed,



reflective and collaborative professional learning activities were not common in schools. Further, the survey showed that when teachers collaborated, they did not engage in professional dialogue, meaning a deliberate discussion about practice.

*Perceptions of CPE, its content and delivery.* How CPE is understood, its programs planned and implemented are the focus across a second set of studies that was reviewed. Concerns raised deal with fragmentation of components (Cushion, Armour, & Jones, 2003), short-term change (Fjortoft, 2006), quantity overriding quality (Hider, 2006), and lack of transfer of knowledge (Daley, 2001). Belzer (2003), Cordingley, Bell, Rundell and Evans (2003), and Friedman and Phillips (2004) evaluate the impact of CPE programs by exploring how participants view CPE, their participation, and outcomes.

As earlier discussed under learning models, a curriculum provides insights about perspectives of learning and the learner as much as on goals and outcomes. On examining the CPE curriculum for coaches in the UK, Cushion et al. (2003) found that programs were divided into components, episodes and fragmented categories of technical facts with no emphasis on critical thinking or social context. CPE thus left coaches as technicians engaged in transfer of knowledge. On the other hand, Fjotfort (2006) investigated the impact of a 3-month interactive CPE course on 99 pharmacists who were enrolled for the course. Fjotfort found resulting behavioral change lasted only for a short time. However, the author also notes that pharmacists take CPE for several reasons which may affect long term retention.

The needs and goals of CPE vis-à-vis the actual practice of CPE is a favorite topic of discussion in literature. A few studies may touch the topic in the course of a finding in a study. A few others purely devote to the topic such as the three studies by Belzer (2003), Cordingley et al. (2003), Belzer (2003), and Friedman and Phillips (2004). Cordingley et al. studied several

studies in depth from a review of 13,000 studies and identified the impact of CPE on teacher and student outcomes in the UK. The review had been sponsored and compiled by General Teaching Council (GTC) and the Centre for the Use of Research and Evidence in Education (CUREE). This study investigated the impact of a specific type of CPE like *professional conversations* (p.14) and specific intervention strategies like mind mapping on student learning. The researchers concluded that the two critical factors for effective CPE were: (1) a school culture that supported innovation, reasoned risk-taking and new learning as a sustained activity, and (2) “collaboration with colleagues, involving formal reflection on teaching methods and pupil learning, built into timetables at a structural level, not just slotted in” (p. 22). The two studies by Belzer (2003) and Friedman and Phillips (2004) are very similar in terms of their focus on the perceptions of CPE. Using 200 and 259 surveys with professional developers and professional associations respectively and followed by interviews both studies confirmed that CPE must go beyond learner outcomes. Belzer (2003) develops a framework for Adult Basic Education based on actual experiences of professional developers in planning, implementing, and participating in professional development. While Belzer (2003) explored participants’ understanding of the term *impact* of CPE, Friedman and Phillips (2004) investigated participants’ understanding of the definition and values of CPE. Both studies found in general that participants viewed the impact of CPE as associated with change and participation in CPE spelt career growth and monetary gains. Findings showed that CPE should focus on a range of outcomes and use variety of methods.

The empirical studies reviewed above give a glimpse of the CPE field. Yet, what is striking is the overall feel for the need and occurrence of change in all the professions. CPE is viewed as necessary but yet not as effective as it can and should be. The review on this whole

section on CPE concludes with the discussion below about what literature envisions as the future for the field.

*Current Trends, Issues and New Vision for CPE*

This part draws mostly on Cervero's (2000, 2001) two articles as they emphasize the need for exploring alternative routes which is the focus of my study. Other perspectives are also added to substantiate the discussion. Cervero views CPE in a state of flux. This instability results in "experimenting with many different purposes, forms, and institutional locations for the delivery of continuing education" (Cervero, 1988, p. 4). I elaborate only on two of the five trends that Cervero (2000, 2001) identifies in CPE in the 21<sup>st</sup> century as they directly have implications for my study. Trend one states, *the workplace is the major provider for CPE more than all other providers combined*. Trend two states, *continuing education is used more frequently to regulate professionals' practice* (Cervero, 2001).

*Workplace, the major CPE provider.* There is consensus in the literature that employers are the largest providers of CPE (Cantor, 2006; Cervero, 1988, 2000; Houle, 1980; Nowlen, 1988; Stern & Queeney, 1992) and simultaneously, the largest consumer of CPE provided by others (Stern & Queeney, 1992). Workplaces offer both formal education and non-formal on-the-job training (Cantor, 2006; Nowlen, 1988; Stern & Queeney, 1992; Young, 1998). Hofstader and Munger (1990) and Cantor (2006) cite that the rapidly changing workplace, technology, as well as the changing profile of the workforce results in a high demand for professional learning at work.

Employers offer CPE to have a competent and knowledgeable workforce in a competitive market (Hofstader & Munger, 1990), and to retain employees (Cervero, 2000). Beckett (2001) sees workplace as "the new sites of powerful learning" (2001, p. 73) and central to the concept of

experiential learning. A workplace allows for developing ongoing diagnostic tools, identifying needs and planning educational strategies accordingly (Nowlen, 1988). Simultaneously, it also allows for the likelihood of learners to apply what they learn (Cervero, 1988; Fenwick, 2001, Daley, 2002; Houle, 1988; Nowlen, 1988). However, often CPE at the workplace is merged with human resource and educational planning caters to achieving organizational goals. Nowlen (1988) and Fenwick (2001) also caution that the workplace affords only a limited vision of how to solve work related problems through learning activities.

*CPE for relicensure and certification.* A widespread use of continuing education has resulted in every profession using some form of mandatory CPE (Cantor, 2006; Cervero, 2001, Young, 1998). Society is indeed the driving force for CPE as professions are expected to be competent and current in practice. Thus, relicensure is used as a measure to guarantee some uniform standards in quality of skills and knowledge (Azzaretto, 1992; Cantor, 2006; Young 1998). Certification is a way by which industry provides a *valuable new currency* in the information society (Kerka, 2000). Certification by individual organizations proves competency in specific knowledge and skills in the real world that education with diplomas and degrees need not necessarily represent (Carew, 2004).

Issues in CPE are located either locally within the field or externally. CPE has not adapted its views and practices to cater to the pace of change in workplaces and the new demands on professionals resulting in a gap. Moreover, external factors at the organizational and market levels have a major impact on the field and CPE is faced with the dilemma of prioritizing.

*Updating knowledge versus improving practice.* The first issue is the frequent use of the Update Model which is now confirmed as inadequate for practice (Cervero, 1988, 2001; Nowlen, 1988; Mott, 2000; Schon, 1987). Knowledge of one's profession alone is no longer sufficient to

solve problems at work. With regard to relicensure and participation in CPE, Queeney (2000) states that it is now recognized “that CPE participation is no guarantee of learning or improved practice” (p. 376). On the contrary, Queeney adds, professionals need professional skills and performance abilities along with knowledge to function competently within practice.

Additionally, “professionals no longer rely on their own capabilities alone” (p. 377). Practice not only requires a team effort, it also requires interdisciplinary approach as professions become more specialized.

*Learning agendas versus political and economic agendas.* CPE is caught in the struggle to prioritize between the many stakeholders it serves (Cantor, 2006; Cervero, 2000, 2001). Thus, in response to who benefits from CPE, we are again confronted with identifying what is the true purpose of CPE. O’Sullivan’s (2003) definition highlights that CPE is more than merely an individual professional’s learning. Cantor (2006), Cervero (2003), and Wilson (2000) confirm this view adding that political and economic agendas have a great influence on CPE. Lawler (2000) suggests negotiating the different agendas while Cantor (2006) and Cervero (2003) offer a systemic approach as a solution. The reality of the workplace and competitive nature of the market in today’s business necessitates this approach for economic growth for both the organization and the individual. However, as Fenwick (2001) argues, organizational goals tend to direct learning strategies in CPE and detract from the original goal of improving professional practice.

*Owning the turf versus collaborative partnerships.* Formation of collaborative relationships is fundamentally a political process as it paves the way for achieving larger organizational goals through these business partnerships. While these partnerships also lead to undercurrents of who is in charge (Cervero, 2001, 2003) the main issues “revolve around who

controls the content of the program and how profits and losses will be shared” (Cervero, 2000, p.10). Power-play guides CPE programs requiring underplaying its mission in order to survive in the business.

*A new vision for CPE.* There is a call for reframing of the CPE vision as embedded in professional practice rather than to consider it as separate from professional practice (Cervero, 2003; Daley, 2000; Daley & Mott, 2000; Houle, 1980; Schon, 1987; Wilson, 2000). A new vision spells change in many aspects. Daley (2000) sees a need for an interactive process between CPE and professional practice for mutual growth and sustainability. Daley and Mott (2000) propose that the role of CPE be extended from that of creator and transmitter of generalizable knowledge to that of enhancing the knowledge creation capacities of individuals and professional communities. Additionally, Daley and Mott (2000) advocate an approach to improve quality of client outcomes within the professions rather than providing educational programs. Queeney (2000) recommends that CPE needs to consider the professional to function completely within a practice context that includes the work setting, other professionals with whom they must cooperate and collaborate, and relevant cultural and individual conditions affecting daily practice. Cervero (2003) suggests CPE should exploit its natural advantage of a major current need of professionals requiring being effective in their practice. CPE should promote and “find ways to better integrate continuing education, both in its content and educational design... into ongoing and collective practice” (Cervero, 2003, p. S16).

The section on CPE began with defining characteristics of three key concepts in the field – CPE, professional, and professional practice. I then discussed needs and goals and why CPE is a stand-alone field although it overlaps with Adult Education and HRD. Learning models and approaches in CPE highlighted what the field’s perceptions and practices are in relation to

professional learning. The various empirical studies from a variety of professions impressed upon the current practices as well as projected what needs to be done to improve the field. I concluded the section tracing major trends that influence my study as well as issues and what the new vision holds for the field of CPE.

### Communities of Practice

Merriam, Caffarella and Baumgartner (2007) espouse that by studying the interaction between adult learners, their environment, their behavior, and their mental processes, we get a holistic view of how adults learn. This viewpoint of learning implies two activities: a dynamic process of interactions between the learners and their environment, and the learners' active participation contributing to their learning process. A life-long adaptation to one's environment occurs from observing, analyzing, and valuing the behavior of others with whom and in what environment we interact. Hence, as can be guessed, innumerable factors contribute to learning. Various learning theories address different aspects of learning as no one theory can explain all. This section of the review covers the theoretical framework of CoPs. Theoretical and empirical studies from the field of education are used as it is the context of my study. As the field of management uses the concept of CoPs more than any other field, I have used a few studies from management literature for conceptual understanding.

#### *Theoretical Roots and Tenets of Communities of Practice*

CoPs trace its roots to constructivism (Johnson, 2001; Wenger, 1998) situated learning (Lave & Wenger, 1991; Johnson, 2001; Wenger, 1998; Wenger, McDermott & Snyder, 2002), and social learning (Lave & Wenger 1991; Wenger, 1998). Constructivists maintain that learning is a process of constructing meaning; it is how people make sense of their experience (Merriam et al., 2007). The emphasis is on how learners construct their own mental structures when

interacting with the environment (Driscoll, 2000; Jarvis, Holford, & Griffin, 2003). Vygotsky's theory introduces a social-cultural factor for cognitive development (Merriam et al.). Knowledge in Vygotsky's social constructivist approach is constructed when individuals engage socially in talk and activity about shared problems or tasks with a more competent partner. Making meaning thus is a dialogic process and learning is the process by which individuals are introduced to a culture by more skilled members (Merriam et al.). Therefore, the learning process in this view is a transformation of interpersonal experience into intrapersonal thought process. Two key tenets emerge from Vygotsky's theoretical framework: (1) mental process in the individual begins through a social process; and (2) mental processes can be understood only if we understand the tools and signs that mediate them (Driscoll, 2000).

Social learning theories focus on the cognitive response of the learner. These theories regard the learner as an active participant and contributor to learning. Learners act upon, create, and mold the environment. Bandura (1986, 1989) explicates his social learning theory that causality of learning flows in both directions: from environment to individual, and from individual to environment and refers to his three-way interactive model set in a social context as *triadic reciprocal determinism*.

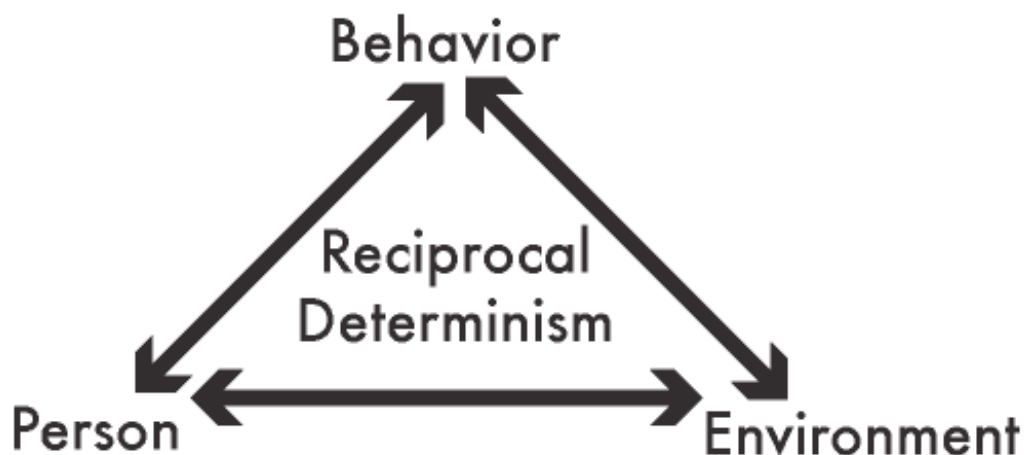


Figure 2.1 A model of reciprocal determinism, reproduced from Bandura, 1986.



Thus, as shown in Figure 2.1, interactions between the person, the environment, and the behavior lead to learning or new behavior. Bandura (1989) adds that the influences between the three need not be of equal strength. The social cognitive theory is thus set in a much broader and more dynamic social reality. Social learning in this view “is a continuous process in which acquired standards are elaborated and modified, and new ones are adopted” (Wood & Bandura, 1989, p. 72).

Situated learning focuses on the context of learning. Brown, Collins and Duguid (1989) state, “Knowledge is situated, being in part a product of the activity, context, and culture in which it is developed and used” (p. 32). The authors contend that learning “entail[s] both changing the user's view of the world and adopting the belief system of the culture in which ... [it is] used” (Brown et al., p. 33). Coining the term “communities of practice”, Lave and Wenger (1991) believe, “Learning is an integral part of the generative social practice in the lived-in world” (p. 35), and participation “suggests a very explicit focus on the person, but as a person-in-the-world, as member of a sociocultural community” (p. 52). In this view one learns a subject matter by doing what experts in that subject do, through *legitimate peripheral participation*. Novice members move from peripheral to full participation in the community and become old-timers in relation to the next incoming group of new members. This way of learning emphasizes continuously changing forms of participation and identity of individuals in a community of practice over a long time (Lave & Wenger, 1991). Critics of situated learning identify its divergence on different counts: from shifting learning from thought processes in cognitivism to social aspects of anthropology (Kirshner & Whitson, 1998); its focus on not-so-much explored area of collective learning over individual learning (Anderson, Reder, & Simon, 1996); and the

negative aspects of community (Fuller, Hodkinson, Hodkinson, & Unwin, 2005; Monaghan, 2007).

*Defining CoPs.* Definitions of CoPs are diverse (Cox, 2005). Lave and Wenger (1991) define CoPs as “a set of relations among persons, activity, and world, over time and in relation with other tangential and overlapping communities of practice” (p. 98). Brown and Duguid (1991) perceive CoPs from an organizational perspective. CoPs are informal groups that emerge at the workplace and are not task forces or teams. “People work and learn collaboratively and vital interstitial communities are continually being formed and reformed” (p. 49). Rather than becoming a member by learning and doing what others do as Lave and Wenger (1991) suggest Brown and Duguid suggest homogeneity in the community through participation (Cox, 2005).

Wenger (1998) expands his earlier work with Lave on both the theoretical framework of CoPs and the initial idea of legitimate peripheral participation. Wenger focuses on social identity, trajectory in participation, and multiple memberships in communities. CoPs, according to Wenger (1998), “are created over time by the sustained pursuit of a shared enterprise” (p. 45). Hence sustained mutual engagement in a joint activity is key to CoPs. Engagement is an evolutionary process for learning and continued personal development rather than mere accumulation of skills and knowledge in groups. Practice in Wenger’s (1998) view “connotes doing, but not just doing in and of itself. It is doing in a historical and social context that gives structure and meaning to what we do. In this sense, practice is always a social practice” (p. 47).

In 2002, Wenger along with Snyder and McDermott makes a clear shift in perspectives to the workplace adding innovation rather than mere repetition of routine work (Cox, 2005). The focus is on knowledge generation. Hakkarainen, Palonen, Paavola, and Lehtinen (2004) define CoPs, also in conjunction with the workplace, as “a group of persons with particular skills or

expertise who interact formally within organizations, or informally – but routinely – in a type of network for shared pragmatic or knowledge-related goals” (p. 58). Johnson (2001) quotes Liedka’s description of CoPs as “individuals united in action” (p. 5) while Hildreth and Kimble (2004), emphasize joint enterprise as understanding is continually negotiated.

The phenomenon of CoPs revolves around its practice. Wenger (1998) elaborates this point: practice involves meaning making (through negotiation of meaning, participation, and reification); relationships within a community (through mutual engagement, a joint enterprise, and a shared repertoire of ways of doing things); learning (by continuity or discontinuity); boundaries and locality. People are mutually engaged in actions whose meanings they have negotiated with one another and may involve different tools or artifacts such as language and books. The collective process in the practice generates mutual accountability which is integral to the practice itself.

Brown and Duguid (1991) affirm that “to understand working and learning, it is necessary to focus on the formation and change of the communities in which work takes place” (p. 41). Key ideas proposed by Brown and Duguid (1991) are work, learning and innovation within organizations. According to these authors, work is through *canonical practices* (p. 41), meaning espoused or explicit practices; *non-canonical practices*, meaning implicit practices such as in-situ or “work arounds” (p. 41); and work practice that infuses narratives, collaboration and social construction. Learning in the workplace is in terms of communities formed or joined, fostering learning and changed personal identities. Innovation is through developing non-canonical practices that bridge the gap between the fixed ways at workplace and adapted practice.

Wenger et al. (2002) simplify and package Wenger's (1998) initial complex ideas into three main elements that forms the basic structure of CoPs: "a *domain* of knowledge, which defines a set of issues; a *community* of people who care about this domain; and a shared *practice* that they are developing to be effective in their domain" (p. 27). Domain creates a common ground, a sense of common identity, and generates accountability (Wenger, 1998; Wenger et al., 2002). It is not an abstract area of interest but consists of issues that members commonly experience (McDermott, 1999). The community is the social fabric of learning. A strong community fosters interactions and relationships based on mutual respect and trust (Lave & Wenger, 1991; Wenger, 1991, 2000; Wenger et al., 2002). McDermott (1999) describes that "Communities have a core group of high contributors and a large group of 'lurkers,' who ask or contribute little" (p. 34). Practice is a set of frameworks, ideas, tools, information, stories, language, and documents that members within the community share. Members, over period of time, have a shared repertoire of communal knowledge and resources that enable them to function efficiently in the domain (Lave & Wenger, 1991; Wenger, 1998; Wenger & Snyder, 2000; Wesley & Buysse, 2001).

*Learning and knowing in CoPs.* The CoPs theory of learning begins with the assumption that engagement in social practice is the fundamental process by which we learn (Lave & Wenger, 1991; Brown & Duguid, 1991; Wenger, 1998). Lave and Wenger (1991) add that, "The social structure of this practice, its power relations, and its conditions for legitimacy define possibilities for learning" (p. 98).

Learning in CoPs is a social process that occurs through co-participation in actions and interactions that are embedded within the culture and history of a community (Brown & Duguid, 1991; Lave & Wenger, 1991; McDermott, 1991; Wenger, 1998; Wenger et al., 2002). Lave and

Wenger (1991) and Wenger (1998) affirm that learning is not a separate activity but an integral part of our everyday lives. Such learning is cooperative, purposeful, and designed to strengthen a group's ability to learn from and apply wisdom to everyday life situations (Stein & Imel, 2002). Through legitimate peripheral participation individuals negotiate meaning initially assisted by others who are more experienced till they, in turn, become old timers in the community. More participation leads to adopting more of the community's ways and norms (Lave & Wenger, 1991; McDermott, 1999; Wenger, 2000; Wenger et al., 2002). In the process they "acquire the community's subjective viewpoint and learn to speak its language" (Brown & Dugid, 1991, p. 48). "Learning involves an interaction between competence and experience... [requiring] a constant fine tuning between [the two]" (Wenger, 1998, p. 215). It is this tension and the two-way process that keep learning alive making CoPs a context for learning and for new insights to be transformed into knowledge (Wenger, 1998).

With today's workplace in mind, Hakkarainen et al. (2004) emphasize learning in organizations as a collaborative process which occurs when experts are engaged in complex problem solving. Interactions of new members with others in the community create identities, establish informal roles, and bring in new ideas as members move from the periphery to the core and at times vice versa (Lesser & Storck, 2001). Learning is therefore a process and a place (Wenger, 1998; Wenger et al., 2002). Collective learning in CoPs fosters the concept of distributed cognition and continuous learning. Additionally, this form of learning helps one to learn what and how to do, as well as to learn what *not* to do, to be competent at work (Wenger, 1998). Learning becomes a process and a product that lends itself to a changing identity for members as well as knowledge (Lesser & Storck, 2001; Wenger, 1998, 2000).

Knowledge becomes collective, dynamic and embedded in CoPs as learning occurs with others and within the community (Lave & Wenger, 1991; Stein & Imel, 2002; Storberg-Walker, 2005, 2006; Wenger, 1998, 2000; Wenger et al., 2002). Besides, knowledge, skills and abilities of just plain folks who have not been earlier acknowledged as experts are valued in CoPs (Hansman, 2001). Much knowing in CoPs is tacit, situated in the context of practice, created by doing, and distributed throughout the community (Brown & Dugid, 2001; Hung, Chen & Koh, 2006; Wenger, 1998). Moreover, as Wenger et al. explain: “The knowledge of experts is an accumulation of experience - a kind of residue of their actions, thinking, and conversations that remains a dynamic part of their ongoing experience” (p. 9). Gherardi and Nicolini (2000) state that community knowledge is greater than the sum of individual participant knowledge.

*CoPs, Learning Communities, and Professional Learning Communities*

Current research focuses on learning as a community rather than merely as an individual endeavor. The field of education interprets the concept of collective learning in several ways and loosely interchanges terms such as learning communities, professional learning communities, communities of learning, and communities of inquiry. Hung et al. (2006) mention that in spite of variations in the usage of the above terms “the tenets are in the same vein as the kinds of orientations that CoPs aim to foster” (p. 301). Organizations also view learning as something situated in practice, context, and activity, and through tacit understandings, processes for applying information, theories, and practices (Hildreth & Kimble, 2004). These learning communities are called wisdom networks (Benton & Giovagnoli, 2006), knowledge creating communities (Bielaczyc & Collins, 2006), and innovative knowledge communities (Hakkarainen et al., 2004). The discussion below dwells only on the field of education to highlight a few differences.

*Learning communities.* The concept of learning community is characterized by “groups of people engaged in intellectual interaction for the purpose of learning” (Cross, 1998, p. 4). Philosophically the notion of a learning community is aligned with the recently changing philosophy of constructing and reconstructing knowledge collectively (Cross, 1998; Dede, 2004; Shrivastava, 1999). Kilpatrick, Barrett and Jones (2003) describe learning communities as being “consistent with a constructivist approach to learning that recognizes the importance of interactions with others, and the role of social interactions in the construction of values and identity” (p. 13). Learning communities is a term used most frequently in education in relation to students learning collaboratively and interactively. However, some argue that classroom-based environments cannot be true learning communities. Brown et al. (1989) argue that students’ activities, set within a school-culture, are not actually like activities of authentic practitioners and hence classrooms do not make authentic learning communities.

Although the definitions of a learning community are diverse and many in number they all acknowledge a common focus on learning as a community and have the following common key characteristics: common, shared purpose; autonomous community members; knowledge sharing and knowledge construction through continuous exchange, interaction and collaboration; flexible and negotiated learning activities; and respect for diversity (Daniel, Schwier & McCalla, 2003; Kilpatrick, et al., 2003; Wilson & Ryder, 1998). Learning communities are intentional structures and incorporate active and collaborative learning activities, as well as lend opportunities for deeper learning (Zhao & Kuh, 2004). All have opportunities to learn as such communities allow for all participants to have roles that may be central or peripheral and yet contribute to the diverse individual and collective activities, knowledge, and expertise of the community (Dede, 2004). Learning may happen consciously or unconsciously, formally, non-

formally or informally, in temporal or permanent space, restricted or not restricted by geographical locations. Knowledge is co-constructed through reflection and analysis of multiple perspectives and is more valuable as it leads to enriched learning (Kilpatrick et al., 2003; Dawson, Burnett & O'Donohue, 2006). Learning communities are differently perceived in higher education literature especially at the undergraduate level. The term learning communities is discussed in specific relation to students living and learning as a cohort (Bassi & Polifroni, 2005; Lenning & Ebberts, 1999; Shapiro & Levine, 1999).

*Professional learning communities.* Professional learning communities are predominant in K-12 literature and draw upon Senge's (1990) learning organization theory to implement whole school change. All staff is included with student achievement as its main outcome. Dufour and Eaker (1998) define a professional learning community as "an environment that fosters mutual cooperation, emotional support, and personal growth as they [educators] work together to achieve what they cannot accomplish alone" (p. xii). Three frequently used models are: Dufour and Eaker's (1998) model, The Whole-Faculty Study Groups (WFSG) designed by Murphy and Lick (2004), and Hord's (2004) model of Communities of Continuous Inquiry and Improvement (CCII).

Based on the ideas of several researchers Shellard (2003) lists what a professional learning community should be: A professional learning community is inquiry based, focused on student learning, goal- and results-oriented, collaborative, reflective, based on shared values and beliefs, and committed to continuous improvement, and evolves in an atmosphere of shared authority and instructional practices. Studies discuss benefits from the perspectives of teacher (Meyer, 2002; Talbert & McLaughlin, 1994) as well as those of students (Reyes & Pazey, 1999; Watkins, 2005).



*Is there a difference?* According to Revans (1997), the three concepts of learning communities, professional learning communities, and CoPs hone in on the two separate but critically related foci of learning and action. Learning communities, professional learning communities and CoPs share the characteristics of shared goals, community membership, and collective learning. Lave and Wenger (1991) and Wenger (1998) emphasize the unconscious, self-evolving, voluntary nature of membership in CoPs. However, the concept gradually changes over time to consciously nurturing CoPs (McDermott, 1999; Wenger et al, 2002). There is not much difference then, on the count that they can all be deliberately nurtured. The striking differences then arise from their purposes and outcomes. While learning communities and professional learning communities target learning, CoPs target practice. Learning occurs in CoPs but it is informal with an emphasis on the dialogue that arises from the practice among practitioners (Brown & Duguid, 2001; McDermott, 1999; Wenger, 1998; Wenger et al. 2002). On the other hand, the outcomes for learning communities and professional learning communities are explicitly linked to student achievement.

#### Communities of Practice for Continuing Professional Education

This concluding section of the chapter reviews empirical studies that have investigated the concept of CoPs for CPE. Studies are from the field of education with a focus on educators across all levels. Two major themes emerge. The first theme that emerges is specific to CoPs such as its development and social relationships. The second theme is professional learning. However, like I found with the empirical studies in CPE literature all these studies incorporate a component of change in practice, beliefs and or attitudes.

### *How do CoPs Emerge?*

Voluntary membership in CoPs is looked upon as one of its key characteristic. However, the initial conceptualization of the term by Lave and Wenger (1991) gradually underwent changes giving seed to the idea that the term voluntary came to be acknowledged in different ways. Thus, in the context of these studies voluntarism means there is a deliberate effort to gather or invite members or to nurture a group for professional growth. Not totally disregarding the self-evolving nature of CoPs, two case studies explicate how a community of practice can be facilitated and nurtured. Hung, Chee, Hedberg, and Seng (2005) study heads of departments from various schools in Singapore who attend an in-service training. They provide a community experience for the participants through several months during the group's meetings that brings about major changes in participants' attitudes and practice. Using simulations, and collectively determined interactions participants deal with real-life projects. The authors design a framework of what strategies work effectively for the facilitating process to nurture CoPs.

Exploring the same idea of creating a community Hung, et al. (2006) studies one embedded case within a bigger study of CoPs in a Singapore school cluster. Hung et al. (2006) label the process of forming a community of practice as *reverse legitimate peripheral participation* explaining, "For a community still under development the reverse process occurs. We begin at the core rather than at the periphery" (p. 305). The authors invite one member to invite other participants from eight school clusters in Singapore. Thus an initial core group is formed for a period of two years of the study. New and old members join as well as leave the community but the activities of the community continue. Roles emerged as the group evolved. The authors found *loose leadership* (p. 299), meaning a flexible leadership, voluntary membership, informal and intrinsically mooted rules, and maintaining an informal ambience as

critical to the success of creating and sustaining a community of practice of heads of departments from the IT department. Simultaneously, the study also pointed to how the community steered its focus to enquire into their practice collectively.

Informal ambience encourages participation, builds social relationships. A lack of bureaucracy in such settings as in CoPs generates trust as well as ignites enthusiasm and interest among members. Niesz (2007) has such an experience in teacher social networks. The author identifies networks are flexible and aren't often faced with contradictory goals unlike in workplaces like schools. Hence it draws membership. Although Brosnan and Burghes (2003) also discuss informal social relationships they view this idea in relation to the success of their program. When course participants are given time to interact socially the community forms faster as they found in their study.

When communities form, members unconsciously adopt roles as they establish relationships. Several studies reviewed mention the emergence of roles in the process of learning and change. Hung et al. (2006) trace the developing stages of their participants through the two years of their study. Participants changed roles from novice, to observer, to participant, and eventually became active contributors in the study. Participation led to a sense of belonging and accountability to the community which in turn encouraged more participation. Fuller, Hodkinson, Hodkinson and Unwin (2005) speak of roles that emerged as well as those that underwent a mutual exchange between novices and the more experienced educators in their study in Britain. Studies showed that a change in roles occurred when novices had knowledge and skills that their experienced peers did not have. While both novice and experienced members learn, the nature of the community too changed in the process. Fuller et al.'s study emphasizes that the demarcation between novice and experience becomes redundant in certain situations. On

the other hand, as members in CoPs engage in an activity together for along time they tend to gain from each others' tacit understandings and practices. Hodkinson and Hodkinson (2003) focus on one educator within a three-member community of practice where the three 'old timers' have a shared practice of fifteen years. Shared practices over the years along with constant inquiry into their practices enable the three teachers to overcome issues at work while not all other departments were as successful.

### *Learning from Practice in CoPs*

Several studies illustrate professional learning and change in practice through CPE programs that have been structured using the concept of CoPs. There are a few studies that also illustrate that these attempts need not always be successful. However, the important idea from these studies is how CPE adopts CoPs to achieve its goals. Membership in multiple CoPs is a common and natural occurrence. According to Wenger (1998) such memberships lead to *brokering* whereby members gather information, skills and understandings from one community to another. Identities and roles shift in concurrence and as McArdle and Ackland (2007) describe, the shift generates new ideas as well as issues. The study reflects on the authors' experiences in developing a new CPE accreditation course for practitioners in the field of adult and community learning. As participants shifted between CoPs at work and in the course the continuous shift helped participants to try new ideas at work from the class and bring back issues and ideas to the course for collective solutions. Niesz (2007) also points to how she negotiated meaning between her memberships in the two CoPs, school and teacher networks, and developed different identities in the two communities. While Niesz (2007) considered learning at work constrained her learning, learning in the teacher networks was hassle free and value added. On the same topic of multiple memberships in CoPs, Triggs and John's (2004) study is of

collaborative partnerships between university faculty and K-12 teachers adopting the concept of 'layers of community' (p. 430). By layers, they refer to the various combinations of teams they had made up of teachers, teacher educators, and researchers who worked together on a 2-year research project. Triggs and John (2004) describe events that show learning within meso, micro and macro levels help to interconnect and omni-directionally improve professional growth.

Learning in the context of practice is one of the merits of using CoPs for bettering practice. Hansman (2001) begins with the initial CPE program that the university assumed would impart sufficient knowledge for new faculty to teach. Hansman (2001) raises a question about the redundancy of theoretical learning during the week's training. The author maintains most learning occurred in practice and more so along with other adult learners and colleagues. Boud and Middleton (2003) also stress CoPs at the workplace impacted learning based on their study of several work groups of educators within the vocational education and training environment in Australia. The authors view informal networks as a good resource for learning at the workplace besides a strong link between the context and the form of learning that occurs. With regard to learning that occurs the authors find that "when work is structured differently, or is subject to different contingencies, then the learning potential of the CoPs differ" (p. 200). However, Boud and Middleton point to the limitation in nurturing CoPs as they see imminent difficulties in nurturing naturally, strongly bound CoPs at work.

Wiessner and Sullivan (2007) show how a structured CPE program using CoPs can become an excellent platform for learning. The authors examine 12 Latino Fellows who participate as a community of practice in a year-long professional development for aspiring community college leadership. Using what they label as a new learning approach a combination of theory-building, discipline-based research and professional development the authors capture

learning that takes place in programs to share it back with the participants adding the researchers' own insights to stimulate further thinking. The study showed new learning occurred at three levels: personal, through making their tacit knowledge explicit; professional, where roles and responsibilities became clearer; and disciplinary, with new understanding of concepts about leadership.

The concept of CoPs is a heavily discussed topic in online learning as a mode of CPE. Studies show that building communities is essential for the success of online programs. Cornelius and McDonald (2008) study a group of academic professors who work in satellite campuses of a university in Scotland. The Open University provides an online forum for the professors to exchange information, ideas and reflect. Participants felt they were able to solve issues at work more efficiently using their online groups rather than previously tried out measures. The study by Brosnan and Burghes (2003) also showed positive learning experiences in online professional development of 16 professionals helped them to modify their practice. However, studies by Chalmers and Keown (2006), and Moore and Barab (2002) found that online environments do not necessarily result in success. Their studies with CPE for K-12 teachers showed good facilitation skills and support of resources to guide effective and productive participation was of prime necessity. While the former study is set in New Zealand the latter is set in the United States of America. However, both studies emphasize that teachers need to be initiated and drawn to reflect upon their practice. Moore and Barab (2002) add teaching being an isolated job; teachers prefer socializing for superficial reasons and may resist group and reflective exercises. Schlager and Fusco (2004) mention designing for online CoP requires design for cultivating and supporting membership. The authors warn that the process of a community should not deter participants from their professional practice. Sherer, Shea, and

Kristensen (2003) present a positive case for the development and implementation of online communities of practice to further faculty professional development. They suggest that designing a faculty development portal using community of practice concepts can be an effective means to jump-start, facilitate, develop, and sustain faculty involvement in academic communities.

This section of the chapter reviewed CoPs. Definitions and key elements were discussed to make connections to the main understanding of how learning occurs in CoPs. I then discussed the often confusing issue of the difference in the terms learning communities, professional learning communities and CoPs. The empirical studies investigated the concept of how CoPs were used for CPE. Studies were used from the field of education with a focus on educators across all levels. A common ground among the studies shows that CoPs are used as contributing in different ways to change in practice.

### Summary

This chapter review began with a discussion on the theoretical perspective of professional practice which refers to a specialized set of knowledge, skills, attitudes and ethics in a profession. The goal of CPE is to enhance professional practice. How CPE perceives learning and the learner shapes how its programs are designed. With changing times and needs at the workplace it is necessary that CPE changes its approach. There are several learning models advocated nudging a shift from mere knowledge acquisition to a reflective process in the context of practice. Moreover trends show that workplace is the major CPE provider. As most professionals today work in complex organizational settings it is important to adopt a wider lens to include all factors that influence practice with an emphasis on where practice occurs and with whom. However, the Update Model still reigns supreme in its usage for CPE emphasizing fulfilling mandatory requirement over lifelong learning to enhance professional practice.

Collective learning is an option to be seriously considered as professionals no longer work in isolation. Besides, rather than perceiving CPE as only to fulfill requirements it needs to be viewed as an opportunity for professional growth.

We get a holistic view of how adults learn if we approach learning as a social practice rather than merely considering it as an individual mental process. Learning occurs in and from the lived-in experience of adults in CoPs. Knowing and learning then becomes purposeful and is intrinsically motivated. Additionally, the knowledge in and of the community is collective and is embedded in itself. As CoPs evolve, individuals also bring about a change in their practices as well as that of the community. CoPs share some characteristics with learning communities as well as professional learning communities. However, CoPs focus on practice while the other two concepts target learning as outcomes.

Two value additions in CoPs are, learning occurs continuously, and in the context of practice. Both these characteristics make CoPs a promising option for CPE. CoPs exist in the workplace but are often not recognized. A new wave in organizations is to deliberately develop CoPs with the hope to foster learning, which in turn will influence practice. Studies show that CoPs which use an inquiry approach at the workplace has resulted in a change in beliefs as well as in the practices of the professionals involved.



## CHAPTER 3

### METHODOLOGY

The purpose of this study was to understand how communities of practice (CoPs) foster continuing professional education (CPE). The following research questions guided the study: (1) How did learning occur in this community of practice? (2) What was the knowledge produced in this community of practice? (3) How was an individual's practice influenced by the community of practice? (4) What Indian socio-cultural factors shaped the process of learning, the knowledge produced, and the practice in the community? The sections in this chapter discuss the following aspects used in the methodology for the study: design of the study, sample selection, data collection and data analysis. The chapter concludes with a discussion on validity and reliability, assumptions and limitations, and a summary.

#### Design of the Study

The study used a qualitative research design as the mode of inquiry to gain an in-depth understanding of the community of practice through participants' unique perspectives on membership in the community of practice. The design also allowed the study to uncover the meanings that this membership had on individual members' professional development and practices. A case study approach was adopted to explore the community of practice under study.

#### *Qualitative Research*

Qualitative research is an umbrella term covering various types of inquiry that share the same philosophical assumption that reality is constructed by individuals in interaction

with their social worlds. Thus, there are multiple realities; meaning is not a fixed or predictable phenomenon that is assumed by positivistic research. Rather reality exists within human interactions and pure objectivity is impossible (Esterberg, 2002). The emphasis is on understanding and in describing the individuals' meaning-making of their social circumstances rather than trying to identify social facts (Hatch, 2002; Merriam, 1998; Patton, 2002). Qualitative study strives to capture the world from the perspectives of those living in it; participants' perspectives as insiders' perspectives are critical to this understanding (Merriam, 1998; Patton, 2002).

A qualitative design was appropriate for this study as it allowed for an in-depth exploration of the community of practice. This study focused on the community of practice as well as each participant as a member within the community. I gathered what the participants shared, and listened to their thoughts, feelings and beliefs as they described their participation and experience in the community. Thus I collated a composite view of how they perceived the reality of their work and its role in their lives.

Qualitative research adopts an inductive approach to derive an understanding of the data (Creswell, 2003; Merriam, 1998; Merriam & Simpson, 2000; Patton, 2002). What is uncovered is mediated through the researcher's own perspectives. The researcher creatively synthesizes the data into varied levels of abstraction as categories, sub-categories, typologies, concepts, hypotheses or theories (Merriam & Simpson, 2000; Patton, 2002). Research questions may change with new insights into a phenomenon during data collection or analysis. Each member of the community of practice studied had diverse experiences. The inductive method guided me to understand the phenomenon of a community of practice through these diverse experiences; the phenomenon was not manipulated or tested, but rather

observed for understanding and meaning. The intuition and understanding as I, the researcher, interacted within the setting of the study guided the development of themes, categories and concepts arising from the data collected.

In all forms of qualitative research the researcher is the primary instrument for data collection and analysis (Hatch, 2002; Merriam, 1998; Merriam & Simpson, 2000; Patton, 2002). My analysis of participant responses as I conducted each interview guided the interview process and led me to modify a few questions to subsequent participants depending upon the responses I received. I taped each interview on a digital audio recorder and transcribed it verbatim into a word document and then analyzed it alongside other data I collected.

Qualitative research usually involves fieldwork where the researcher physically goes to the setting for data collection (Merriam, 1998; Patton, 2002). I visited the setting, the organization, for several observations. Although for the most part the setting was the office space I also had the opportunity twice to observe the participants collectively in a setting away from the office where they had gathered to conduct events. Also as a characteristic of qualitative research the data resulting from this study was its rich, dense description as the participants described the various aspects of the phenomenon.

According to Hatch (2002), unobtrusive artifacts and records that are used to support qualitative work as data do not take on any significance until they are processed by the researcher. Therefore, Merriam (1998) states that bias can be a shortcoming of qualitative design in terms of positivistic perspectives. However, Auerbach and Silverstein (2003) claim that qualitative research assumes that subjectivity is an essential part of human interactions and cannot be totally eliminated. In fact, a researcher's subjectivities can serve as an important and unique source of information (Auerbach & Silverstein, 2003) and interpretation (Merriam &

Simpson, 2000). Moreover, Merriam and Simpson (2000) add that the unique merit is in having a human instrument because a person can be immediately responsive and adaptive. The researcher can adapt techniques to suit the circumstances; consider the total context of the phenomenon rather than a particular segment; clarify for accuracy of interpretation; and explore anomalous responses (Merriam, 1998; Merriam & Simpson, 2000). As the researcher I was able to respond to situations as they occurred whether during observations on site or during individual interviews to gain as much understanding as possible of what happened within the community of practice.

While there are various forms of qualitative research that share some common, essential characteristics, some types of inquiry may emphasize certain characteristics, ignore others, and generate alternatives (Hatch, 2002). A qualitative case study, as this study, is defined by its own uniqueness within this research paradigm.

#### *What Makes a Case Study?*

The key differentiating feature of a case study from other qualitative methods is in its focus on a single, bounded unit (Merriam, 1998; Stake, 2006; Yin, 2003). A case study is about a case, an entity, or a phenomenon, which may be a person, a program, an institution, a social unit (Dyson & Genishi, 2005; Merriam, 1998; Stake, 2005; Yin, 2003), or some combination of those units which is the phenomenon of interest. Thus the focus is on a particular situation, which is also a bounded system. This study explored a community of practice which was a social unit, an integrated and functioning entity that was singular but had subsections, all of which contributed to the whole case (Stake, 2006).

Stake (2005) describes a case as an integrated system, “a specific, unique, bounded system... [with] working parts, and purposes; many have a self” (p. 445). The term *bounded* means, “The case has an inside and an outside” (Stake, 2006, p. 3). The outside boundaries

help to define what lies within the system, including its context and environment. The boundary also provides a framework for the study (Dyson & Genishi, 2005). Members of the community of practice in this study shared a practice as educational consultants which defined membership. Thus, I could *fence in* my case as Merriam (1998) suggests, with an inside and an outside boundary to study the community's activity. Also, the community of practice was both the context and the unit studied; this feature of a case study is highlighted by both Stake (2005, 2006) and Yin (2003) who state it makes it difficult to separate the two. Finally, Stake (2006) posits that a case is dynamic - a study in real-time and with its own stages of life that "has a sense of history and a future as part of the picture" (p. 3). The community of practice itself in this study has a life of its own – a past, a present, and a future, as does each member of the community.

#### *Is Case Study an Appropriate Choice?*

According to Merriam (1998), "A case study design is employed to gain an in-depth understanding of the situation and meaning for those involved. The interest is in process rather than outcomes, in context rather than a specific variable, in discovery rather than confirmation" (p. 19). First, the case study design fit this study best for reasons related to both the process of the study as well as the context of the study. Further, Merriam (1998) views a case study approach as a process of understanding that is achieved by continuous monitoring. Yin (2006) states, "The case study method is best applied when research addresses descriptive or explanatory questions and aims to produce first-hand understandings of people and events" (p. 112). In accordance with Yin (2006) and Merriam's criteria, the study was guided by both *how* and *what* questions and I, as the researcher, got an in-depth understanding of the community of practice. Moreover, the process was an in-depth study of

the context, a case or phenomenon of a community of practice. Yin (2003) also suggests that a case study has a distinct advantage when the researcher has less control over a contemporary set of events as “the variables are embedded in situations as to be impossible to identify ahead of time” (p. 1). My study was in real-time, focusing on the community as well as the experiences of the members within the community. Therefore, like Merriam (1998) mentions, variables emerged as the study unfolded and did not allow for their identification ahead of time. Finally, “A case study might be selected for its very uniqueness for what it can reveal about a phenomenon, knowledge we would not otherwise have access to” (Merriam, 1998, p. 33). This study, set in India, makes a unique contribution to the knowledge base of both CoPs and CPE as there have hardly been any studies done in these areas in the Indian context.

Case studies are classified in several ways by different authors. This study was an instrumental case study as per Stake’s typology (2005, 2006) as its findings help to widen the understanding of CoPs and the field of CPE. From Yin’s (2003) point of view this study was both descriptive as well as exploratory as it explored with *how* and *what* questions.

### Sample Selection

Purposeful sampling was used to select a sample that would afford maximum learning in agreement with Merriam’s (1998) view that this method is the most appropriate choice to discover and gain insights. There were two levels of purposeful sampling: first, the case – a community of practice which was the unit of analysis that was to be investigated; and second, individuals within the community of practice. Details of both levels of sample selection are described next. Level 1 describes the criteria used in identifying the case. Level 2 briefly describes aspects that helped in identifying individuals to serve as participants in the study.

### *Level 1- Identifying the Case*

#### *Selection Criteria*

The first step to achieve a purposeful sample was to establish the criteria for selecting the community of practice and then select a community that matched those criteria. Below are the three criteria with rationale for their choice for sample selection.

(1) The organization is in India in the business of adult education offering programs in a face-to-face format. Online learning, when offered, is a complementary instructional mode.

*Why India?* The decision to base the study in India rather than the United States was a deliberate choice due to the following reasons: First, while literature on CPE and CoPs published in the United States has studies from Asian countries like Korea, China, and Malaysia there is a glaring lacuna with respect to India, a growing superpower in a globalized world. Second, professional practice today is global and Indian professionals have entered in big numbers into the U. S. workforce in various sectors such as engineering, management, accountancy, nursing, and K-12 math and science education. While many Indian professionals have migrated on their own, many new entrants from the fields of law and management are recruited by headhunters from the U.S. Placement agencies from the U.S. are also hiring Indian nurses and K-12 math and science teachers to make up for the deficit in domestic applicants for these jobs. In the last decade, outsourcing has also resulted in a huge Indian population working for U.S. clients in areas such as publishing, banking, medical transcription, medical billing, and education. The majority of the outsourcing work is carried out from India but the software sector brings these professionals in teams for several months to several years to work on-site with the client in the U.S. Understanding the Indian socio-cultural context and its influence on professional practice contribute to a better understanding

of the influence of Indian culture on learning and professional practice besides introducing new international perspectives in adult education. Last, logistically, my cultural background, work experience, and network in India was an advantage in identifying willing organizations and participants for data collection. Moreover, I was able to understand, appreciate and reflect on socio-cultural contexts in my home country as both an insider and an outsider in the study that enriched the research process.

*Adult education programs are in face-to face format.* Indian culture still prefers learning through face-to-face interactions with the instructor as well as with peers. This could be due to a strong dependence on a traditional learning paradigm where learners prefer teacher-led instruction to self-directed learning. Moreover, although India is in the forefront of the use of software technology for the purpose of business, online learning is sparingly used apart from the use of the intranet in multinational corporations. One important factor that inhibits the use of the online format maybe attributed to poor infrastructure and limited resources. Basic formats of email exchanges are used rather than discussion boards when online learning is used. To understand common practices in the Indian context it was necessary to select an organization that used face-to-face programs. A technology component may be incorporated but not as the sole mode of delivery.

(2) The organization employs a minimum number of 10 members, full-timers as well as part-timers, in the roles of facilitators, content developers or both for its programs.

In general, small and mid-size private business ventures in adult education recruit a few full time employees ranging from 3 to perhaps 15 people who combine several roles in the organization. Depending on the business, partnerships, and projects on hand, external consultants are employed as facilitators as well as content developers. External consultants



may be employed on a semi-permanent basis across all projects or on a contract for specific projects. As the number of employees varies continuously in small businesses, a number of ten was chosen as a suitable number for data collection.

(3) Members in the organization meet periodically to discuss their practice.

Members together form the community of practice that is the case for this study. An important factor that helps an organization to progress is to enable its members to interact frequently. One such opportunity for interactions is through meetings. While meetings may be planned in advance it is also common in organizations to have impromptu meetings. Besides, the number of attendees in meetings also often varies. The important aspect of these meetings is that they can serve as a platform for professional dialogues. Hence the selected organization should have regular meetings where members interact professionally with colleagues they regularly meet as well as with those they don't meet often at work.

An organization, Educators' Academy (EA) in Bangalore, a city in South India (see Figure 4.1, p. 81) met all the above criteria. EA works with educators in K-12 environments. At the time of my study the organization had 12 full-timers and fluctuating numbers of part-timers. Members in EA meet as a whole group every first Tuesday of the month. However, this meeting schedule is not rigid. Members also meet regularly in smaller groups based on the projects they work. The driving factor in these meetings is members' inquiry and discussions to problem solve and deal with other concerns of individuals as well as the community's practice. Meetings at EA are planned in advance or at times adhoc in which all or a few members meet. Further, these meetings have an explicit agenda and yet combine a loose structure to allow for other impromptu discussions. Frequency of meetings varies as well as numbers of attendees.

### *Level 2- Identifying a Sample within the Case*

The second phase of purposeful sample was within the case, meaning, within the selected community of practice for this study. There were 13 individual willing participants who included 10 full-time employees as well as 3 part-timers. All the participants worked as facilitators or content developers or as both in EA. Individuals had to have worked in the organization for a minimum period of one month. This time-frame allowed for a new participant to gain familiarity with the workplace as well as with colleagues.

### *Data Collection*

“Data collection in a case study is a recursive, interactive process in which engaging in one strategy incorporates or may lead to subsequent sources of data” (Merriam, 1998, p. 134). As a case study I typically used all three major techniques for data collection – interviews, observations and documents. Interviews and observations fit well to explore research questions. Documents that served as good indicators and provided information about participants’ practice were used. Documents such as fliers for the programs conducted by the organization , copies of past and current half-yearly newsletters, several session feedback forms by facilitators, and the organization’s annual planner were explored for additional and new information.

### *Semi-structured Interviews*

In Merriam’s (1998) view, interviews are conversations with a purpose to find out what is in and on someone else’s mind. Patton (2002) suggests that semi structured interviews allow researchers to gather opinions on a certain topic in detail within a limited time. Further, Merriam adds, interviewing is the best technique in intensive case studies as these studies involve small numbers.

Interviews served as good techniques for this study as they helped participants to recapture past experiences that shed light on learning within the community of practice and its influence on practice. The community of practice for this study was made up of a small number. Hence I interviewed all willing members. Each interview lasted for approximately an hour.

Asking the right questions is the key to collecting good data. In-depth knowledge of the topic helps the researcher ask meaningful questions but using a language and manner that is easily understood by those interviewed is critical to get a good response (Patton, 2002). During the interviews I followed an interview guide based on the four research questions to steer the conversation towards discussion on learning and communities of practice (see Appendix A) Questions were flexibly worded in semi-structured interviews. As key ideas guided the exploration instead of predetermined exact words and order of questions I, as researcher and interviewer, responded to the emerging views of the respondents. Interview questions left the respondent wide coverage but within the direction of focus of the study. Participants brought their unique personal learning experiences based on their prior work experience, education and background. Hence flexible, open-ended questions were used that was also sensitive to diverse perspectives. Probes followed for more information and clarifications. Often probes depended on the responses and were not planned earlier. Whenever possible I used specific terms the interviewees used that helped the flow of the conversation.

Interviews were conducted only after three weeks of initial visits to the site for observation. This period helped to establish a basic level of familiarity with most of the participants. Depending on how familiar the participant and I were with each other, the interview process began with a casual conversation to introduce myself. I then explained the

purpose and topic for my study, gave them time to read and sign the consent form pointing out to them information on confidentiality and rights as a participant. All interviews were recorded on a digital audio-recorder along with notes or comments. Recording allowed for listening to the conversation several times that helped me to pay more attention to details that I may have ignored initially. Patton (2002) suggests jotting brief notes serves to locate important quotes from transcriptions. I made brief notes during the interview to record body language or any interesting reaction during the interview. The following is an excerpt from an expanded field note I had jotted down during one interview that described how the participant spoke:

Participant: Savitri (S)

Date of Interview: September 18, 2008

S: Voice is too soft. I requested her to talk louder and into the recorder. She takes long pauses between sentences using the time to think and respond. A few times she asks me to repeat a question. Other times she repeats my question aloud and then strings her response to it.

Patton (2002) suggests transcribing and assessing data soon after the interview to increase the quality of the data. This allows for clarifying any ambiguity immediately with the interviewee if there is a need. Esterberg (2002) advocates detailed transcribing “to preserve the flavor of what was said” (p. 108). I transcribed verbatim as soon as possible after each interview. Transcribing at the earliest helped me to modify a few questions based on how participants responded or if they had required me to explain the question. At times I modified questions because responses did not produce sufficient information or if I thought I needed additional information.

### *Observations*

Unlike interviews, observations are firsthand encounters with the phenomenon rather than a second-hand account of the world (Merriam, 1998). Patton (2002) warns that researchers observe based on their interests, biases, and backgrounds; therefore, “disciplined training and rigorous preparation” (p. 260) helps to conduct quality observation. Keeping in mind that one cannot attend to everything in observations (Merriam, 1998), my observations were guided “by the focus of the study and by being open and sensitive to new ideas and insights as they emerge in the process” (Merriam, 1998, p. 139). Creswell (2005) suggests beginning briefly with a broad overview and then focusing more narrowly to gather specific information. This served as a good strategy for observations in this study.

I did my observations throughout the data collection phase. I spent the first week of observation in the last week of June just watching people in the study setting. This helped me to get familiar with people and some of their routines. In the second week my observations were more focused. I used a protocol for my observations (see Appendix B) about what details I needed to focus such as spaces where people tend to, or prefer to, meet frequently, which person interacted with whom and for what purpose, body language and tone of voice during casual conversations, and topics discussed. Being on the site also helped me to begin casual conversations with participants and gradually led to trust and rapport. In early July I observed a meeting that was attended by almost everyone at the office. The director introduced me to all attendees and requested me to say a few words about my study and the purpose of my visits. I did accordingly and requested their participation mentioning that I would later approach them individually for interviews.

Observations were of daily happenings that also included several in-house meetings. I would check the organization's annual planner and note down meeting dates and time that were planned in advance. Members also took it upon themselves to keep me informed if they were part of any subgroup meeting that was due to happen soon. For impromptu meetings, someone would just tap me on my shoulder to tell me to join them wherever the meeting was to be held. I also had a generic protocol for meetings (see Appendix B) just to guide my attention. During meetings I focused on the topic of discussion, who initiated the topic for discussion or inquiry, how other members interacted and sustained the process, and what decisions or solutions were proposed. Additionally, I also looked for implicit and explicit routines the community may observe as well as any subtle or conspicuous factor that influenced the process. I observed two whole group and two subgroup meetings that were planned in advance as well as two impromptu subgroup meetings that happened when I was on-site. Meetings gave me the opportunity to observe participants as a community.

Besides meetings, I observed workshop sessions and training programs that happened on-site. I sat in two short sessions of Train the Trainer in the regional language. Although I could not follow detailed discussions because of my lack of fluency in the language, I was able to follow simple directions and what the activities involved. I was also invited to observe a day's workshop conducted for the 12-member cohort enrolled in the international diploma program for teachers. The cohort was made up of school teachers from several schools within and outside of Bangalore. My interview with Nina, the facilitator of this diploma program, was after this observation and so helped me to relate her comments about her practice to what I had observed in this session. Thus, while meetings served to

understand the community of practice as a whole observing a workshop helped me to link individual participants' practices with information from their interviews.

Observation helped this study in the following ways. One, I understood certain routine occurrences that led to a better understanding of the community of practice. For instance, people took a break at about 9.45 a.m. around the time the tea-cum-coffee-vendor would arrive on his bicycle. It was a time for a few people to stretch their feet, walk up to a colleague for a short chit-chat. Second, observation provided information of the context on specific incidents and behaviors as it occurred; like my observation on the second day when one participant entered the office looking very flustered and walked up straight to his section-head for a serious conversation. Soon three other colleagues joined the two people and led to a long discussion on concerns of their practice. Third, observations helped me to triangulate findings with the other data sources. Finally, observations allowed me to interpret occurrences of what I, as researcher, observed rather than depend solely on others' interpretations from interviews (Merriam, 1998; Patton, 2002). For example, in her interview, Gowri spoke of how the training session lays an emphasis on active participation of all participants. Gowri's comment corroborated my observation of a training program where the two facilitators gave opportunities for all to participate through various activities.

Field notes serve as records written by the researcher from notes taken during an observation (Creswell, 2005). Creswell adds that a researcher can maintain descriptive or reflective field notes. Esterberg (2002) supports note keeping as it helps to organize thoughts. I maintained field notes with a quick memo next to what I considered was an important or interesting information, anecdote, or if it raised a question that I should pursue. I also

expanded my field notes from my observations everyday after my return from the field visit. The expanded notes captured more details of what I had seen that day.

### *Documents*

“Document is an umbrella term to refer to a wide range of written, visual, and physical material relevant to the study at hand” (Merriam, 1998, p. 112). Merriam adds that documents are generally not produced for research unlike other types of data; however, they contribute valuable information. Documents can be either public or private records or research-generated (Creswell, 2005; Merriam, 1998). While public documents, for example, consist of agency records and government documents, private documents are personal diaries, journals, letters, photos etc. The documents I used were from the organization. Participants did not use any personal resource; rather they dipped into the common pool as the session plan or flow-line of a workshop required. Even the flow-lines were common property. I received copies of the organization’s newsletters, copies of flow-lines, session feedback-forms from few facilitators in English as well as in the regional language, and the organization’s pamphlet of past and future programs. These documents added information about the community of practice as well as individual member’s practice. I made copies of the feedback forms, translated the feedback forms from the regional language into English and analyzed them along with other data.

### *Summary*

This study used three common methods for collecting data in qualitative research. Interviews helped to gain a detailed understanding of how people experienced and interpreted their context. Observations led to an overall understanding of the organization studied, aided me to build rapport and trust with the participants, as well as to confirm findings from, or to inquire



about during interviews. Documents, as the third source of data, contributed to my understanding of the organization's mission. They also provided information on the various programs, services rendered, and organizational processes.

### Data Analysis

According to Merriam (1998), data analysis “is an interactive process throughout that allows the investigator to produce believable and trustworthy findings” (p. 151). As in any qualitative study an emergent design requires data to be analyzed as it is collected to help in further exploration. Hence “data collection and analysis are recursive and dynamic” (Merriam, 1998, p. 155). It “involves moving back and forth between concrete bits of data and abstract concepts; between inductive and deductive reasoning, between descriptions and interpretations” (Merriam, p. 178). To avoid an unfocused, repetitious, and overwhelming process I analyzed data continuously using the constant comparative method.

#### *Constant Comparative Method*

The basic strategy that this method adopts is what its name implies. According to Merriam (1998), “The researcher begins with a particular incident from an interview, field notes, or document and compares it with another incident in the same set of data or in another set. These comparisons lead to tentative categories that are then compared to each other and to other instances” (p. 159). Ezzy (2002) maintains that through the process of comparison, events that seemed unrelated in the beginning may be categorized together and vice versa. Thus, Merriam (1998) mentions that categories are derived from the data; they are not the data themselves.

Strauss and Corbin (1990) describe the first step in analysis: “To uncover, name, and develop concepts, we must open up the text and expose the thoughts, ideas and meanings

contained therein” (p.102). This process is the phase of open coding. Charmaz (2006) suggests two ways of optimizing the coding phase. First, speed and spontaneity help in initial coding, and second, coding using gerunds rather than nouns helps to detect processes and stick to the data.

Data analysis began with open coding which was done through a close scrutiny of the data to identify key ideas. Each interview was analyzed for meanings, understandings or concepts that illustrated the participants’ understanding of the phenomenon. Thus I open coded small paragraphs, sometimes a sentence or a segment depending on the major idea that it resonated. As often as possible I tried to use the same term that the participants used to describe the idea. New ideas had new codes while similar ideas were coded with the same labels. Table 3.1 gives an example of open coding of data from an interview transcript. Charmaz (2006) identifies focus coding as more conceptual arising from sifting, sorting synthesizing and integrating data using the most frequently found or significant codes. Similar labels in open codes were clustered together to organize them into a bigger idea or a theme. In the next step I also noticed that although two labels were similar sounding they fit better under different categories because their settings were different. For example, in the sample given earlier all the open codes related to learning. The codes “discussing” and “discussing informally” seemed to be similar while “sharing with the team,” “sharing with individual colleagues,” and “sharing with whole group” conveyed a common idea of sharing. However, as I progressed with the analysis I saw discussing during training and sharing in whole group was within similar planned settings and hence different from discussing informally with the team or sharing with individual colleagues. Hence, from one level to another, codes were continuously compared and developed into bigger ideas and categories with the four research questions as the major frames.

Table 3.1 Sample of open coding from the data

Open Code	Data Source	Line Number	Data Segment
Training Discussing Problem-solving	A	51-52	I attend many organized training by EA. These trainings sessions focus on discussions and problem solving with my colleagues.
Approaching for help	A	62-64	One, with regard learning you will have to approach people who will help you to learn a particular aspect. You know who is good at that field and you approach that person for help.
Sharing with team  Discussing informally  Sharing with individual colleagues  Sharing with whole group	A	69-71	Sharing concerns, not with all. Concerns, not personal but work-wise I share with the team as it affects work and the quality of work. Discussions happen informally more within my project team members. I share with Shaila who is the project head or team members, Vinay, Anjana because we work together as a team and we are on this project together. Other times concerns are situational and I may talk to Mala or Meena. At times within the structured meeting I share concerns with the whole group.

Initially I identified 54 codes (see Appendix C) to describe data that addressed the four research questions. Gradually these codes began to coalesce. After comparing and collapsing the themes the number of codes was reduced to 23 (see Appendix C). Following this phase of reduction, interview transcripts, field notes and documents were reanalyzed and coded with the 23 codes. Data were sorted then cut and pasted into document files based on each theme under each research question. This process helped in listing characteristics or properties that define the categories and its subcategories. Simultaneously I also developed a reference list for each theme under respective research questions with good quotes that could serve as evidence. This final grouping of similarly coded data into categories was further analyzed and formulated into study findings.

Categories were narrowed and refined to twelve (see Appendix C) as a final number that was more inclusive of concepts while at the same time conveying an abstract understanding of the experience. For instance, I began to see that several categories under the first research question that related to learning conveyed a manner of maintaining contact with peers such as in meetings, in-house training, through co-planning and co-facilitating, and informal coaching.

Table 3.2 Sample of development of final categories

<b>Code</b>	<b>Data Source</b>	<b>Line Number</b>	<b>Data Segment</b>
Structured interactions	A	51-52	I attend many organized training by EA. These trainings sessions focus on discussions and problem solving with my colleagues.
Informal interaction	A	62-64	One, with regard learning you will have to approach people who will help you to learn a particular aspect. You know who is good at that field and you approach that person for help.
Incorporating ideas	A	104-105	In some situations I develop my own module and I use these new ideas when I get the opportunity to develop my module.
Assuming new roles and responsibilities	A	129-130	I was supposed to analyze a school audit. It was challenging because I had never done it in my previous work. Both my expectations and what was expected of me wasn't clear. I was waiting for a direction and criteria from them and they were expecting me to develop the criteria on my own and share with them. It was subtly but not directly conveyed that I had to find my own way.

Hence I concluded that interaction with colleagues was an appropriate term to use for this category. The category “interactions with colleagues” subsumed interactions that occurred

during sessions planned in advance like during a meeting or training as well as at other times at work like a casual conversation during lunch. I then pulled out all the transcript sections dealing with interactions with colleagues from all of the perspectives of the different categories and renamed them as either “structured interactions” or “informal interactions” to make the category consistent. Table 3.2 shows a sample from a transcript of the final concepts that were part of the findings. From one interview to the next the process was extended across all interviews completing analysis of one data source. Each interview provided the researcher with an opportunity to revise understandings of the similarities and differences among interviews. Simultaneously, I also maintained memos to keep track of thoughts, ideas, questions, or hunches as I engaged in analysis. I performed a similar process with the documents and field notes collected during the study. Finally, all categories across all three data sources were compared and collated as a single analysis.

### Validity and Reliability

Auerbach and Silverstein (2003) claim that readers evaluate research findings based on validity and reliability. Therefore it is essential for a study to establish both. According to Merriam (1998), internal validity is defined as the congruency between research findings and reality. In qualitative research, internal validity refers to the researcher’s adequate and honest description of participants’ interpretations of the world. Patton (2002) and Merriam (1998) suggest triangulation of data sources and member checks as good strategies to establish internal validity. Triangulation is the use of multiple data sources. Using one data source and collection method can give rise to errors versus the use of various sources to understand participants’ interpretations of the phenomenon (Patton, 2002). This study used three kinds of data collection - observation, interviews, and documents.

Member check refers to sharing the findings with participants to see if the researcher has captured what the participant wanted to convey. I first shared a one-page summary of finding to the first five participants I interviewed and asked for their feedback. I also added a brief introduction of the meaning and purpose of a member check. This was also a way to give the participants a formal sense of this study and the importance of their assistance. All the feedback from the member checks was positive and participants agreed that the findings of this study summarized and represented their experiences well. Participants were also provided an opportunity to react to the final findings through member checks when I shared with them the final 2-page synopsis of my findings. The members easily agreed that they had experienced learning, that the community of practice was a supportive environment, and that their practices had been influenced by their association with the community of practice. A third strategy is peer examination. I requested my major professor to do a random check of my analysis and to comment on the findings. Finally, articulating a researcher's subjectivity may not reduce one's bias in the study, but can help the readers to understand my stance as the researcher within the context of the study.

External validity is the generalizability of research findings to other studies (Merriam, 1998). Researchers use random samples as representative of a larger population in quantitative studies. However, qualitative studies do an in-depth study of small purposeful samples to understand the particular in depth rather than what is true of many (Merriam, 1998). Additionally, Merriam considers the concepts of *reader or user generalizability* to establish generalizability. By this strategy people in various situations determine if the findings are applicable to another setting (Merriam & Simpson, 2000). On the other hand, Auerbach and Silverstein (2003) suggest the term *transferability* as theories developed in

qualitative research can be transferred to other situations as abstractions. A detailed description of my study and the participants allows the readers to “determine how closely their situations match the research situation, and hence, whether findings can be transferred” (Merriam, 1998, p. 211).

Reliability refers to replicating results when repeating the same study. Qualitative design acknowledges multiple realities as well as the possibility of the same individual having different interpretations of the same phenomenon at different times. Hence, “achieving reliability in the traditional sense is not only fanciful but impossible” (Merriam, 1998, p. 206). Therefore Merriam insists that the terms “dependability” and “consistency” may serve the needs better. Thus reliability rests on the extent to which results are consistent with the data collected (Merriam, 1998). Techniques that I further used to strengthen reliability of this study included an audit trail which is a detailed documentation and transparency of the data collection and the process used and the steps of data analysis as well as a reporting of my decision making process throughout the study. I also had detailed discussions with my major professor that helped to conceptualize and finalize the themes.

#### Assumptions and Limitations

All researchers initiate studies with certain assumptions. The following are my assumptions which can influence research findings. I assume learning occurs as a social practice at the workplace and influences individual beliefs, attitudes, and capabilities. The influence can be either positive or negative. My own learning experiences at the workplace as well as observing other adults in workplaces has given me opportunities to understand the subtle and indirect extent of influence colleagues have over an individual’s practice and attitude towards one’s practice, especially in the field of teaching. I also have observed that

workplaces especially educational institutions offer little scope for collective learning and any such opportunity is often taken lightly.

I also assume cultural context has a huge impact on one's practice. Cultural norms and systems are ingrained from birth. These ways of thinking permeate subconsciously into all aspects of an adult's life including one's professional practice. For example, Indian culture values and respects authority that comes with age to the extent that questioning someone older is not looked upon favorably. Therefore, if an older member's practice in the community of practice is cause for concern and I observe that the younger members avoid questioning or joining the discussion related to the concern, I tend to link it to the culture and overlook other possible reasons. Another assumption that influenced my study is my belief that inquiry is a good way to reflect upon and change one's practice. Not everyone is comfortable with this process. And not all change is for the better. I may tend to give undue emphasis to the process of inquiry and change.

My 15 years of experience as a teacher, and six years as an educational consultant in India dominate the study. Moreover, my experience outside of the country both as a graduate student as well as a teacher also has led to incorporating new and non-Indian ways of thinking, about teaching, learning, teachers, professional practice and life in general. These experiences have a strong influence on my outlook as well as this study. Further, data collection and analysis were shaped by my assumptions of what makes good and bad practice. My experiences and views on what constitutes traditional paradigms also pose a subjective perspective as to how I perceive practice, teaching and learning. It has also become obvious to me during my career that K-12 teachers and educators, who deal with the teachers or students directly, especially in India, must pursue continuing professional education to remain competent and current in their field. A



generic view of what I perceive as Indian and non-Indian ways of doing and thinking pervades the study as an extension of my personal beliefs and experiences.

Although this study was conducted in India, I used English for all my data collection and communication as I am proficient and comfortable using the language. However I had a few participants who could manage simple English and who may have preferred to speak in their regional language. Nonetheless I preferred not to use translators and wanted to capture their views firsthand and so did not offer the option. While the difference in language fluency did not hinder participants from expressing their views, I think they may have spoken more if they had spoken in their mother tongue.

### Summary

This chapter discussed the methodological process and strategies that I adopted in the study of the community of practice. I have detailed the research design, sample selection, data collection and analysis methods. I used a qualitative case study design incorporating data gathered through observations, interviews and documents. A purposeful selection for a community of practice made up of educational consultants in India was chosen based on the selection criteria. Data was analyzed using the constant comparison method. I also discussed strategies I used to establish validity and reliability as well as my assumptions that influenced the study.

## CHAPTER 4

### CASE DESCRIPTION AND PARTICIPANT PROFILES

The purpose of this study was to understand how communities of practice (CoPs) foster continuing professional education (CPE). The following research questions guided the study: (1) How did learning occur in this community of practice? (2) What was the knowledge produced in this community of practice? (3) How was an individual's practice influenced by the community of practice? and, (4) What Indian socio-cultural factors shaped the process of learning, the knowledge produced, and the practice in the community?

A qualitative case study design was employed to address the research questions. The case is an organization made up of educators in India working predominantly in K-12 educational settings. The case was "bounded" by the membership in the organization as those who worked full time or as freelancers. Continuous engagement with each other as well as in their professional practice together has helped this group of people to evolve into a community of practice. Between June and September 2008, data was collected through 13 face-to-face interviews, several observations and documents.

This chapter is divided into two sections. The first part describes the case, Educators' Academy (EA), and a description of each participant. The second part presents the findings of the study.

#### Case Description – Educators' Academy

The education sector in India has attracted interest and activity in the past few years. Many new initiatives have been started to address and advocate for the cause of quality

education. Quality education refers to a holistic education that is locally relevant and culturally appropriate and which will help people become better individuals and citizens. This approach is contrary to a prevalent system in India that depends on rote learning and lays undue emphasis on exam results. In 2002, EA was founded to carry out such new initiatives at the primary and secondary school levels. It is a young, registered public non-profit trust that is committed to promoting the interests and development of schools and educators throughout India and the sub-continent. Its goal is in making a significant shift in the kind of education that is being routinely managed and imparted in India. To make this shift materialize the organization's mission statement declares that EA will work towards empowering educators to become reflective practitioners and lifelong learners to be able to create a better and safe school environment for all students.

### *Background*

Since its inception EA has worked in significant ways with schools, principals, school administrators and teacher educators. Broadly, EA works in the three areas of content development, training and support, and research and evaluation. Through its program called Empowering School Education (ESE) it provides sustained professional development programs and school support for whole school change for teachers, heads of schools, and whole schools. Its Lead-On program targets leadership in schools. For the past three years EA has also engaged in research and evaluation in schools and school-related projects.

Teachers are a special focus of the organization's endeavor towards change. EA has worked with several thousand teachers in both government and private schools across the country. Recognizing that there is still a dearth of opportunities for teachers in India to grow professionally and personally, EA offers teachers learning spaces, centers and forums to discuss

issues, share ideas, and insights. All EA's brochures, its various programs, their half-yearly newsletter, and listserve confirm the organization's focus on teachers and highlight the facilities and opportunities at EA for teachers. Many of EA's projects, including the international diploma program for teachers that it conducts, are supported by, or are implemented in collaboration with established domestic and international private organizations, Karnataka State Education Department, and an international university. These projects sustain the organization.

EA has its headoffice in the metropolitan city of Bangalore, capital of the state of Karnataka which is in South India. It has additional centers in the smaller neighboring cities of Mangalore and Mysore. These centers are partly independent and self-sufficient. EA also has a representative office in Kolkata on the east coast of India to establish its presence and network for business. Figure 4.1 shows a map of India with the cities in which EA offices are located. The majority of EA's work is in the south, Bangalore being the main thrust for private schools and Mangalore and Mysore for government schools. For administrative purposes EA has two sections; one for private schools and the other for government schools. Each section has several concurrent projects. There is a head for each who coordinates and manages all the projects for the respective section.

#### *Government vs. Private Schools*

Although overall work with teachers may seem to be the same, the way government schools function in India is drastically different from how private schools operate. Government schools come under the purview of the state education department for all policies and services. A few policies and services from the national level education department are routed through the state department. Each state in India has its own language which is generally its official language. There are currently 22 official or regional languages each so different from the other.

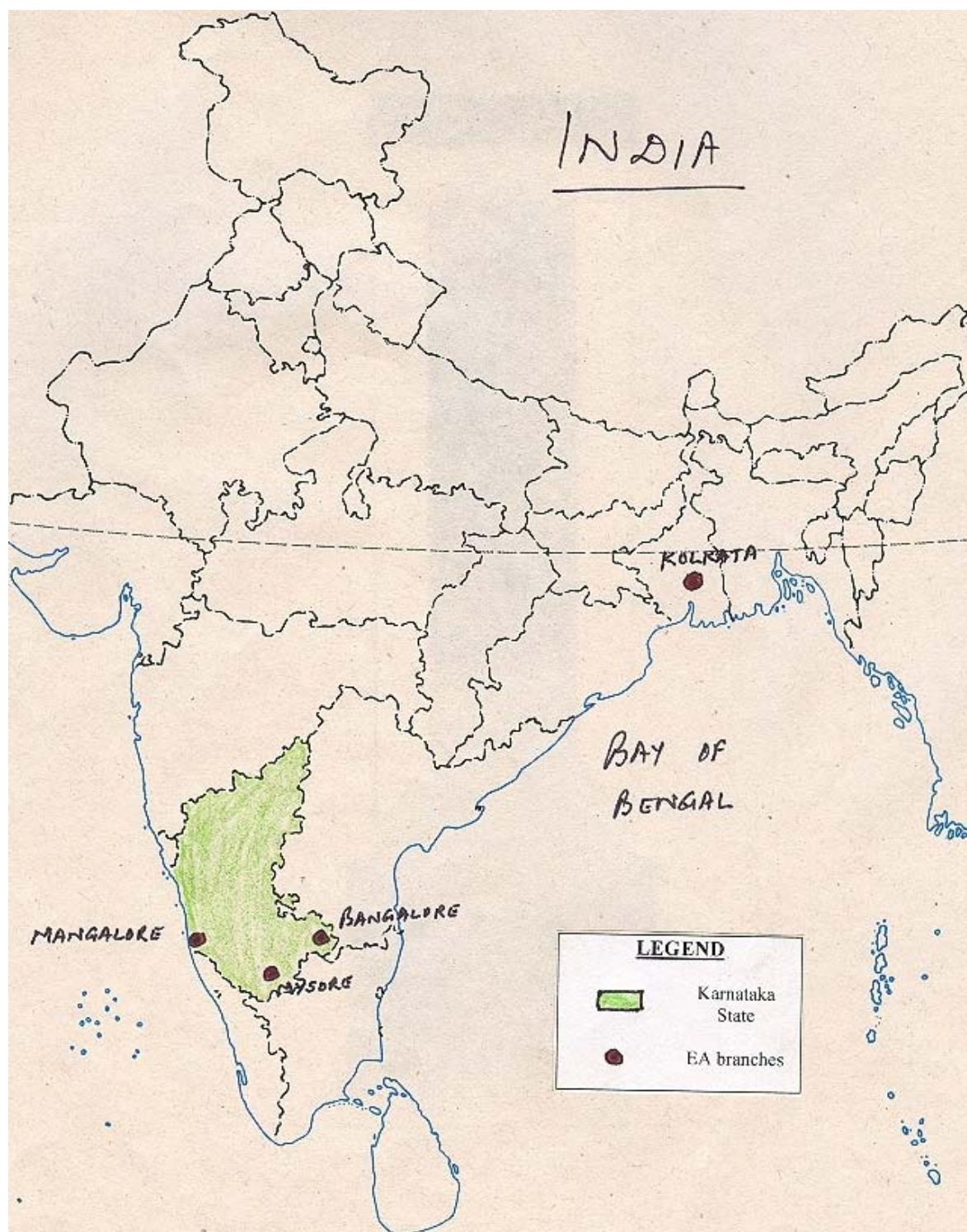


Figure 4.1 Map of India showing cities where EA offices are located

The medium of instruction in government schools in a particular state is in its regional language. These schools teach only up to grade 10 and are affiliated to their respective state's board examination. Government schools do not collect tuition fees but students pay for their school uniform, textbooks and notebooks. Schools in some states offer free mid-day meals. These schools are often in a sorry state with woefully inadequate infrastructure, rampant teacher absenteeism, and high dropout rates.

Government school projects at EA currently cover only the state of Karnataka. Therefore, all related work in the project is conducted in its official language, Kannada. This includes the organization's correspondence with the department officials and schools, school-based support as well as all their training programs. More importantly, these EA projects are located in districts [equivalent to counties in the U.S.] which were identified for their poor performance in education.

On the other hand, private schools are managed by private managements or individuals. They are affiliated to one or more different board exams at the state or national level. Schools are up to grade 10 or 12. Several international schools have sprung up in the last decade affiliated to an Indian as well as foreign exam board like Cambridge or International Baccalaureate. Therefore each private school is an individual entity accountable only to its management for its day-to-day operations. They also have to abide by certain policies of the affiliated exam board. The medium of instruction in private schools is usually English. However, there is a marked difference in the fee structure among private schools. Tuition fees can range from 150 Rupees (approximately 3USD) a month in a small private school in a poor neighborhood to about 10,000 Indian Rupees (approximately 2000USD) a month in an elitist school which is generally located

away from the city. Private school projects at EA are typically in bigger cities. While its major work is in Bangalore, EA also works with schools in other cities across the country.

### *The EA Office*

The EA office is located in one of the newly developed and well known parts of the city. Twenty years ago this area would have been a purely residential area. Today, the area has almost equal if not more commercial establishments than residences. Two-way traffic is continuous on the road where the EA office is situated. Cars, auto rickshaws that are a hired mode of transport and can seat three people, two-wheelers, cyclists, and push-carts are a common sight on the road. Figure 4.2 gives a glimpse of traffic on a busy road in Bangalore. Pedestrians walk on pavements on either side of the road but they also weave their way through this traffic if they have to cross the road. As it is with traffic anywhere in India, the noise of the vehicles as well as the loud honking is part of the life on this road. Midway down this road is a big open playground that extends for a long stretch. The EA office is located opposite the playground which makes it easy to locate.

The EA office is a two storied house converted into an office space as is a common practice these days in Bangalore. This building is enclosed by a compound wall on all four sides like every other building on the road and has been built with about 15 ft open space in the front. A path from the gate runs straight down to a garage at the end of the compound. A few feet down the path a second path breaks off to the right and leads to the entrance door of the building. Rows of potted plants and ferns along this path leading to the door welcome the visitor. The path leads up to an open porch which gives entry into the office through a main door. In the front 15 ft. open space is a huge mango tree. As June to August is the end of the mango season, there were



still a few mangoes on the tree when I was there. Beneath the mango tree the ground is bare and brown as nothing will grow well under its shade.



Figure 4.2 A busy road in Bangalore.

Inside, the EA office sports a vibrant and an atypical office-look. Bright and boldly colored walls in yellow, blue and green catch the eye. The light textured but bright curtains flutter in the breeze that wafts through the open windows. A few children's drawings decorate the walls. Figure 4.3 gives the floor plans of the ground and the first floors of the EA office.

The large L-shaped open space which was originally the living and the dining area of the house is the main office space. It has large windows on three sides that let in natural breeze and sunlight. Inside the doorway there are two single sofas for visitors that are placed opposite each



other. Next to the first sofa, and facing the entrance door sits the receptionist. She is the first to be in the office each day. Beside her at the next workstation sits the accountant. These two

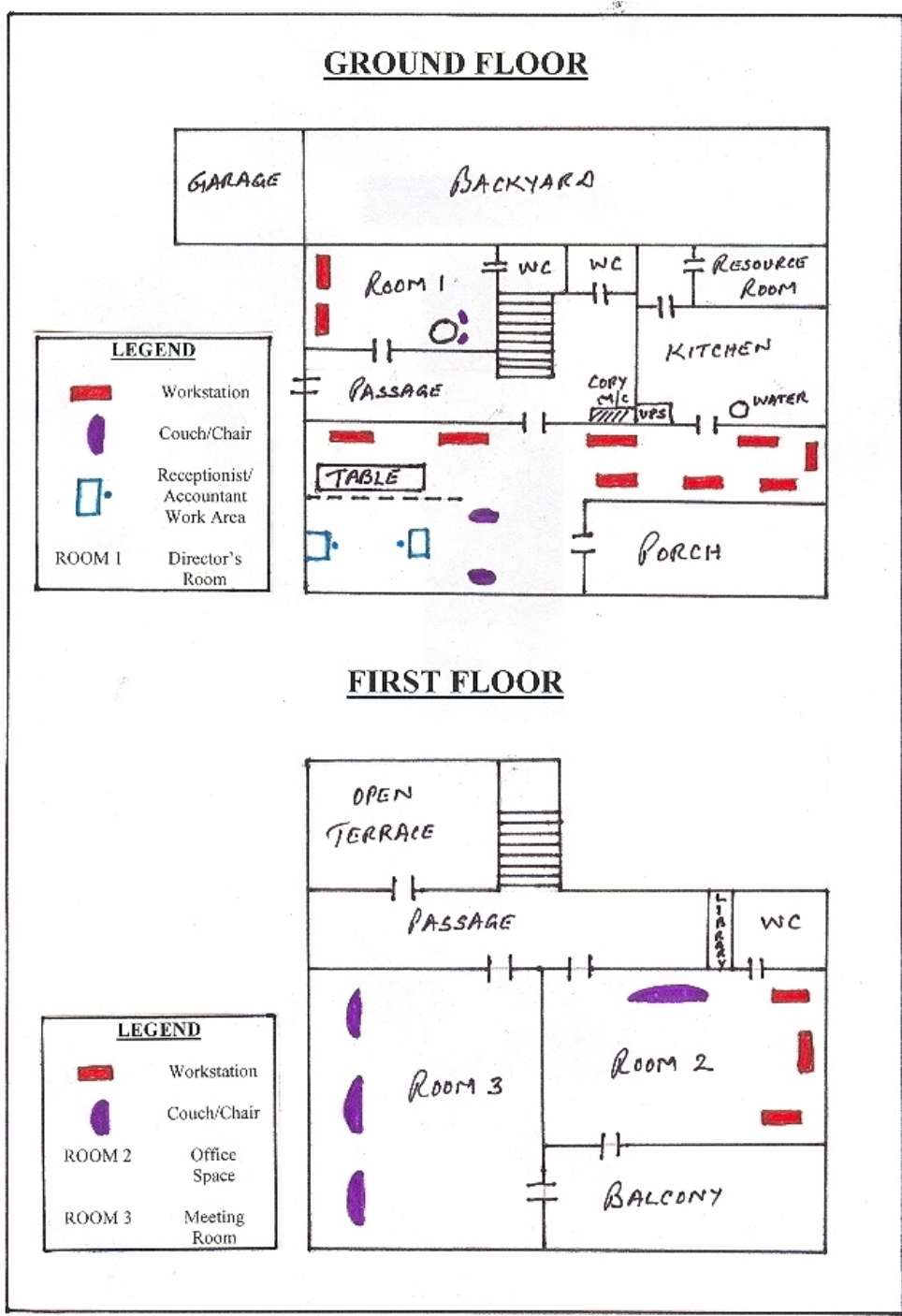


Figure 4.3 Floor plan of the EA Office

women look after EA's administrative work. This seating arrangement on the left side of the main office space creates an entrance passageway which gives easy access to doorways. The remaining six work stations are along the walls on the opposite side of the space described earlier. Conspicuously missing is a storage facility in this space. But for one small cupboard near the accountant's table, there are no cupboards or filing cabinets that would be commonly found in an office space. The six workstations are so positioned that it creates an open space for movement in the center. Often members just turn their swivel chairs to face each other to talk or move in their chairs close to another workstation for a closer conversation with just one colleague. The entrance passageway and this open space are frequently used places to share a quick joke, chit-chat, whispered conversations, or a serious discussion related to work. There is a lot of movement and talk in this part of the office on days when people are around. There are days when this space looks deserted because many have gone for school visits while others may be traveling on work. Although I varied my observation spots this space close to the eight workstations was my favorite as there was always some action.

One other place where a lot of conversations and action occurs is in the kitchen where people come for water, tea or coffee, or lunch. A door from the main office space on the right leads into the kitchen. The kitchen has a food warmer, a few plates and glasses, and a 25 liter (approximately 6 gallons) water-can with a tap for drinking water. A tall cupboard in the wall holds several files. On the opposite end from the door to the kitchen is another door which leads into a store for office supplies and a bathroom. The Uninterruptable Power Supply (UPS) that serves as a backup of power supply for the computers hums softly in the left corner of the kitchen. Power cuts are frequent and unpredictable in Bangalore; they can last for minutes or hours several times in a day or there can be days with no power cuts. Therefore, a UPS is a

necessity in offices if work is to continue without too much disruption. The UPS at EA keeps all the computers and three fans functioning for a few hours during a power cut.

Behind, and along the open hall space on the left where the two section-heads sit is a passage that ends at the side wall of the kitchen. The passage opens out to three areas, a room, staircase, and a washroom. To the left a door opens into a room that serves as the director's office. The door to this room is always open, though it is a few yards away from the rest of the hall space. Besides two work stations in this room, there is also a couch and a small glass-topped table with two chairs. The couch and the table in this room serve for a quick chat or a small meeting. A bathroom is at the rear of this room. Adjacent to the director's room and right opposite the door from the hall space that leads into the passage is the flight of stairs to go to the first floor. Next to the flight of stairs is a space that leads to a wash room. A printer networked to all the computers on the ground floor is in the right corner placed against the wall.

The stairs leads up to a landing which extends into a passage that is exactly above the passage downstairs. On a narrow wall of the landing rests a tall glass shelf which serves as the EA library. The shelf is not too big and is filled with books on education and is always under lock. To access a book one has to get the key from the receptionist after entering details in a log. Three doors open out from the landing to two rooms in front and an open terrace at the rear. The open terrace at the rear is right above the director's room and is also of the same size. In the front, the open hall space below is replicated and divided into two rooms. The room on the left is above the hall space below with six works stations. This room upstairs has three work stations as well as a couch. The room has an attached bathroom on one side and a balcony on the other side. Thus the balcony faces the road and the open playground across the road. The second room on the right is empty but for a few chairs and a table that are stacked on one side along the wall.

This second room is used for meetings, in-house training, as well as for workshops and can hold about 20 people comfortably. I used this room for most of my interviews as this is the only free and quiet space available. A door on the opposite end of the second room also opens out to the same balcony as the first room. For want of space or sometimes fresh air, a few sub-group meetings that I observed were also held in this balcony amidst the din of the traffic.

During my observations in the kitchen I observed a few interesting practices. Almost all members bring their lunch from home. Among them several carry lunch in small stainless steel *dabbas*. Dabba refers to any container. Stainless steel is the most preferred storage and cooking material in a typical middle and high income home. Members warmed their food and only after serving small portions of their food on each others' plates did they begin to eat. Often people eat together in small groups of three or four – small groups because it depended on who was free or who was hungry. I was invited to join them a few times. Eating out on a daily basis is still not a common or preferred practice in most homes. Rather, taking freshly cooked food to work as well as sharing one's food at lunch is a way of life. Also like in most offices in India, coffee and tea is served to everyone, including visitors like myself, twice a day. A vendor delivers one big flask of ready made tea and coffee each with milk and sugar added. The male support staff member pours it into mugs and serves everyone. If anyone wants an extra cup of tea or coffee at other times they can make it in the kitchen or request the male staff member to make it.

### *The EA Community*

EA began as a two-person establishment. Today a team of committed education professionals makes up this organization. Spanning several years, they bring a wide range of experience and insights from classroom teaching, school administration, educational research, and the corporate sector. EA has 20 full-time employees across its four centers with 15 of them

working at the Bangalore office. A director, one of the founder-trustees, oversees the organization. The 15 people include a receptionist, an accountant and a support-staff member. Only 12 people work directly in EA's projects of whom 10 participated in this study. A few of these 12 people work either with private or with government school projects, while there are some who straddle both types of projects. Although members have assigned designations there is no rigid demarcation of roles and responsibilities. Everyone shares all the work such as school visits, teacher support and training in various degrees depending on their strengths and their availability. As Arjun mentioned in his interview, "I work with almost all projects but mostly with the government projects. I also work with private school teachers when I have free time."

Several freelancers work with EA as facilitators in EA's programs or work in the area of school support with teachers. However, occasionally freelancers are recruited to assist with content and curriculum development. Freelancers are contracted on various terms and work with different projects in various locations. Freelancers who work on government projects are fluent in the regional language Kannada. They are mostly locals of the state and assist in working with projects in schools in and around the district where they live. Freelancers in the private school projects work independently or along with full timers at EA. They travel across the country if there is a need. The Mysore and Mangalore centers have resident EA coordinators who coordinate between the project coordinators in Bangalore and the local freelancers. All freelancers undergo in-house training with the full-timers in Bangalore when it is related to delivery of a module or when establishing a new process. These Train the Trainer workshops are usually conducted by the director or the seniors in EA for all full-timers and freelancers in private schools projects. External facilitators conduct workshops on general topics such as Conflict Management, Appreciating Poetry, and Story Telling. The freelancers in the

government school projects are trained in Kannada by the two full-timers who work on the government projects. As this group of Kannada freelancers is spread out in the districts, all their training happens in the office premises at Bangalore. Of the three freelancers who participated in this study I interviewed two Kannada freelancers when they had come to attend one such training.

This EA community made up of all the full-timers as well as the freelancers meets regularly formally and informally. There are whole group meetings where all the freelancers in private school projects are invited to attend with those who work full time at EA. These meetings are planned for every first Tuesday of the month. However the meeting schedule is not rigid. During the three months of observation there were two meetings out of which one was postponed to the third Tuesday of the month because of clash in travel dates for several members. These meetings serve to update, discuss, as well as to raise issues. Whoever has an agenda to share leads the meeting and the lead role changes as the discussion veers to various issues.

Besides whole group meetings, there are several subgroup meetings. Subgroup meetings occur more frequently. A few are planned in advance while quite often impromptu meetings also happen. For instance, the government section meets every first Thursday of the month. I was informed of this meeting prior to its occurrence. However, I also observed two impromptu subgroup meetings. A member checked with others in the subgroup if and when they could spare an hour in their day's schedule for that day and then confirmed a time that suited everyone's convenience. The venue for the impromptu meetings depended on the space that was available. Of the two impromptu meetings that I observed one was held in the open balcony upstairs and the other was held in the garage. Subgroup meetings are planned section-wise, project-wise, or even event-wise and focus on only one project or event. These groups are made up of varying but

small numbers of only full-time members who not only belong to several subgroups concurrently but also in various roles. For example, I observed Shaila in a one hour meeting of four members in a government-project section meeting. She played the role of a team member as she listened to issues of others and worked out solutions along with the others. Shaila was present again in a two-hour meeting two days later with five other colleagues brainstorming for a national level seminar they were conducting in three months. Although she participated in the general discussion, her major contribution was to present a tentative budget for the 2-day event. The following week Shaila took the lead as head of the government schools section at a meeting negotiating new time-breaks in modules to suit the needs of her projects.

Two characteristics bond this community made up of those who work full time and part time at EA. One, they all share a strong commitment towards the cause of education. All the interview participants shared fervor and pride in their effort to bring about a change. A majority of the participants come from a teaching background. A few like Varun and Sangeetha who had been teachers mentioned that they had joined EA because of their love for children; others like Savitri and Arjun spoke of their interest in working with teachers and wanting to help them do better. On the other hand, Meena who worked full time at EA but did not have a teaching background perceived her major attraction was to be with people working towards a cause.

Meena recalls her first contact with EA:

One day I saw the advertisement. The ad was generic but it also had an appeal – people who wanted to change the face of education. It struck a cord and I walked in not even imagining that I would be taken on, or if I too wanted to take it on. It was the nature of the group that I was surrounded that intrigued me. I actually saw it as a great atmosphere to work in because it was very informal. I also found like-minded people, people from

diverse backgrounds impelled by something that was not driven by the usual motivation of money, not that I don't like money.

In all, the groups' commitment to its single purpose is a driving force that holds them all together. Pavitra sums up in simple words. "We all really feel we do a lot of meaningful work here. The thing is whatever each one does, basically everybody wants to make that difference to the teachers and really want to see the change in them."

The second striking characteristic of this group is its collegial work setting. Participants view the ambiance and interactions at EA as informal, supportive and informational, personally as well as professionally. Everyone knows everyone. The amount of activity and the size of the group at work vary day to day. Working hours are flexible and allowed a few to begin and end the day an hour earlier due to personal commitments or concerns. For instance, Shaila had a school-going child and had no help at home while the receptionist had a very long commute and getting an auto-rickshaw to go home was truly difficult during peak time. Additionally, as projects are spread out in different cities people travel a lot independently or in small groups depending on the nature of the trip. Also, most training programs are offered during the weekends. A working weekend is offset by a Monday as an off-day. Nevertheless there is a skeletal staff working on Saturdays and Mondays. Thus people tend to interact with those who are in the office at the same time. However, participants identified that communication within those working on the same project is greater. In Shaila's perception as head of government school projects,

The way we work in this team, there is no differentiation amongst ourselves. We are very clear we are working for a particular mission. We are all together. Of course I coordinate,



oversee but I never give that feeling of directing them. I am one among them and work with them. We actually go out of our way to do a lot of things for each other.

Apart from interactions in subgroups, I observed that there was continuous interaction with each other during the day as everyone sat in an open office space, often had lunch together or just happened to be in, or passing by, a group that was discussing a topic or an experience. All these activities create a sense of social community as well as opportunities for a better understanding of their practice. Although to the outside world EA was just a workplace, people's enthusiasm and intent towards achieving the same mission and a work environment that was conducive for frequent interactions benefited members to grow personally and professionally.

#### Participant Profiles

Thirteen participants were interviewed for this study. Table 4.1 presents a summary of demographic information of the participants in alphabetical order. Twelve interviews were conducted in EA premises as participants perceived it to be most convenient to fix a time with me during working days with a lighter schedule. Among them were two freelancers from the government school section. The two freelancers had traveled from the districts to participate in the Train the Trainer program for four days in the EA office at Bangalore. The last interviewee, a freelancer in the private school section, requested me to come to her apartment as it suited her better. For the 12 interviews at EA, the participant would check for room availability for about one hour and take me there. There were times when we had to shift from one room to another midway into the interview because of a need for space to hold a sudden meeting. I did one interview in the kitchen space with the UPS humming in the background because there was just no free space available that day. Yet another interview was in the open office space on a Saturday as there was no one else but the interviewee to attend the telephone or a chance visitor.

Table 4.1 Participants' Profiles

<b>Pseudonym &amp; Gender</b>	<b>Age range</b>	<b>Degree</b>	<b>Years in EA</b>	<b>Current Responsibilities</b>
Arjun (M)	30-35	M.Sc., M.Ed	3 full-timer	Government Schools – Training, Translation, School support
Gowri (F)	60-65	B.A., M.Ed	2 months freelancer	Government Schools – Training, School support
Mala (F)	35-40	B.Sc., B.Ed., MBA (U.K.)	6 full-timer	Director, Training, Research, Content Development
Meena (F)	30-35	M.Sc., M.A.	3 full-timer	Research and Documentation, Content Development, Training
Nina (F)	40-45	B.Sc., M.Ed. (U.K.)	1 full-timer	Private Schools – Program Coordinator for international diploma program, Training, School support
Pavitra (F)	30-35	M.Sc., B.Ed.	3 full-timer	Private Schools – Program Coordinator for an International Project, Training, School support
Ratna (F)	55-60	B.A., B.Ed.	6 freelancer	Private Schools – Training, School support
Sangeetha (F)	30-35	M.Sc., M.Ed.	1.6 full time	Government and Private Schools – Training, School support, Moderator of online forum, Editor of newsletter.
Savitri (F)	55-60	M.Sc., B.Ed.	3 full time	Private Schools – Head, Content Development, Training
Shaila (F)	40-45	PhD (Agriculture Science)	4 full time	Head, Government Projects – Managing logistics and manpower.
Spandana (F)	30-35	M.A., B.Ed.	2 months full-timer	Private Schools – International project
Vinay (M)	30-35	B.Sc., M.Ed.	3 full-timer	Government Schools – Liaison, Training, School support Translation
Varun (M)	60-65	B.A., B.Ed.	2 freelancer	Government Projects – Training, School support

The majority of participants have a background in K-12 teaching. Ten of the thirteen participants have masters degrees and one has a doctoral degree. A few others have prior exposure to working with teachers as teacher educators while some have been trainers in the corporate or education sector. Nearly half of them fall into the age range of over 40 years. Three participants are male and ten are female. The time they have spent at EA ranges from two months to six years.

### *Individual Participants*

#### *Arjun*

Arjun was my first interviewee. He is thin and tall and wears spectacles. Arjun is a local, hailing from the state of Karnataka. He is fluent in Kannada and English. Arjun took this interview very seriously and was eager to respond to every question. A teacher educator by profession, he is passionate about his job and “wanted to be associated with an organization that worked with teachers.” Arjun began his career teaching math methods and psychology at a private teacher’s college in Bangalore. He has been with EA for three years when the organization began work with government schools. He currently works on government school projects conducting the Train the Trainer programs for Kannada freelancers and also translates content from English to Kannada. Arjun also helps with private school projects. He expressed that joining EA was a great move for him as he has grown professionally as well as personally.

#### *Gowri*

I met and interviewed Gowri during her first training at EA. Gowri is about 5ft tall, slim and wears spectacles. She is over 60 years of age with dyed black hair braided and knotted into a bun as most Indian women of her age. Gowri was excited to be interviewed and was eager to speak. She was keen to share her experiences in the training she was currently undergoing at EA.

A retired government lecturer at a teacher's college, Gowri has been with EA for just about 2 months. Gowri is a freelancer in the government projects. She lives in Mysore and had traveled to Bangalore, a distance of 175 km (approximately 100 miles). She took a 4-hour journey by bus, to participate in the Train the Trainer program.

Gowri's interview provided information from the viewpoint of a newcomer to the EA community but with immense experience in the field of teacher training. Interestingly, Gowri was the only female freelancer in the government school projects but that did not deter her; in fact she saw an advantage in being female and older than the others while working with government teachers.

### *Mala*

Mala is the director and one of the founder-trustees of EA. She began her career as a teacher in a private school. Mala left classroom teaching to pursue masters in education management in U.K. in the nineties and on her return to India she co-founded EA. She oversees the organization, guides content and research, facilitates in the Train the Trainer program and the leadership workshops at EA. She travels constantly participating in conferences, building business, and stands as an icon for EA in the public eye. Mala writes on issues concerning educational practice and management in leading publications in India.

Mala is of a small stature with a charming smile. She spoke slowly, pondering over every word she said, as if with caution. One could quickly identify how passionate she was about EA's current work and future direction. Mala also spoke on topics that others didn't speak about such as getting through government bureaucracy, attending partner forums, and areas in K-12 education that EA has not yet explored. Her informal yet respectful demeanor and openness to learning is built into the ethos of the organization.

### *Meena*

Meena hobbled into the interview with a bandaged left foot. By far she was the most enthusiastic and excited participant, Meena is slim and tall, about 5ft 7in. She was articulate and voluntarily explained or substantiated her comments with anecdotes interspersed with fits of laughter. On enquiring about her foot, Meena briefly told me of her accident briefly. She rides a two-wheeler daily to work. On her way back home in incessant rain recently she had avoided hitting a cyclist who was ahead of her and had swerved suddenly. In the process of avoiding the cyclist Meena lost control of the two-wheeler landing in a puddle on the road.

Meena has a non-teaching background. She has double masters degree and a background in gender studies and life sciences as well as sociology. Meena's work experience was in the areas of project management, research and documentation of micro-credit and grassroots empowerment. She currently heads research and evaluation at EA but also helps with content development and training. Not only did Meena mention a few times that she felt accountable to the organization, she also voiced that she took the onus of educating her colleagues about the research work in EA to help them appreciate qualitative research.

### *Nina*

Nina is about 5 ft tall and plump. She has short black hair. One of the most interesting experiences while collecting data for this study was to observe participants in action. When we fixed a date for the interview, Nina invited me to sit in her workshops for a cohort of 12 teachers enrolled in the international diploma program. The session moved at a brisk pace of structured activities. I also observed that Nina has a habit of shaking her head a lot as she speaks; the more eagerly she speaks, the more she shakes her head!

During her interview Nina spoke lots and she spoke fast shaking her head. It was difficult for me to keep pace with her as I jotted down notes. Besides a teaching background and a masters degree in Educational Leadership and School Improvement from U.K, Nina also has a diploma in Systems Management. Prior to EA she had been coordinator of a teachers' resource center, a teacher educator, and had taught computers at a school at Kolkata. She had moved from Kolkata to Bangalore to work with EA. Nina coordinates the international diploma program at EA and also helps with research. She mentioned having frequent stimulating conversations with Savitri and Meena who shared office space with her upstairs as well as with Mala whose advice she sought often.

#### *Pavitra*

Pavitra is young and committed to her work. Her prior experience was in teaching. Pavitra began her career at EA as the center coordinator at Mangalore for 3 years. Recently she had moved to the Bangalore office to take on the additional role as coordinator for a new internationally funded project. Pavitra planned to monitor her center long-distance from Bangalore to help out the staff there. This interview, like Mala's, provided rich data in new areas as Pavitra had lots to share about her experiences especially with the government system in the smaller cities and the district.

#### *Ratna*

I interviewed Ratna in her apartment and I thoroughly enjoyed this visit. The apartment is perhaps about 20 kilometers (approximately 13 miles) from my apartment. However, it took me about one hour to reach because of the traffic. Several pictures of her family were displayed on the living room walls. What caught my attention was the antique rosewood furniture in Ratna's apartment. Ratna took me around the apartment to see other odds and ends from her

parents' and grandparents' collection such as the painting in the prayer room, and an old wall mirror. After this tour Ratna's maid made us both a refreshing cold glass of *lassi* or spiced buttermilk with which we began our interview.

Ratna's career started with teaching in schools and then she moved to work full time in the corporate sector. Ever since she quit fulltime corporate work, Ratna said she moves between education and corporate training as a freelancer. This also gave her time to complete a diploma in teaching English at the Tertiary level. Associated with EA as a freelancer since its inception Ratna works with the private school projects. Unlike the Kannada freelancers, Ratna lives in Bangalore and interacts with those in the Bangalore office. She travels often to facilitate EA workshops in and out of Bangalore. She also assists with school support.

### *Sangeetha*

Small and petite, Sangeetha is full of verve. During my observations, I found Sangeetha friendly and easy to talk to. She is fluent in English and Kannada and so switches between the two languages with ease when she is talking to her colleagues. As one of the very few who straddle both government and private school projects, Sangeetha was able to offer me significant insights into the nature of work in both the sections. She loves teaching and being with children and has prior experience with a NGO where she designed creative educational workshops through the arts. She does school support, moderates the organization's online forum for educators, and edits the half-yearly EA newsletter.

I saw Sangeetha in action at the end of the 2-day national level seminar that EA conducted later in the year. To conclude the program she surprised the 200 odd people at the seminar by making them participate in a 5-minute mime which left the audience in a cheerful spirit.

### *Savitri*

Savitri's diverse experiences spanned being a microbiologist, an accounts executive in an advertising and promotion company, 10 years as a Science teacher in a school, and a teacher educator and curriculum developer for a new school. She is head of content development and the in-house trainer at EA. Savitri is the oldest and the quietest among the full time member at EA that I interviewed.

Soft spoken and gentle in her approach, Savitri responded to all the questions slowly and thoughtfully. Her anecdotes suggest a diverse range of interactions she has been exposed to as part of her work at EA. She identified the future potential and direction for this young organization as well as the gaps that need to be rectified soon.

### *Shaila*

Shaila requested me specifically to interview her on a Saturday when not many people were at the office. She also said she felt less harassed on a Saturday. Exactly as she had said, there was no one else to be seen on the ground floor of the EA office on the day of her interview. In fact, it ended distracting Shaila because she had to attend three telephone calls and attend to two visitors in the midst of her interview.

Like Meena, Shaila has no background in teaching. She has a PhD in Agriculture Science. Shaila is head of government projects and manages all activities from her office space. She was the only interviewee who did not do any training. Shaila stumbled into working in the field of education because of life's circumstances. Widowed very early in life with a baby daughter, Shaila was given a job in the company where her husband had been employed, a company that was into multi-media school resources. When the company shut down she approached EA because her deceased husband and Mala had worked together. She believes that



building good relationships at work is most important as it builds camaraderie among colleagues. She perceives her good relationships with people make her work easier as people are willing to help. She spoke several times of the synergy within her group and felt she needed to give group members opportunities to grow professionally like she did.

### *Spandana*

A new entrant, Spandana joined EA after I began my observations. I interviewed her towards the end of two months to give her time to get acclimatized to the workplace. An English major, she had taught in schools and a college, as well as had a stint in corporate training. Spandana's experiences were rich information as they gave rise to new insights from the lens of a new member in the community. She repeatedly mentioned that the past 2 months had opened her to a wide new world within education and provided her with rich learning.

### *Varun*

Like Gowri, Varun is also retired and a freelancer in government school projects. He has been with EA for two years. He lives in Mangalore which is about 350 km (approximately 320 miles) from Bangalore. He had made an 8-hour overnight journey by train to attend the training in Bangalore. Varun had worked as a school teacher for 30 years teaching Kannada at a government aided girls' school. After he retired he continued working in the area of human resource training at an institute. He currently helps with school support for teachers in schools in and around Mangalore District.

Varun is a simple person and was happy to talk with me though he said he was not sure what information he could give me. He said he enjoyed interacting with teachers. He wanted to see teachers trying new paths. Varun was not too sure if he learned much from others. On the

other hand, he said that colleagues and teachers regarded him with respect for his age and experience and came to him for advice.

### *Vinay*

Vinay said he joined EA because he was fond of working with government teachers. A teacher and later a teacher educator, Vinay had previously worked as a lecturer in one of the districts of Karnataka. Although he had become familiar with me and we had spoken on a few occasions during my observations, Vinay requested to be interviewed after I had completed a few other interviews.

At EA, Vinay does all the liaison work EA has with the government officials as he is familiar with how the government system works. According to Mala, having Vinay in EA is extremely helpful as he is from the same social context as the officials and so understands their ways better than anyone else in the organization. Vinay works in the area of school support with government teachers as well as in training and translation of content from English to Kannada.

### Summary

This chapter began with a case description the case, EA. The description included details of EA's location, focus of business, and the two sets of people involved, freelancers as well as full-timers who made up the EA community. A detailed description of the EA community discussed the two striking characteristics that helped members to bond into a cohesive unit: a shared and strong commitment towards the same goal and its collegial setting. The case description ended with an introduction of individual members of the EA community highlighting their educational and work background, and current responsibilities in EA. A participant profile including a brief description of each of the 13 participants in this study concluded the case description.

## CHAPTER 5

### FINDINGS

The purpose of this study was to understand how communities of practice (CoPs) foster continuing professional education (CPE). The study was guided by four research questions: (1) How did learning occur in this community of practice? (2) What was the knowledge produced in this community of practice? (3) How was an individual's practice influenced by the community of practice? and, (4) What Indian socio-cultural factors shaped the process of learning, the knowledge produced, and the practice in the community?

Table 5.1 Summary of the Research Findings

---

(1) Learning Occurred Through
Structured Interactions
Informal Interactions
Hands-on Experience
Reflection
(2) Knowledge Produced
Procedural Knowledge
Professional Knowledge
(3) Influence on Individual's Practice Through
Expansion of Repertoire of Skills and Responsibilities
Increase in Self-knowledge
(4) Socio-Cultural Factors Influencing the EA Community
Age and Gender
Language
The Indian Education System
Poor Infrastructure

---

The following is a synopsis of the findings for the four research questions. For the first question on how learning occurred, findings showed that it occurred in several ways, through structured as well as informal interactions, hands-on experience, and, reflection. With regard to what knowledge was produced it was discovered that members gained both procedural and professional knowledge. In response to the third research question it was found that an individual's practice was influenced by the community through expanding one's repertoire of skills and responsibilities and an increased self-knowledge. Finally, socio-cultural factors of age and gender, language, the Indian education system as well as poor infrastructure showed up as major influences on the EA community's learning, knowledge and practice. Table 5.1 presents a summary of these findings.

#### How Learning Occurred

The first research question was to determine how learning occurred in the EA community. The participants unanimously were of the view that they had learned through just being a part of the community. Table 5.2 lists the four broad categories along with subcategories

Table 5.2 How Learning Occurred

---

Learning Occurred Through:
Structured Interactions
With colleagues
With others outside of EA community
Informal Interactions
Hands-on Experiences
Applying prior knowledge and skills to new situations
Assuming new roles and responsibilities
Incorporating ideas
Reflection

---

derived from the data that showed how the participants experienced individual learning. First, learning occurred through structured interactions with colleagues both within the EA community as well as with others outside of the EA community. Second, learning happened through informal interactions within the community. Third, learning occurred through hands-on experiences by applying prior knowledge and skills in new situations, assuming new roles and responsibilities, as well as incorporating ideas. Last, learning occurred through reflection.

### *Structured Interactions*

Structured interactions included all planned interactions among colleagues as well as others outside of the EA community such as people from other organizations in the same or related fields. Interactions with colleagues occurred through established routines such as meetings, in-house training, as well as through co-planning and co-facilitating workshops that the interviewees facilitated. Interactions with others outside of the EA community happened with two sets of people. One was with people who participated in EA's workshops or the teachers in EA's school support programs. Two was with the group of professionals or organizations in the field of education with whom members of the EA community interacted. Such interactions occurred when the members attended professional seminars or workshops.

*Structured interactions with colleagues.* Providing information, sharing successes and concerns, asking questions, and problem-solving characterized the meetings at EA. Meetings occurred at multiple levels, as a whole group and as several subgroups. The majority of the participants spoke of much learning during the process of a meeting. Sangeetha captured what usually occurs during a meeting:

I get to know what's happening in the other projects, what new projects are coming, what new project has started or what old projects have come to an end, different working styles

of people, and the problems others face on the field. These things come across live in the meetings. Otherwise there are general discussions of experiences, concerns, successes if colleagues have returned after a work-related trip. We also talk about these things during lunch. But to know on the whole when everybody is together happens only in the meeting.... Sometimes when we have had problems and shared it in the meeting, let's say we shared that some school or some teacher was not working well in our program, or some demo did not work out, or we had a concern with the facilitator, we have definitely had others coming up with a suggestion or solutions. Just talking about it gives you an idea or a different perspective to look at. I think it is a good idea to talk about things. So that way it helps me to work on my content better, work on my facilitation better.

Nina shared the following example that substantiated and expanded upon Sangeetha's comment about how meetings helped to solve several issues:

For instance, I talked about the reflective journals. It had not worked initially with the government teachers. But later on when we put it together, the government team facilitators came and watched how I did it in my workshop. So, you know you are keeping abreast of each other and if there are any good practices in a particular group, you can then sort of perhaps use it in your team or in your way in a different project.

Besides whole group meetings those who worked full-time also often met as subgroups. The subgroup meetings were planned section-wise, project-wise, or even event-wise. Subgroups were made up of varying but small numbers of members. Members belonged simultaneously to several subgroups. Learning again was through discussing, brain storming, questioning, and problem-solving as it occurred in the whole group meeting but topics were focused to just one project or event. These interactions were observed on many occasions with different groups.

In-house training and workshops were conducted before launching a new module, to train new members, or for members to become familiar with a revised module, or occasionally for a general awakening to the nuances and demands of the profession. A few like Arjun and Varun mentioned interactions during training gave rise to new perspectives and ideas. Gowri, with several years of experience as a teacher-educator, commented that this being her first training program since she joined EA, these programs gave her an opportunity to refresh ideas. Gowri added that discussing and listening to others' opinions on a topic or a practice affirmed her view points. Savitri spoke from her role of a trainer in EA's Train the Trainer programs. Deliberately building in time for feedback from her colleagues who were constantly on the field helped Savitri to fine-tune the modules she designed to make them more realistic.

One other established practice at EA was for members to collaborate in their planning and facilitating. A few sessions, however, are handled individually, depending on the content of the session, number of participants and also the experience of the facilitator. Arjun, Vinay and Varun mentioned that they planned with their co-facilitators before every workshop. They worked closely with a colleague learning from each other. As Pavitra recollected,

I was new to facilitation and had to learn a lot with my co-facilitators, a lot of key aspects of facilitation skills right from the planning stage. We have a system where we need to sit together and have a brief with co-facilitators about what we are going to do. We micro-plan for a day or a particular session – how we walk in, ask questions, probes and take cues from each other, what each one's role will be – I mean absolutely working on all the nitty-gritty.

It is important to mention here that I observed that these interactions were structured only to the extent of being planned in advance. The ambience was informal within a planned time.

Having an agenda and having members attend served to get the meeting started. Agendas as well as those who took the lead in these interactions were flexible. For instance, at the end of the second whole group meeting that I observed there was a pleasant detour. A freelancer, Anushka who was not interviewed, announced that there was a surprise in store. Anushka explained that she wanted to share a short de-stressing activity that she and Mala had tried in one of their recent workshops that had been extremely appreciated by the participants. Asking the members to choose a partner and to a background of soothing music, she guided the members through an acupressure routine on each others' palms. The meeting closed with tea and light snacks and had all the members applaud the two women for a pleasant and relaxing surprise.

*Structured interactions with others outside of the EA community.* Interacting with the community's clients as well as with other people in the same or in related fields was another way participants learned. A majority of the participants worked closely with teachers as part of their jobs. Often each participant worked one-to-one with a few teachers across schools in the school support program. This program involved one or two cycles of observations of a teacher's classroom teaching which occasionally included video-taping a class in session, a feedback session with the teacher, and concluded with a follow-up for the next unit. Sangeetha and Vinay spoke about how they learned to cope with challenges on the field, especially with teachers who were not responsive. Ratna was visibly moved just recollecting her interactions with teachers. To her, the one-on-one interaction with teachers was "a wonderful window of personal interactions" which to her was "very sacred." These interactions widened her exposure to the field and took her professional understanding to a different plane because the teachers discussed other things about themselves and their practice. Feedback forms from teachers after workshops also provided learning for several participants. Arjun thought a written feedback was a "direct



confirmation from participants whether our session or ideas are workable or not.” Nina explained feedback forms from her first batch helped her to revamp her module because “there were things that were written by some of them that made a lot of sense.”

Besides interactions with their clients, findings showed that learning occurred through professional interactions with co-partners in projects, ex-colleagues, and with other organizations in related fields. Spandana and Vinay said they often discussed and shared new ideas with friends who were ex-colleagues still teaching. To Mala and Savitri, attending partner forums were a way to get a wider lens of the field of education. A partner forum was a gathering of several partners working for one sponsor on different or a same project within one field. Savitri described partner forums as platforms to share practices and these forums helped her to understand “how other organizations that are in the same field are also approaching education.”

### *Informal Interactions*

Frequent informal interactions that occurred among the members during the course of a day’s work facilitated learning in this community. Such interactions were in the form of casual conversations in and around work spaces, lunch time chat in the kitchen, and informal coaching or support from colleagues. Meena emphasized that informal interactions sustained the community:

We as an organization talk. We discuss a lot in this room and back there also (points to downstairs). Say something happens, and even if it is small we can turn around and discuss it in depth. Sometimes we agonize too much and lose a lot of working time. But that has been the driving factor here. We can just walk across and talk. And as we talk we make connections and we can see our neurons going click-click (snaps her middle finger and thumb). So talking a lot amongst ourselves has helped a lot.

Debating on issues was embedded in EA's routine. Like Nina explained, "the fact is that you are exercising your mind and trying to see whether one opinion is right or the other." Arjun, on the other hand, described times when he had just joined the community and had colleagues informally coaching him in some areas of his work where he needed assistance.

Not all learning occurred only by participating in a conversation. Learning occurred by listening and observing colleagues consciously or unconsciously. As Sangeetha reasoned, "I have seen that we all work at close proximity. So, wittingly or unwittingly, we listen to things, we see things, and there is always something to learn." Meena used the term *osmosis* to describe how she made connections from overhearing conversations:

It is a conversation that doesn't directly concern me. Others are discussing about something that has happened to someone, or talking about their own personal experiences. I learn something from this conversation I overheard which later helps me to understand something else better. A little confusing to explain but it happens all the time. Spandana and Gowri, both with about two months membership in this community, said that they spent most of the time consciously listening to others talk. Spandana's reason was because the others seemed to have a longer exposure to the field or to the community. Listening helped her to understand more about the work at EA. Gowri wanted to merely gain a comfort level with others in the community. However, Sangeetha had a different purpose to consciously spending time to listen:

I am a person who learns by observation. I observe a lot. I look at people; I listen to people and try being silent when others are talking. Sometimes during lunch I am the one who is quietest while everybody else speaks. It is good to see how people hold on to certain ideas and principles very dearly. It gives me a kind of feel that there's so much to

learn. And many times I really learn from these observations. If I notice that something bothers somebody it is just that I will not do that again, I mean I will not, it will not be seen in my behavior. So consciously I make an effort to see what helps you, what would be good, what is the right thing to say, what is wrong to say. I can't really find a solution, but it really helps because then I know who likes what (laughs). It almost sounds like you are manipulative but not really.

Informal coaching also contributed to learning in this community. Many spoke of approaching Mala in particular for help as they thought of her "as a fount of knowledge" (Nina). Sometimes participants approached colleagues for help depending on a colleague's expertise in an area where they needed help. Other times a participant volunteered to help. Pavitra described the time that she had to move to the Bangalore office and so voluntarily made an effort to teach the ropes to her colleague Bindu, a member who was not interviewed:

I think my job was basically to help Bindu see the bigger picture as well as maintain that level of dealing with government officials. If I had to talk to government officials, I would take her personally where I was going for meetings, where she really did not contribute too much to the meeting as such, but she would be there. It helped her to meet our contacts, see our approach from phone calls, to making appointments, meeting the official, how we talk to them, and what facts and details I need when meeting with government officials.

During my observations I had the opportunity to witness many such informal interactions. The most interesting recorded anecdote of such informal interaction occurred in late June. Vinay and Sangeetha entered the office at about 2 p.m. and met Shaila in the open passage between the two sections of the floor space (see Figure 4.3, p. 85). The conversation in Kannada

revolved about teachers' resistance during their school visit that morning. Mala and Meena who had just finished lunch came out of the kitchen and joined the trio. The conversation among the five people now changed to English. Sangeetha shared the day's experience. Mala gave suggestions of how they could try to cope with the situation in the next visit and then linked teachers' attitude to the Indian education system. The debate then veered to the education system for another five minutes before the group disbanded and each returned to their workspace.

### *Hands-on Experience*

One other way learning occurred in the community was by participants' hands-on experiences. Findings showed that there were three different ways they learned in the process of actually doing their jobs: (1) Applying prior knowledge and skills to new situations, (2) Assuming new roles and responsibilities, (3) Incorporating ideas.

*Applying prior knowledge and skills to new situations.* This subcategory came about from what most interviewees shared about their work experiences, roles and responsibilities in their prior jobs vis-à-vis their current responsibilities. The majority of the participants had been in direct or indirect contact with a school environment as teachers or teacher-educators. For example, Savitri had taught Science for 10 years. She then moved to training teachers, underwent training to work with teachers as well as was in charge of developing a science curriculum for a new school. At EA she was now developing content and conducting the Train the Trainer workshops. Even Shaila, who had a doctoral degree in Agriculture Science, had worked for 3 years developing multi media resources for K-12. As a natural process participants drew upon their teaching skills and understanding of the teaching profession during classroom observations of teachers, giving demos, developing content, or while conducting workshops. Nina described how she applied her prior training in systems analysis to her current work in developing projects:

See how system analysis feeds into my work here is simple. It is not necessarily just in application to computers. It is the way you look at something as the inputs, the processing and the outputs that you require. So, it just allows your mind to function in a particular way. So you look at things categorizing as these are going to my inputs, these are going to my processing areas, and these will be the outputs that I will get. Or you start work with output. If this is the output that you require how or what kind of inputs would you require. It is just that you are training your mind to look at anything. Similarly, you can apply this thinking to a project. You can analyze as to why a project is not working the way it is supposed to because if you know why, if you can see the kind of inputs that should have been there and see they are not there, then you will be able to plug it in. But, you know it is not like whatever I learned over there I am using here, but it is basically the whole skill.

*Assuming new roles and responsibilities.* Amidst bouts of laughter, Meena's recollection of her debut as a facilitator serves as a good example of how participants took on new roles in this community. Meena described how her fluency in her mother tongue, Tamil, helped her to work with teachers in the neighboring country Sri Lanka. She said,

Here I was fairly new in the organization and I had never done training workshops before. And there was this whole project that was to be run with teachers in Sri Lanka who spoke only Tamil. We had to translate all our workshop materials into Tamil and we needed Tamil facilitators to be trained to work in Sri Lanka. Guess who was the in house Tamilian (laughs)? Somehow I felt it was my responsibility. I pulled in my dad who was enjoying his retired life and put him in charge of translation (laughs). From 0 to 12 workshops in a month, I was training trainers who were greenhorns themselves as they

had no knowledge of the content, let alone the process (laughs). They spoke Tamil; that was all. They were teachers but had no understanding of our program and I was training them. Basically they were accompanying me as I was carrying the weight of the entire training (laughs).

Unlike Meena, most of the participants had exposure to teaching but their current work involved more than just being in schools or working with teachers. Participants were delegated or at times were in situations that they had to adopt new roles. With new roles came new responsibilities which facilitated new learning. Each participant had a story to share. For example, Arjun was delegated a researcher's role and in the process of doing a school audit learned to use the computer to do data analysis as well as to write a report. In contrast, Shaila described how her managerial role emerged when other members in the community identified her skills with people and operations:

They put me in content looking at my academic background. It was something I couldn't manage. I don't think I have those skill sets. Somewhere it emerged that I am good at operations and managing projects and people. So I then started with managing small projects...My role now is more managerial. It deals with a lot of interaction with our own team in the organization and all the facilitators, the officials, teachers, and heads of schools. It is lots to do with people management.

*Incorporating ideas.* Learning in this community also occurred by members trying out new ideas in their work. When participants spoke of others using an idea of theirs there was a sense of pride for being appreciated and acknowledged by others in the community. As Sangeetha said,

I think new ideas are very well accepted here. People really take ideas and I have been able to take my ideas forward also. For example, I have changed the way the newsletter looks and some content areas and people are very happy about it. Also I took the initiative to demonstrate in classes. You know live classes because we preach a lot of techniques and for me unless it is practiced, it is not a valid technique at all. So that's one thing, I revived a lost practice. Demos are being used nowadays as part of our work with teachers.

Often interviewees tried an interesting idea that they came across while participating in a seminar or a workshop. They also tried ideas that either their colleagues shared or a colleague's idea that they had observed going well. Whosoever the idea, it was in the process of using this idea in a particular context that learning happened. Arjun was convinced that he had learned from every workshop he attended. He then described how he adapted certain ideas to his workshop:

Last year Berry conducted a workshop for us on Conflict Management and Consensus Building. Apart from the content of the workshop I liked his approach, meaning the processes he devised. I still remember the processes and I use some, not all, of those processes in my workshops. The process is the same but content differs. When I developed content for my workshops I tried to bring in some of those components into one or two sessions. It was very well received. I tried it in that Train the Trainer workshop of government project trainers at EA which you observed last week. I found it successful.

### *Reflection*

This last category was often nested within the other ways that learning occurred in this community. Participants used self, collective or guided reflection to look at their own work or a

colleagues' work. Usually collective reflection happened during meetings. Reflecting on successes as well as perceived gaps was a continuous process within the community. This frequent process assisted individuals as well as the whole community to be open to learning and change. To Arjun and Nina, the self reflective process helped them to improve upon their own modules. Arjun explained his reflective process: "I often dwell on previous years' experiences. I think of ideas that worked well and didn't. I analyze and I know which I can try again or where the module needs changes."

Meena also found reflection as a valuable process to improve modules. However, as Meena worked in the area of content development for the whole EA community, a collective reflection served to benefit the whole community. She explained,

When the field workers come back and give us an update and discuss during meetings they tell us what they have missed out in the session-plan process we give them as a hand out. This is what I want to know – how to improve upon. There is a constant process of looking back critically as a group, look at things we have done before, and how we can do the same in a better way.

The same collective reflective process served Ratna differently. Collectively, colleagues helped her to understand her own practice better.

When we have tried to analyze why things went wrong and you know working backwards with other people, it has many times shown me why something didn't work out in my session. At that point it may not have been uppermost in my understanding of it.

Guided reflection was used either formally in training and workshops or informally to help a colleagues understand a process or a concept in his or her own practice. Colleagues helped



Vinay, one-on-one, to gain clarity. Using deliberate thoughtful questions a few senior colleagues guided Vinay into a journey of reflection and understanding. According to Vinay, “Some times when Shaila or Mala expect me to complete a task that I am not familiar with they will ask me questions. For example, they will ask me to reflect on how and where we can use an idea in a particular task. They help me to make connections.” Several session feedback forms from co-facilitators as part of the documents that were gathered for data also served as evidence of guided as well as collaborative reflection. The feedback forms were in a preset format in English as well as in Kannada. The format directed both co-facilitators to discuss specific aspects of a session before they individually entered their responses on the same form for each question.

Categories for this research question often intertwined rather than exist alone. There were several instances of data that snugly fit into more than just one category. I explicate only two of them for an example. Nina’s comment about the first cohort of teachers she worked with in the international diploma program for teachers fits well under all four categories. Nina said,

I will tell you very honestly I was still sort of swimming when I was doing my first batch. It was far more experimental than my second batch because I had already seen the reaction of the teachers, what they were able to connect with, and what they were not able to connect with. I was making subsequent changes all the time to my second batch. So in a way my second batch went smoother because I had the experience and learning from my first batch. But also along with that it is not just experience; it is the reading that I do. It is a kind of discussion I have with colleagues, the kind of discussion I have with the candidates themselves, that is trainees themselves that actually allowed me to learn a lot and put them together. I really think these are learning that I just have had as I go long.

That Nina applied what she learned from her first batch to the second batch fitted well in learning through hands-on experiences as well as learning through reflection. Additionally, while discussion with her colleagues was an apt example for informal interactions, discussion with her cohort matched with the category structured interactions outside of the EA community.

Similarly, Shaila's remark on how ideas are exchanged within the community could be used under learning through hands-on experiences as well as learning through reflection. Shaila spoke of the two sections at EA:

In fact, we, the government team, have come up with a lot of ideas. We put certain processes in place which the private school team is quite happy to adopt. It makes us to do lot more constantly keep thinking and see how we can improve and do the best. But there is no competition between the teams.

In summary, all the participants in the EA community learned and in several ways. Interactions with colleagues that were planned in advance through established norms such as frequent meetings, in-house training, and co-planning and co-facilitation fostered learning. Participants also learned through planned interactions with others in the field apart from their colleagues at work. Informal interactions, hands-on experiences, and reflection were also the other ways through which learning occurred in the EA community.

### The Knowledge Produced

The second research question sought to identify what knowledge was produced in this community. Data showed that the participants learned about various aspects of their profession. Table 5.3 summarizes the findings of the types of knowledge that were produced. Two categories were derived from the data to define what members learned through membership in the community: Procedural Knowledge and Professional Knowledge. Procedural knowledge

included members’ understanding of the whole system that was involved as well as the key role of marketing in their field of business. Professional knowledge was the understanding of specific skills and content for participants’ daily needs on the job.

Table 5.3 Knowledge Produced

Procedural Knowledge
Systems understanding
Role of marketing
Professional Knowledge
Related to the field
Skills knowledge

Procedural knowledge included members’ understanding of the whole system that was involved as well as the key role of marketing in their field of business. Professional knowledge was the understanding of specific skills and content for participants’ daily needs on the job.

*Procedural Knowledge*

This category identified members’ understanding of generic processes involved in the field of education. This knowledge was necessary for the growth of not only the individual members and their community, but as well as for their organization’s growth. Two subcategories described specific areas of knowledge that the interviewees gained: (1) Systems understanding, and (2) Role of marketing.

*Systems understanding.* Whether members worked with teachers, school heads, government-college lecturers or representatives of funding organizations they realized their work did not stop with just the one client with whom they directly interacted. Participants recognized that besides the client they met there were other invisible stakeholders who were indirectly

involved. Comprehending respective stakeholder's roles allowed participants to figure out how much each wielded power within the system and how that power impacted their clients and their work. Moreover, participants showed a grasp of their own position and practice within this complex system. Members' interviews produced rich descriptions of their direct experiences with different visible and invisible stake holders in the course of their work. It became apparent that members were constantly negotiating and juggling their practice to maintain a balance within this wider context.

Almost all who were interviewed worked in the areas of school support, training and facilitating workshops for teachers. Teachers' resistance, vocal or subtle, was a constant issue; a few participants spoke about the topic in their interviews while there were several discussions on the topic during my observations. However, teachers' resistance stemmed because of others involved in the teachers' professional lives. Savitri showed a clear grasp of the system in operation when she commented about teachers' low motivation levels in professional development workshops:

In professional development it is that not all teachers are there because they want to be there. Sometimes the school has bagged them off [treated as a piece of baggage, without asking for their opinion], because the school has entered the program. The school may have entered the program for its own reasons. For instance, it may be an examination board's stipulated enrichment program or a requirement to avail of a sponsor's funds. So I know these adults are coming in with a certain mindset. Many sit there thinking of the lost time, "My Saturdays have been taken." It becomes a little bit difficult when they have come in with a mind set like that for them to receive any thing.

Meena and Shaila also spoke with awareness of the systems but from other angles.

Meena gave the example of designing a research study for a funded project with a school where the funder's policies and budget influenced all major decisions. She mentioned that the members of the EA community who worked on this project identified gaps in the study that could be rectified as the project progressed. Yet the community could not take any action based on the members' understanding. Making changes midway during the study was difficult even if it would benefit the school because the EA community had to abide by the budget as well as other stipulations to ensure continuity of the funding. Meena added that the learning would be of use in future projects:

For the project which is underway this learning [feedback and discussion on how to improve upon gaps in the study] is of no use. For a lot of them [projects] have budget implications and we have to abide by certain policies that the funder has stipulated. We can't do something differently suddenly because it will benefit the students or the teachers. These are the constraints of a funded program. So it [our study] is not free flowing and fluid as one would want it. This [overcoming gaps] could be for the future.

Shaila's process of understanding how government schools worked within a system was more convoluted. She learned that the government projects involved working and building rapport with and also educating several others in the political and social hierarchy of the government education system. Shaila explained what she did:

We have started working with teachers and heads but also with government officials and teacher educators. What we realized is that working with the teachers and heads was not enough because here in the Government school system, the officials play a very important role. So we thought it was necessary to train them also. So in this project we

are focusing upon teachers, heads, officials, and the lecturers in government teacher training colleges. We are looking at equipping teachers in service as well as equip the lecturers with skills so that when teachers begin working they will come with these skill sets.

Ratna saw teachers within a bigger system, not just the education system. She conveyed the urgency to have teachers see the larger picture of the world outside. Hence she claimed that she used her corporate exposure to bridge the gap she perceived in the teaching community:

When I facilitate or when I interact with teachers, I try to give them the sort of inputs that I can from a world which is apart from the teaching world. Because I always believed that the world of teachers is really very small and narrow one. You are so protected and you talk about values which work within that small protected environment. In fact, if I could be an advocate or sort of activist for something, it would really be for exposure for teachers to the outside world. So in whatever little ways I try to give them little glimpses of how the world outside is quite different from what they are accustomed to and what they should really gear up for.

*Role of marketing.* An important knowledge produced that benefited the whole community was the impact of publicity on their business and practice. Meena stressed that it was critical to be seen and taken seriously as an organization in the field of research and teacher change. Members understood that they had to make a conscious effort to build as well as sustain clientele to survive in the field. Marketing styles differed depending on participants' sphere of work within the EA community. Pavitra drew the path she adopted as center coordinator when the Mangalore office was opened:

We had to really build the market right from getting in touch with schools before even starting the project. The first year was spent basically on a lot of marketing in terms of identifying schools, getting them on our data base, introducing ourselves to them, explaining our work as what we are doing for the professional development of teachers, and finally the schools really warming up to the EA center in Mangalore. At the same time we also worked on a lot of rapport building with the government officials.

Vinay and Pavitra saw how visibility worked with teachers. Both spoke of school support. Within his sphere of school support Vinay spoke of breaking teachers' resistance with his consistent visits. In the same vein, Pavitra was of the view that informal physical presence in a school where the community offered school support projected a sense of easy access and availability of support to the teachers as well as school heads. To her, physical presence was one way to build a good relationship as well as to sustain business. Yet another method adopted was to use a variety of outside resource people for EA's workshops. In a way inviting outsiders served to publicize EA's work as well as widen EA's business network. Nina and Savitri mentioned inviting external resource people in several of their training modules. Brochures of EA's several workshops also show evidence of using several outside resource persons as facilitators.

Publicity of the community's products and services was a part of every event EA hosted. During the online forum meet, I observed Nina take a few minutes to introduce the international diploma program for teachers to the audience made up of about 60 teachers who had gathered for the event. Pamphlets of the various workshops were displayed for teachers to browse through during break times. Also during the subgroup meeting to plan the online forum meet, members present told Sangeetha, the moderator, that flyers for the forthcoming national level conference

should be displayed in the online forum's website. This move was suggested as it would enable heads of schools to see value in their teachers attending the conference.

### *Professional Knowledge*

Data that pointed to interviewees' understanding or learning that enabled their day-to-day professional work was integrated under this category. There were two subcategories. One, data showed that participants acquired an understanding of issues related to their field in several areas such as adult learning, curriculum development and school-audits. Two, data also pointed to gains in knowledge of skills that was crucial for participants' daily practice.

*Related to the field.* A few members mentioned that they had acquired a good understanding of how adults learned. Arjun's insight on adult learning was a direct reflection on how government teachers responded in his workshops and training sessions. He perceived teachers' learning was very need based and that the teachers did not participate in what was not useful to them. On the same topic of adult learning, Savitri gave this detailed explanation of what she discerned:

What I have found with adults is that it takes a lot to change them and so the challenges are very different. Young minds are far more receptive, far more agile, open to new things much more. The moment we move to work with adults my experience tells me that adults are very set in their ways and because they are set in their ways they are not so open to change and it is hard to move from their old practice. Also there is a defense in this which comes in. If you don't know something you will be the last one to admit you do not know it while kids just take it so much in their stride. They know they are to learn whereas adults think they are supposed to know it all. I am talking about a large number of adults who have this attitude. However, there are a few who come in with the idea of



learning something new and being able to use it. They are much easier then because they have come in with a very receptive mind.

Spandana's learning was in the area of school development. She learned to look at school through a new lens – a school improvement framework that helped her to analyze and categorize a school. The framework made her look beyond the narrow lens of one teacher, herself, to all the other teachers in addition to other aspects that contributed to successful functioning of a school.

Knowledge of developing content specifically for their various audiences was yet another facet that surfaced from the data. Members built on each others' understanding of a method or concept to be adopted in their practice constantly checking for relevance, novelty, and feasibility. No content for training and workshops was frozen for a long period. Several participants commented about constant revision and updates of resources and materials. They repeated successful ideas, experimented with methods and topics from their own experiences, and also adapted new and interesting ideas that were relevant to their audience. Nina's words pointed to how members had an understanding of what was relevant or not in their scope of work:

Say somebody has been at a meeting to which the others have not been. She comes back from the meeting and says this was so interesting and this has happened. Everybody jumps in and we are then discussing as to how that interesting idea can be improved or if it will work or it won't work.

On a contrary note but still related to professional understanding were comments made by Savitri and Mala. Both identified gaps in knowledge within the EA community. Savitri saw gaps in members' understanding due to their past working experiences and saw the need to bridge these gaps. She said,

We have teacher trainers who have no experience of the classrooms and we have teachers who have never been teacher trainers. We have both and in both areas there are gaps.

Teacher trainers might be good facilitators but they come up with a lot of suggestions that are not practical. They have never been in classrooms. I think definitely the ones who come straight from classrooms need lot more training in adult education. The ones who come in as teacher trainers need to understand the reality of the classroom.

On the other hand, Mala gauged a gap in knowledge within the EA community arising from the limited target audience with whom EA worked. Speaking about partner forums, Mala said that these platforms enabled her to see the wide playing field in education and how essential it was to widen the community's experiences by going beyond what was being done currently:

Very often when we get a different perspective from another organization working in totally different circumstances we get a lot more sensitized to other things. Perhaps they have done a different kind of learning which is important for us to take or listen. We may not agree with it, but it is still valuable learning in terms of understanding a different population of schools, or teachers, or students.... I think we still are very often limited by certain educational experience. And I think the educational experience, we need to widen that. I think these interactions with others help us to widen that. I think that we don't have experience of direct contact with tribal children, girl children, backward classes, minority communities.

*Skills knowledge.* Those interviewed unanimously recognized that they had to be proficient in certain skills that they used regularly in their work. Observation, facilitation, and communication skills were identified as critical. Few participants were in praise of, or looked up

to, colleagues as role models for certain skills. Sangeetha spoke of learning different skills from different members of the community:

I have learned different things from different people. I have seen some people managing very well. I have seen some people communicating very well. I have seen some people facilitating very nicely. I would say everybody has influenced equally but I have learned from Mala quite a bit, specially her tone of voice, mannerism, and her knowledge about the field - the knowledge about education and the kind of perfection she brings to things she does.

While Mala was looked upon as a role model for certain skills and knowledge, Mala also spoke of learning from other member. Speaking of Shaila, Mala said, “She [Shaila] is great at delegating, so I learned to do that better. I think she is better delegating than I have done in the past.” Vinay learned to deal with the tricky aspects of translation:

Actually, during translation Arjun came up with the idea. We were translating verbatim from English to Kannada but we couldn’t get the essence of the idea. So Arjun suggested a different method that we should translate not verbatim but use a colloquial or a common terminology. That made a great change to my translation work.

School support that required observing classroom teaching and giving feedback one-on-one to teachers required participants to know the purpose of observation as well as having good observation and communication skills. Spandana spoke of the clarity she gained about observation from the Train the Trainer workshop:

I learned how an observation should be, and how and why when we fill in the observation sheet the observer should not add personal interpretations. I was not very sure of this because the observation that I have done in my earlier jobs always had some kind of

interpretation and I would use my interpretation anywhere. So I understood from that workshop that interpretation and evaluation is not done by the observer.

Several participants such as Gowri, Vinay and Varun spoke of the role and skills of a facilitator. Inhouse training and being in the field gave them new knowledge about this role. Vinay expressed that although it was difficult taking time to build goodwill with the teachers made it a little easier to get them in due course to pay heed to what he said. Gowri spoke of how she learned that participants in her workshop will without doubt mirror her attitudes and moods. Thus shedding inhibitions, being active and enthusiastic in the facilitator's role became an important learning for her. On the other hand, Varun spoke of a wider view of skills that a facilitator required:

Academic or Higher Education does not help facilitation or communication skills. I have seen people with double master's degrees and a PhD fail to facilitate well. Practical knowledge of the field and skills are more important. I constantly look out for ways of doing things differently with the teachers. Teachers appreciate that.

To conclude, the discussion in this section revolved around the knowledge that was produced within the EA community. Members gained procedural knowledge through an understanding of the systems as well as the critical role of creating visibility in the market at whatever level they operated. Professional knowledge that was also produced in the community included learning about concepts in the field as well as knowledge of key skills.

#### Influence on Individual's Practice

The third research question in this study explored how participants' practice was influenced by the community. Table 4.5 summarizes the findings of the influence of participation in the community on the professional practice of those interviewed. Two categories of findings

emerged from the data as shown in Table 5.4. Participation in the EA community expanded members' repertoire of skills and responsibilities, increased their self-knowledge, and brought about a change in perspectives.

Table 5.4 Influence on Individual's Practice

---

Through:
Expansion of Repertoire of Skills and Responsibilities
Increase in Self-knowledge

---

*Expansion of Repertoire of Skills and Responsibilities*

Right through the interviews there is evidence that individual practice was influenced by their participation in the EA community. Findings showed participants developed new skill-sets as well as assumed several new responsibilities. Often the two were interlaced, one giving rise to the other. A conducive environment within the EA community also contributed to the development as it opened the participants to more opportunities. Pavitra talked about diverse exposure, "diversity in terms of dealing with different people as well as varied experiences." Critical to her responsibilities as a center coordinator, Pavitra developed organizational and people skills as she had to continuously deal with people at different levels. She explained her interactions,

I had to train and talk to new staff at one level and on the other I had talk to the school principals who have been running their schools for the past 30 years. Even if I wanted to get something across to these principals I had to be really careful because they could say I am nobody to tell me them how to run a school. At the third level were the facilitators with varied experience. I had older facilitators in terms of experience who had been in

this job and knew it well. There was a group of older facilitators who had to be trained to new ways because what they did 5 years ago was not applied now. At the same time, sometimes I also had a new facilitator who was very new in the job and who looked up to me for support.

Savitri, Sangeetha, and Shaila shared Pavitra's view about having a diverse and wide exposure as being part of the EA community, an exposure that allowed them to take on new responsibilities. Savitri's experience as a teacher had been confined to "just worrying about that little bit of content that had to be delivered by the end of the year." She mentioned she had moved a long way from completing a syllabus and managing labs to a larger range of responsibilities that included in-house content development, curriculum for a wide variety of schools as well as training. Like Savitri, Sangeetha's experiences had also been limited. Her work experiences at a given time were either with students or teachers. Here she had opportunities to see beyond and meet people such as heads of schools, funders, government officials, and even a wider variety of teachers. Sangeetha claimed,

Being here has really helped me be with people because a lot of people-people thing happens here. I get to see different kinds of people and different kinds of work that is done. I see how different they are and how you have to be different to different kind of people.

To Shaila, new responsibilities with budget as well as overseeing all the government school projects helped her to have a vision for the organization and steer other members towards that direction. Freedom to try new ideas, lack of age or gender bias, and supportive colleagues allowed members to grow. As Savitri commented,

I would say one thing which has contributed to my own growth and development in the organization has been the fact that I am very much allowed to explore a lot on my own.

And for me that is the ideal environment to be in.

### *Increase in Self-knowledge*

Increased self-knowledge in members was the second theme that emerged with regard to the influence of the community on an individual's practice. Participants' comments on their increased understanding of themselves, and awareness of personal and professional growth were included under this category. Several comments in all the interviews emphasized an increased understanding of themselves as well as underlined personal and professional growth. Comments varied from a direct mention of such evolution, a recently developed ability, newly identified or hitherto latent strength, or a weakness that participants were trying to bridge, cope with, or had overcome.

Shaila and Arjun were proud to acknowledge personal as well as professional growth. Both also saw clarity in the direction they were growing professionally. Arjun stated, "The growth has been positive. Earlier, somebody told me how to do things but here I have a say how and why I do something." Sangeetha pointed to an increased self-awareness that directly reflected in her practice. She was of the opinion that her communication style had changed for the better. She pointed out that being with and observing others in the community as well as the several in-house training sessions urged her to be open, speak and think differently.

Nina and Savitri recognized a latent talent. Nina identified her liking for as well as an aptitude for structure. Commenting on this aptitude, she voiced, "I mean one thing I have learned about myself, forget about anything else, is that I am pretty organized in my head and that I can see a process in my head." Savitri, on the other hand, saw teaching science in school had not

allowed for much creativity. However, she viewed her current work had unleashed a talent.

Savitri said,

Well about myself I have discovered that there is a part of me which is creative and I always felt that I was, but as a teacher in teaching science or chemistry of course there was not much scope for creativity although I tried a bit. I think now as a person who designs learning I think I am getting more of a chance to be creative and I am enjoying that.

Ratna identified her personal growth but at the same time she also realized that she was easily affected by a negative incident or comment by the audience in her workshops. She knew she had to overcome this gap to be a better facilitator. Ratna's words captured her struggle to overcome this discord in her practice:

For me personal growth was wonderful because through those modules I discovered various aspects about myself, my skills, and my views on education and so on, which were up to that point not really crystallized. I had worked as a teacher and a fairly effective one I think. But I think this really brought together a whole lot of things.

Professionally, and this is to do with facilitation, I don't believe I have really overcome it. I think that it's something that is very much in my consciousness now. I think that I am beginning to recognize that I am a person who gets extremely stressed wanting to be on an even keel with the participants. It is sometimes difficult. I realize that many times I have let the quality of work I do in terms of dealing with groups of people suffer because of some incident that has shaken me, you know, put me off balance. The rest of the day's session that follows or whatever it is certainly has an impact of the mood of that moment. The mood that I had been left with because of something and that is the challenge for me.



Contrary to Ratna, Pavitra and Mala had overcome issues that could have hampered their day-to-day interactions at work. Both spoke of how they changed their ways to a more mature way of responding to challenging situations. Pavitra reminisced her first year when she was exposed to the challenges of working with the government system while Mala was philosophical as she spoke of challenges from a people's dimension. Self-awareness occasionally also surfaced through appreciating a colleague's way of performing a role well. For instance, Arjun indicated he would approach Mala for tips on facilitation while Mala admitted that she admired Shaila's ways of delegating jobs and learned Shaila's ways.

Arjun and Spandana shared self knowledge through experiences they recollected as a transition point in a belief or a norm in their practice. Arjun came from a traditional work-setting where he was used to a structured way of doing my work. He realized he had to be creative and be open to new ideas within this community. Arjun compared his past job of a lecturer with his current experience: "Earlier, we were looking for some formula and we believed only that a formula would work in a situation. Now I see it [formula] as one of the several ways I can try." In Spandana's situation a change occurred when she understood this community's mode of giving feedback. Spandana who was familiar with giving feedback described the routines she was used to: "Especially in the corporate it was like the other person is at the receiving end. There was no sharing of ideas." She added "Here I have realized it should be more of an objective view and not subjective. It should be very factual."

This section discussed how membership in the EA community of practice influenced individual practice. The influence was seen through members' expanded repertoire of skills and responsibilities. A wide variety and exposure to opportunities enabled this expansion. Gathering new skills and taking on new or larger responsibilities were interdependent and often reciprocal

in their occurrence. Participation in the community also influenced practice by increasing participants’ self-knowledge. Participants were aware of their strengths and weaknesses which allowed for better understanding of, as well as to how to consciously and constantly improve their practice.

Socio-Cultural Factors that Influenced the EA Community

The previous research findings uncovered three areas: how learning occurred, the types of knowledge produced within the EA community, and how participation in the community influenced participants’ practice. The fourth research question sought to discover how Indian socio-cultural factors shaped the learning process, the knowledge produced, and the practice of this community of practice. Four factors that described this phenomenon were identified: Age and Gender, Language, The Indian Educational System, and Poor Infrastructure. Table 5.5 summarizes these findings.

Table 5.5 Socio-Cultural Factors that influenced the EA community

Age and Gender
Language
The Indian Education System
Poor Infrastructure

*Age and Gender*

Considering the 13 members of the EA community who were interviewed for this study, the age of the members ranged from 25 years to 65 years. Women dominated the community numbering ten. Participants voiced that age did not raise an issue among members with each other but that age influenced their practice by way of interactions with the teachers with whom

they worked. Additionally, data showed that gender played a more influential role than age.

Comments about both age and gender were related to what participants witnessed or experienced in their own practice or what they observed in the practice of other members.

Speaking on the topic of age, a few members spoke of how they perceived their own age. A few others commented on how they or their colleagues at EA were perceived by the teachers. Remarks about age were in relation to personal values and outlook and were either articulated or left as a tacit understanding. For instance, Ratna was not only explicit about her values and respect for age but also articulated what she expected from others. Speaking of a recent visit to an international school along with a colleague, Ratna said she found it difficult to accept the culture of that school. Asked to elaborate, Ratna said she was bothered by the casual relationship between students and teachers that she had witnessed in the school. She perceived her reaction was a mindset due to her age, as well as because it clashed with the traditional relationship between teacher and student that she was used to and she valued. To her, a teacher was older and needed to be treated with a different type of respect than as a friend. Besides, it also meant “what you want to see as evidence of that respect.” Ratna perceived respect for adults from children was a given in Indian culture and was still seen in most schools. She acknowledged that it would take time but she would have to accept this change in certain settings, like in the international school environment. When questioned about the obvious conflict between exhibiting respect that she valued and the openness she advocated to teachers, Ratna compared herself to a “benevolent despot” in wanting teachers to allow for freedom and yet hold authority. She explained,

At this moment it looks like a dichotomy. I think what I am most comfortable is like in history books you read about benevolent despots. Maybe my thinking is like that I don't know, where you allow for a whole amount of openness and you know you do want

questioning and everything, but then it's as far as you are willing to let go, to that extent.... It's the very obvious manifestation like in the tone that you use, in the way that you perhaps show respect through your body to an older person. For me it's the very superficial things like that. I would expect that. The deeper thing is fine and if I respect you as an individual I have to be open to the idea that you may think completely different from me. I don't want anyone thinking exactly like me. That is okay. For me it is the superficial thing you know. I still value that (laughs).

On the other hand, when Gowri who is a freelancer and a retired college lecturer spoke of her age she left much unsaid and also assumed I would understand what she meant. She stressed her age as being a factor that the teachers were respectful to her and participated in her workshops. She also thought her age allowed her to interact freely with her audience: "I have no problems to mingle with them as I am an elderly person." Moreover, Varun who like Gowri was also retired, as well as Gowri viewed their age to connote wisdom as well as experience. Varun was proud to share how teachers responded: "Always people here appreciate the way I teach and talk. They say I am elderly and talk intelligently, thoughtfully, not reacting." To a question about challenges in her practice Gowri commented, "Nothing is challenging. I am not being arrogant. I am old and I know. My experience in this field also helps me to tackle problems." Both Gowri and Varun also considered their age as an advantage in their work with government teachers. They both believed that the teachers would surely pay some heed to them out of respect for their age.

The other aspect of this category was gender. Findings showed that gender played a major role in the participants' understanding of their personal as well as their colleagues' learning and practice, as well as in understanding teachers and teachers' practice. With regard to

gender, the EA community was an all women's organization for the first three years of its inception. Male members joined the community only when EA took up work with the government sector. Answering to a query about a disproportionate male-female ratio in the community, Mala hastened to point out the male dominance in the government freelancers and added,

It [female dominance in EA] just so happened. We are not deliberately recruiting males or females as full-timers. It just so happens that is how we got the people. There is also a dearth of good teacher trainers and educators and definitely a dearth of male teacher trainers.

Besides, having male members in the community had its advantages of gaining a male perspective as well as to deal with government teachers. As Mala stated:

I am glad we have at least a few men because at one point of time we got only women. I think it is important to have men partly because they give a slightly different perspective. Also having males in our work with government schools where the government teachers are predominantly men, the gender helps.

However, Mala acknowledged a difference between the males and the females in the community. I shared with Mala that I observed that the men were quieter than the women especially in bigger groups and whole group meetings while they seemed more relaxed and in-fact talkative in their subgroups. According to Mala, the men in the EA community were less assertive because they were generally in the minority, and because of the lack of their exposure in comparison to the women in the community in terms of "a far wider exposure in the early years – one's own schooling and college." The lack of exposure, Mala added, impacted one's

pace and ability to learn on the job. Nevertheless, she assured that the women listened with respect whenever the men spoke as well as gave them a lot of support in their work.

When Shaila spoke of the men in the community she spoke specifically of their role as facilitators in the workshops. Describing the men's body language, Shaila perceived them to be always on guard with women which crippled the spontaneity on occasions. Like Mala, Shaila also linked the men's behavior to their background but to their professional rather than social background:

When these men facilitate, they are rigid in their body language. They don't smile much. We bring it to their notice but they say they work with a lot of women in the field. They are cautious because if they talk or smile too much like the women [facilitators] they may be misunderstood by their participants. We tell them not to be too formal with the teachers. I think it is their background as teacher educators. That is the way they have been [trained to be] with their students [predominantly female].

Mala also articulated that in general males in teacher education were constrained in their practice and did not share many of the experiences that the women had in the field. Corroborating this view, Shaila explained how "teachers tend to talk of several aspects in the workshops, even personal problems. So, teachers look for a female figure to speak of their concerns. With male facilitators it is not easy."

Rural India vis-à-vis gender was how Varun, Ratna, and Savitri shared their experiences as facilitators during training and workshops. Rural India spells a strictly traditional environment, a majority living in poverty, and people with nil to minimum education. Often girls and women are not educated and avoid interactions with males even within their own extended families often in their own homes. Interacting with men in public is not encouraged and in fact

may even be considered misdemeanor and invite criticism. Varun's comment portrayed a conventional rural South India. He talked about government schools in the districts in Karnataka where women are a minority. While few women have stepped out of their homes to work, they usually abided by the norms of their society. Varun's problem arose because the rural female teachers did not participate or mingle with the male participants although they did not seem to mind interacting with the male facilitators. This posed a problem in drawing the women out to join in the activities or discussions.

On the other hand, Ratna and Savitri spoke of rural north India as being more open to learning and change within a traditional environment. Ratna had just returned from a workshop series in the smaller town of Patna, a city in North India where she had a "huge contingent of men." Ratna found the rural men were more open to what she said and were more participative in contrast to male participants who were less in number as well as who distanced themselves in workshops in urban cities like Bangalore.

Savitri's experience was truly an eye-opener for her and also serves as evidence of a change occurring in teaching practices in rural areas. Savitri had recently visited schools in the state of Rajasthan. With a rich cultural and historical heritage Rajasthan still lags behind in the education of girls. Savitri observed a class with a young male teacher teaching a group of Muslim girls in burkha [a cloak covering the whole body]. She was awed by the high levels of thinking and expression in this empowered environment although the dress code of the girls led to a misleading expectation:

They have managed to achieve really good levels of education in those villages of Rajasthan where I found they were girls debating; they were Muslim girls, children studying for board exam debating about why this formula in chemistry should be written

this way or not written this way. And I was really in awe of the way the teacher, a pretty young chap, dealt with these young Muslim girls, encouraged them to ask questions.

They were demanding of him in a very free and wonderful way and you could see the real learning was happening. Now I have taught the similar age group in urban areas like Kolkata and I have taught so many batches. But when I thought of the particular questions she [a Muslim student] asked no one had ever asked me a similar question. And we would imagine that those urban children would be far more empowered than these Muslim girl children who were absolutely covered up like that and from a remote village. First I think it was a big step that their parents to have allowed them to come to school at the age of 16 and not married them off. And secondly that regardless of the way they were dressed they still have the freedom to question, to argue, and be allowed to do so in a very nice manner. They were allowed to say what they wanted. The level of thought was quite intriguing; nobody ever asked me such questions... I can see that how well it worked there [in Rajasthan] and somehow the teacher must also be able to do that in our classrooms, urban classrooms.

Gender also played a role in participants' experiences in the towns and cities. Even in urban cities a common practice is to offer separate seating for men and women in public gathering such as a music concert, meetings or weddings. While this custom has changed to a large extent Savitri observed that men in general, whether from smaller towns in India or from bigger cities, had the tendency to still segregate themselves from the women and sit with only other males. This, she thought may be because the men were often in the minority during workshops. Savitri described a generic situation:



In a group of thirty you might have two men. So the two men do feel a little awkward.

They tend to want to sit together, pair together and also don't forget that we are kind of a conservative society. Men are also not so happy to hold hands with other women and you know do things like that which some of our workshops demands (laughs). We have some activities where we do hold hands and they are not very happy to do that.

During my observations I saw male members segregating themselves either voluntarily or as an option that was offered to them. For instance, there were only two male students in the cohort taking the international exam. I observed that the men in the exam cohort deliberately swapped places to sit next to each other during two workshops as well as for activities that required a partner. However, Anushka, the freelancer who guided the acupressure de-stress activity at the end of one whole group meeting described the activity briefly and suggested that Arjun and Vinay be partners as they would be more comfortable to be with each other for just that activity.

In response to how the women responded to men opting to sit separately, Savitri stated that all members of the EA community as well as the teachers in the workshops were empathetic with the men in such situations. Savitri reasoned out why the women were more considerate:

On the whole, the women seem less inhibited by this [segregation], the majority kind of respects the men. You must remember that these women are working women so they are people who have already come out of their homes and doing something. While for the men perhaps their women are at home and so they are still not used to it [sitting with women].

Ratna, on the other hand, saw the women as still being influenced by the men during her workshops:

However facile the point, these women still feel that because a man has made that point it is something worth sitting up and listening to. And really if you go to critique it, which of course you would, you will find it [the man's point] was sheer nonsense. So there seems to be a little bit of what I call as appreciating of the male point of view. They [males] are centers of influence. That is the fact.

A few comments projected gender in an emancipatory role. Sangeetha and Savitri spoke in the context of working women. Sangeetha spoke of an incident when she was still new at EA. She spoke of how her colleagues worked at a frenzied pace to meet deadlines:

The proposal was sent on time which was like 11 o' clock at night. I have never seen anything like that kind. I have not seen ladies sitting and working to send a proposal at 10.30 p.m. I have not seen that.

Although quite common in other jobs such as software, Sangeetha was shocked because she had never seen such female colleagues in all her previous years of experience in education.

Sangeetha added that without realizing it she has also got into the habit of working in a frenzy to meet deadlines and gave an example of the time she had to design a session in two days time rather than the usual two-weeks time-frame. Savitri mentioned that off late EA had suddenly received several requests for curriculum development and training from the pre-school sector. She saw the increase of women entering the workforce in India today was the reason for the growing market for pre-school education. This sudden spurt in demand introduced EA to working in the area of pre-school education which was hither-to an unexplored territory.

### *Language*

A common understanding is that people with fluency in a regional language but not in English come from a culturally traditional background. Often this group of people also represents

a social background that is different from those people whose fluency in English supposedly makes them more open in their outlook.

Findings indicated that the EA community had varying levels of ability with the local language, Kannada as well as with English. This diverse language ability influenced individual's practice as well as that of the community. Mala viewed having Kannada-speaking members allowed EA to forge into collaborating with the government education system. On the other hand, she also was aware of how different abilities in English of the members influenced learning and understanding within the EA community. Mala shared what she observed in the community:

I find that language does play an important role in understanding ideas. Sometimes there are certain ideas that we are discussing a universal idea, not necessarily but it can be seen as a Western idea. So if somebody has the power of the English language and fluency with English they can speak out perhaps far more or make sense of it far more quickly than somebody else who is grappling with the language to get the idea and the concept.

Apart from difference in members' fluency in English and Kannada, data showed language influenced content development as well as access to resources. All the content was developed in English and, as Savitri mentioned, targeted a large audience of English-speaking urban schools. However, a literal translation into Kannada did not always work well. From the content developer's perspective sometimes there were difficulties in applying the same content to Kannada-medium schools as well as schools in the very rural areas. From a Kannada facilitators' perspective, Varun experienced transliteration from English to Kannada resulted in a lack of emotion. Vinay explained how a technical Kannada term resulting from a literal translation was not easy to explain or connect with teachers' understanding. Often in such situations a colloquial

term served the teachers' understanding better. There were also concerns with the use of technology because of restricted availability of the latest software in Kannada such as Windows Vista.

Pavitra and Meena spoke of their own language proficiency, or the lack of it, in relation to their practice. The language dilemma placed Pavitra in a unique situation within the EA community. Though she was fluent in colloquial Kannada she felt her practice was constrained because of her lack of written Kannada skills as she could not use the language in formal oral and written communication. Pavitra described how she landed in this situation,

I am a Kannadiga [Kannada speaker]. I speak Kannada but the problem is I studied in Mumbai and Pune, so I have never learnt Kannada in school. It [Kannada] is just at the level of speaking at home and with relatives and probably with friends. Even that has been very restricted because in Bombay and Pune you don't really have neighbors who can talk Kannada. So it has just been at home. So I can speak Kannada, but the problem is that I cannot really do Kannada facilitation because I cannot read and write Kannada. Kannada speaking is at one level, but conducting training and preparing for hand-outs is at another level because there are so many technical words and syntax which I don't think I will be able to do justice. So I am not directly involved in the facilitation as such.

For Meena, proficiency in a regional language gave rise to a new opportunity for herself and for the EA community. Meena's proficiency in her mother tongue Tamil helped her to conduct training programs for EA in the neighboring southern country of Sri Lanka where Tamil is one of the official languages. The success of the project expanded EA's entry into the Sri Lankan market.

There were issues also in implementing government school projects especially in the city. Bangalore city is cosmopolitan. Families from within the state as well as from other states migrate to this city in search of work. Children from these migrated families belonging to middle and high income speak their respective regional languages at home and attend private schools where English is the medium of instruction. English does not pose a problem because English is also a part of the home environment though it may be spoken with different levels of fluency. On the other hand, children from the low income families that have migrated from other states go to government schools where instruction is in Kannada, the regional language, because these schools are free. However, these children are fluent in their respective mother tongues and can receive any possible help from their homes only in the language that is spoken at home. Thus, language created a dichotomous situation. Vinay explained the dichotomy that students faced in one government school in Bangalore that he regularly visits for school support: “The students come from the slums and the majority of the students speak Tamil or Telugu [regional languages of two neighboring states]. However, the medium of instruction in the school is Kannada but there is not one Kannada student.”

### *Language*

Rote-learning resulting from an over emphasis on exam results, and government schools plagued by bureaucracy and inertia hamper the education system directly or indirectly. Knowing facts and formulae rather than application in exams requires drill and rote to achieve the magic number of 90% which is a common cut-off mark for admissions for higher studies. With reason, a creative and interactive teaching and learning methods are often considered redundant by most teachers, schools, as well as parents. An innovative teacher or a non-traditional school is also sooner or later drawn into the system. Therefore one of the direct implications of the system is

teachers' low motivation levels for professional development which is a major influence on the EA community's practice.

*Low motivation.* Participants working with the government schools were most vociferous about teachers' low motivation. Low motivation translates in different ways during training as well as school visits. Absenteeism and non-cooperation are common issues embedded as some habitual behaviors. Arjun spoke of one habitual behavior:

For government and aided school [schools that are partly funded by the government] teachers, professional development workshops are mandatory. So normally, government teachers who attend training workshop will sign and go away or come in between to attend for some time. They get a certificate for just that [signing attendance].

Shaila contributed with another custom that was uniquely the prerogative of the men:

Men in government schools are very busy with other personal activities outside of school. Not everyone, but a majority of the men. That is very common in government schools. Even the HM [headmaster] will go missing from school as he has to go for some personal work to do, like organizing a personal loan... I think it is their thinking that "I have a government job and I don't have to do anything. What can anyone do to me?" We are finding it very difficult working with them.

A subgroup meeting was held to solve the incessant problem of absenteeism. Usually, a common venue for training is chosen to cover government schools in several nearby small towns and villages. Most of the teachers have to travel distances by public transport to attend the training. The inconvenience of a long commute compounded an already low level of interest. The facilitators of one particular district found that often teachers attended a cursory length of time or merely the morning session and exited in post-lunch sessions. One way to beat this issue

was to find a way to retain the teachers in a session till after the one crucial train departed the town station. To try out this strategy the content for a session's module had to be split differently and yet retain the original purpose and flow of activities. All the full-timers who worked with government projects, namely Vinay, Arjun, Shaila, Sangeetha as well as Anjana who didn't participate in the interview met with the content developers, Savitri and Meena, as well as with Mala to work out some possible solution. The following conversation is a snippet that captured the problems members faced in the smaller towns.

**Anjana:** The EA program coordinator in Mysore advised us not to break our workshop at 1p.m. It coincides with their [teachers] train schedule and so many teachers leave without staying back for the afternoon session. So lunch has to be shifted to after 1.30, after the train leaves. Also, by habit, after lunch the teachers go for a smoke or paan [chew betel leaf]. We have to go and call them back. Even though we insist on time, lunch break lasts for more than 1 hr. Bells don't work because they are not in the vicinity at all.

**Mala:** They are used to threats and complaints which we don't as we have other expectations from them.

**Anjana:** The EA program coordinator told them before the workshop not to pressurize us into giving memos [complaints to the government heads]

**Vinay:** But in Bangalore the teachers are more powerful than officers. They have associations with higher officials.

**Mala:** How do we reach out to the Teacher Associations? We need to have them on our side.

**Arjun:** They look for economic support, computers from EA, not professional support.

**Shaila:** In the other town, women call husbands to the training center. That way they can leave early. Husbands arrive and it becomes a big distraction. So how do we reorganize the modules to fit into the new time breaks?

Data showed that low motivation in government school teachers in cities too influenced the community's practice. Merely recollecting and speaking of this school set back Vinay's enthusiasm during his interview. Vinay regularly visits a government school as part of a funded school support project. The school has six teachers for about 200 students and was identified as the most backward among government schools in the city. Vinay explained the difficulty of the task and why he was hesitant to be associated with this school:

I have seen schools and all schools are different. In this school there is no coordination between teachers, and it is worse between teachers and HM [Head Master or Principal].... Expecting them to change and making them to change is a difficult task. There is a lot of resistance from the teachers and the head when we visit the school. That's why I was afraid to take up work with this school.

A few days later in the subgroup meeting those who worked in the school that Vinay described above discussed the situation with Mala and others. Sangeetha and Vinay had visited the school for a demo. All six teachers were expected to attend. The conversation below reflected the circumstances under which Vinay and Sangeetha often had to work in that school.

**Shaila:** Yesterday Vinay and Sangeetha returned depressed from their school visit.

**Vinay:** It is the teachers' attitude. They don't want us there. I go everyday and feel like I am useless. Yesterday through the demo, one teacher, she was old, asked me every 5 minutes if she could go [home]. One teacher didn't come. Another teacher walked in and



out with her cell [phone] and in between spoke to the kids in the class as the demo was going on.

**Sangeetha:** She kept picking up calls. She didn't even realize it bothers others.

**Arjun:** She was on the cell even when I visited her class last week. She was on the cell in class as kids were writing on the blackboard.

**Vinay:** We have spoken to the official. He wants a complaint as a report. If not, he can't take any action against her. If you take any step, they will get support from the Teachers Association and can badmouth us. They can point at me as I am one man and they are all women.

**Shaila:** They are not used to working. And with us they are forced to. To them, we are an intrusion.

Government teachers in India are affiliated to strong teachers' associations and at individual levels teachers have strong personal ties with senior local government officials. Having both, the support of associations and ties with officials, is an advantage to the teachers. No complaint or action is ever possible because associations will counter a complaint with other issues, possibly stir a strike and make more demands that the government cannot afford. Contacts with higher government officials often help to sweep complaints under the carpet.

The private schools that the EA community worked with were part of several programs and projects. All participating schools are partially funded by external sponsors in exchange for stipulated participation in training of teachers by EA. Teachers were often chosen and sent by the school based on their availability and the relevance of the discipline they taught to the theme of a workshop rather than the teachers' interest to participate. Hence their participation was half-hearted when they participated. Ratna explained briefly what bothered her during a workshop:

It can be the response of audience. You'll always have people in a group who are negative about the work that you do. Or, they have an attitude that says "I have seen this before and I am really bored, I don't know what I am doing here with you." These kinds of things bother me a lot.

Not always was motivation an issue in private schools. Participants also mentioned that several teachers became more enthusiastic after they begin participating in a workshop. One prevailing cultural practice that Savitri pointed to was how Indians work towards a foreign degree. She facilitated workshops for private school teachers as well as taught a few modules for those teachers enrolled in the international diploma program that EA conducted in India for a foreign university. Savitri acknowledged a vast difference in how teachers who were sponsored by their schools responded in both situations. Teachers who were enrolled in the international diploma program felt honored to be sponsored by their schools and put in an extra effort to do well. As Savitri explained,

I also do work with the international diploma program and they [teachers who are enrolled] pay for themselves. Not all but some schools do sponsor. I don't know how the selection happens but I have a feeling that very few of them [the teachers] are school sponsored but when they are school sponsored, they see it is a privilege. Because they are just two or three of them who have been picked and sent. So then, because they see it as a privilege, they are very much more on the job. They know a huge amount is being spent on their education. I find that in the international diploma program people are more open to learning, not necessarily more capable, just more open to learning.

*Bureaucracy.* Findings showed that local and central level bureaucracy influenced the community's understanding and practice with government schools. Complex procedures with

government officials at different levels were required to continue current projects as well as to gain new projects with government schools. For instance, even a simple attempt to rectify one's behavior during training has to go through a specific route as immediate higher officials do not have the power to question teachers. EA has to sign a Memorandum of Understanding (MOU) with the government authority even if the project is funded by external organizations. A project also has to be renewed every year which again involved procedures as Shaila explained:

Every time there is a different person at the state government office as government officials have a lot of transfers and changes. So constantly we need to update them in the field of education and convince them of what we are doing and want to achieve. Once they are convinced we sign the MOU. To work with one college we then have to meet the [district] director who has direct control over all the teacher education colleges in that district.

Such requirements constrained the community from implementing ideas on the field without the support of government officials. At the same time procedures also demanded continuous interaction of the community with the officials as well as to work with the stress of having no assurance of continuity of a project. Not everyone in the EA community could work with local government officials for several reasons. Local government officials represented a different social background when compared to the majority in the EA community. Besides, the government officials at the lower hierarchical levels in general do not look favorably at those who hail from middle and high income backgrounds, and those who have been educated in private schools. Also one needs to have an understanding of their ways of reasoning, working, and talking. Hence there is always an issue with one's demeanor in maintaining crucial relations with these officials.

Mala perceived having someone from a similar social background in the community helped. “Somebody like a Vinay equates and connects well with these government officials. They speak the same language in a way and it is almost as if we [the others at EA] speak different languages. I think it helps.” Asked to elaborate, Mala said it was more than Vinay being male or speaking Kannada; it was because Vinay and the officials came from the same social context that made it easy for him to relate and get work done. She further explained how officials look at those not from their social background as aliens because one doesn’t understand the other’s ways:

It [having Vinay] helps because it is partly gender; it is partly speaking from an experience of that social context, and they [government officials] are also from their own context. Because very often my big concern is that, I feel this very often, we as people who are from upper class, and upper middle class background and who predominantly go to private schools are seen as aliens in a lot of situations.

Pulling strings and bribes are a way of life in India especially when dealing with anything related to the government. One needs to have the right connections at the top hierarchical levels to get things done. However, one needs also to know the right people at the lower levels to reach to the top official. That is why Vinay was of great help at the local level bureaucracy.

Bureaucracy exists also at the central government but is more sophisticated as the scope of work is larger. Mala described a frustrating experience in trying to get foreign funding for a project. This involved getting a special registration for which she had to interact with people from The Home Ministry at New Delhi and she almost gave up:

I refused to give a bribe, which, if I had, is what possibly may have speeded up the paper work. For me that is the biggest challenge and I really had to pull strings. I was lucky to

have and know which strings to pull. That is when I felt the sense of despair and anger which I don't normally feel for other things. With regard to educational staff and regular professional work, it is challenging but I think there are always ways out. Getting your head against this large bureaucracy is what becomes difficult, but I am thankful that I could handle that.

### *Poor Infrastructure*

Findings showed that the poor availability of public amenities such as electricity and transportation affected government projects. The whole state of Karnataka has constant problems with electricity supply. Therefore most private establishments and several homes in the cities rather than in towns have personal battery-run generators as a back-up. Government schools cannot afford them. In the area of transportation, public transport between major cities and thus the towns on these routes is good while interior towns and rural areas do not have frequent connections. As majority of the government-school projects at EA were located in smaller towns and rural areas poor public amenities impacted the EA community's work.

Erratic power supply in the cities and more in smaller towns and rural areas played a role in the community's learning and practice because technology is an integral resource in EA's training sessions. Members had to always be prepared for a sudden power cut that would disrupt the use of the LCD or an overhead projector. Vinay and Arjun spoke of using other resources to not disrupt the flow of a session. As Arjun described in his interview,

We use a lot of technology in our workshops. Sometimes I go to conduct workshop in interiors of the state. In case of power failure, we have had to manage using more simple resources. We had planned for it but I didn't expect it to happen. I had to use flip charts instead of the computer.

Documents as well as field notes during observation served as evidence about impact of erratic power supply on members' practice. I read through ten 2-page session feedback forms completed by facilitators. Four forms mentioned how erratic power supply disrupted an otherwise good workshop in big cities. Below is an example of one question related to the session to which Ratna and Savitri responded after each had facilitated sessions in two different cities, Bhopal and Patna, respectively:

**Question in feedback form:** What could have made this session better?

**Ratna:** 09/12/2008, Bhopal

Today's session could have been better if we had started on time, the electricity was more constant, and teachers were not called out to attend to the inspector.

**Savitri:** 09/12/2008, Patna

Today's session could have been better if the power hadn't fluctuated so much; the video clip had been shown in the afternoon [when the power supply returned].

There were daily power cuts even during observations. Arjun was conducting a session of the Train the Trainer program for five people on the first floor. However, EA has a UPS as a backup to which all the computers are connected. Arjun and his group of five people came downstairs to the computer at his workstation. Arjun played a digital video disk (DVD) to show a video-clip on his computer. The group stood around the computer and watched the video for 10 minutes after which Arjun had a brief discussion with them. The group then moved to resume the session upstairs.

Poor transportation facilities caused much inconveniences to participants' practice. Private transport as a car is a privilege that 95% of people in K-12 education cannot afford because of paltry incomes. A bicycle or a moped (a motorized bicycle) is a common mode of

transport in towns while a moped, auto or a public bus serves the needs in bigger cities.

Connections between towns and cities are by train or bus. Frequencies of bus and train fluctuate depending on the location and size of the town. For instance, a town close to a bigger city will have more train and bus facilities than a more remote town. So a distance of 50 kilometers, (approximately 31 miles) can take half a day. Varun who worked with the government school projects spoke of the difficulty he faced traveling between several districts and towns, many of which had no direct modes of conveyance. Varun said he needed to travel a whole day to cover a distance of a few hundred kilometers: “I have to travel from Mangalore to Hubli, from Hubli to Shahapura, and then to Yadgiri. It takes three changes and about 20 hrs by bus and train.”

Transportation was an issue with not only facilitators but also for the government teachers. Commuting within one town also posed an issue for some teachers as a few government schools were located in remote places. As Vinay commented in one subgroup meeting,

The school is far away from town. We cannot keep back the teachers after school. Their transport back into town is only by local transport that is available, a rickshaw [a two-wheeled cart carrying one or two passengers either pulled by a person on foot or by a person riding a cycle attached to it] which is not available after 4.30 p.m.

This section elaborated upon the several socio-cultural factors that influenced the community's learning, knowledge as well as the practice. Factors identified were age and gender, language, the Indian Education System as well as poor infrastructure. Respect for elders, a given in Indian culture, eased work for a few members of the EA community. Community members faced concerns with minority representation of either gender as those in the teaching profession are not yet ready to mingle freely with their peers of the opposite sex. Language, fluency or its

lack influenced the community in the way members worked and with whom they worked. Working with the Indian education system was a major influence on the community. Teachers preferred to abide by demands and expectations of the current system rather than to a pedagogical change that EA strives to introduce to improve the standard of teaching. Finally, lack of basic amenities also impacted the community's practice as members could not use resources as per their plan or travel comfortably.

### Summary

This chapter delved into the data to discover answers for the four research questions. The first research question uncovered how learning happened. Members of the EA community learned in several ways, formally with colleagues as well as with others outside of the EA community, as well as informally within the community. Another way members learned was through hands-on experiences. A direct, first-hand experience was by applying their past skills and knowledge into new situations, assuming new roles and responsibilities, and incorporating one's own or others' ideas. Finally, individual, collaborative as well as guided reflection was also one way that members learned.

The second research question asked what knowledge was produced in the community. Data showed that participants learned procedural and professional knowledge. Procedural knowledge included a systems understanding as well as the importance of creating visibility in the market. Both understanding were a requisite to enable individual members as well as the community to grow. To meet with individual's daily work needs, members of the community gained professional knowledge that was related specifically to their field and the skills knowledge that was required for expertise.



Without doubt, membership in the EA community influenced individual's practice as was found in response to the third research question. The data revealed that the participants expanded their repertoire of skills and knowledge. The expansion of skills and responsibilities happened because the community was open to exploring new opportunities. The data also revealed that participants had an increased understanding of themselves as individuals, as professionals, and of their practice.

The final part of the findings section presented the four socio-cultural factors unique to India that shaped the EA community's learning, knowledge, and practice. Factors identified were age and gender, language, the Indian Education System as well as poor infrastructure. Respect for elders as well as for teachers is still valued in Indian culture. Community members always had to deal with minority representation in workshops of males in urban areas and females in rural areas. This posed difficulties as men and women do not mingle freely as society still frowns upon it in several ways. The data also exposed how different levels of language ability among members in the community influenced whether members worked with the private or government school projects. The Indian education system disempowered teachers resulting in low motivation in professional development, a direct impact on the EA community's field of work. Bureaucracy within the system also made the community's work with government schools a cumbersome procedure. Last, poor infrastructure in terms of lack of uninterrupted power supply and good transport connections contributed to discomfort and inconveniences in the community's practice.

## CHAPTER 6

### CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

A qualitative case study was designed to understand how communities of practice (CoPs) foster continuing professional education (CPE). The following research questions guided the study: (1) How did learning occur in this community of practice? (2) What was the knowledge produced in this community of practice? (3) How was an individual's practice influenced by the community of practice? (4) What Indian socio-cultural factors shaped the process of learning, the knowledge produced, and the practice in the community? In response to these questions, four sets of interrelated findings were inductively derived from the data using the constant comparative method of analysis.

Findings of this study suggest that learning did occur as a result of participation in the Educators' Academy (EA) community of practice and that this learning was facilitated through structured interactions, informal interactions, hands-on experience, and reflection. The knowledge produced in the EA community was both procedural and professional. Participants identified that membership in the EA community of practice changed their professional practice through expansion of skills and responsibilities and increased self-knowledge. It was also found that socio-cultural factors of age and gender, language, the Indian Education System, and the lack of infrastructure impacted the EA community. Findings of this study suggest that membership and interaction within a community of practice fosters CPE.

This final chapter begins by presenting three conclusions prompted by findings of the study vis-à-vis the current literature. The chapter then continues to describe implications for

practice arising from the study findings. The chapter concludes with suggestions for conducting future research on this topic.

### Conclusions and Discussions

The three conclusions of this study are the result of exploring the EA community over a 3-month period, through observing the community on-site for the whole period of the study, analyzing documents, and interviewing 13 participants, all of who are members of the EA community of practice. The participants represent a variety of backgrounds that includes K-12 teaching, teaching in government and private teachers' colleges, working with multi-media resources for K-12, and research. The participants practice in a variety of K-12 settings in small towns, rural, and urban areas. The three conclusions are: (1) Learning is central to the professional advancement of a community of practice, (2) A professional evolves through participation in a community of practice, and (3) Socio-Cultural factors in a context impact professional practice.

The ethos of EA as an organization needs special mention as it lays the foundation for the conclusions and discussion. Every member's dedication to the cause of bringing about a change in K-12 education is definitely a driving force. EA's small size is also a key factor that enables the evolution of a close-knit community. In addition, certain routines, roles and structures have shaped EA's organizational culture to become empowering and supportive to benefit individual members as well as the organization. There is a deliberate effort to allow time for members to collaborate, debate, reflect, and innovate both formally and informally. People in leadership roles have a vision, are an inspiration, and blend with others as part of the community. Markedly a flexible structure at EA allows for members' autonomy while keeping them continuously challenged. All of the above helps to build trust and a feeling of oneness. It is not as if there are

no differences and cliques within EA. However, the overall culture of the organization creates an atmosphere where individuals ensure that their individual differences of opinion do not come in the way of EA's mission.

*Conclusion One: Learning is Central to Professional Advancement in a Community of Practice*

As the study found that learning within the EA community was continuous and that it occurred in several different ways, I conclude that learning is central to the professional advancement in a community of practice. The theoretical framework providing a lens to this study is that of communities of practice. This framework is based upon social learning theory and situated cognition theory, where emphasis is placed on the relationship between learning, practice and identity. The study may deviate from the original concept of voluntary membership in CoPs proposed by Lave and Wenger (1991) but it still comes under its purview as later literature on CoPs introduces variations in understanding this idea. Variations include seeding and nurturing (Brosnan & Burghes, 2003; Hung et al., 2006; Triggs & John, 2004; Wenger et al., 2002) as well as considering existing organizations as a community of practice (Wenger et al., 2002). This study is of EA as an organization which has evolved into a community of practice. In the discussion of this conclusion, I first identify similarities in the EA community to what the literature identifies as essential elements of a community of practice. This comparison helps to establish that the EA community fits the concept of a community of practice. Next, I discuss how the learning is embedded within the EA community and perpetuates its professional growth.

*Basic Elements of a Community of Practice*

Wenger et al. (2002) claim a community of practice is a unique combination of three fundamental elements: a *domain* of knowledge, a *community* that cares for this domain, and a shared *practice* in this domain.

The first critical element is “domain.” Wenger et al. (2002) mention that, “The domain of a community is its *raison detre*. It is what brings people together and guides their learning” (p. 31). A common finding among the participants of this study is that they all share an understanding of what constitutes CPE of educators working in K-12 systems. This understanding guides the EA community’s goals, approach to issues, what questions to ask, as well as what and how learning happens. Moreover, the majority of the members in the EA community also spoke of their keenness to work with teachers and contribute towards making a change in teachers’ practices. Thus not only is the vision and mission of EA as an organization to bring about change in education by working with teachers, the EA vision also synchronizes with the objective of the majority of individual members who make up the EA community. This synchronization is the foundation on which the EA community rests. It is the passion and interest of the members for the domain of teacher professional development that drives a spirit of inquiry into their profession as well as what maintains the vibrancy of the EA community.

Synchronization of EA’s vision and individual members’ goals has contributed widely to EA’s success corroborating Wenger et al.’s statement that, “The most successful communities of practice thrive where the goals and needs of an organization intersect with the passions and aspirations of participants” (p. 32). Hung et al. (2006) also supports this view with the findings of their study of eight heads of departments in a school cluster in Singapore. The authors found “an intrinsic alignment of personal goals with institutional demands” (p. 310), a congruence between teachers’ passions and beliefs with the sense of excellence expected from them.

The second element in a community of practice is “community.” A community is made up of people who interact, learn together, build relationships, “and in the process develop a sense of belonging and mutual commitment” (Wenger et al., 2002, p. 34). Participants in the study

affirmed that they always felt that they were a part of the community. This feeling of community is critical to the learning that occurs within it. While members share a common understanding of their work in professional development individual members within the EA community still bring in their unique perspectives on a given issue. Evidence shows that the EA community is supportive; members know who to approach for help in a particular area and also offer help to others if they perceive a need. At the same time, members mentioned that they debate on a lot of issues with each other because they come from different schools of thought.

Community also connotes frequent interaction. The EA community meets regularly raising several questions, discussing, problem-solving, and reflecting collectively as well as to arrive at a collective understanding on certain critical issues. Frequency in interaction helps to build a shared understanding not only of their domain of CPE of educators, but also of the EA community's practice. In the process, members build valuable relationships as well as a common history of the EA community. Simultaneously, interactions also helped one another to identify individual's uniqueness in relation to the EA community thus creating diversity within a commonality of belonging to one community.

The third element is "practice." Practice refers to a shared body of professional knowledge by all members of the community. There is evidence that members of the EA community possessed a common understanding of "socially defined way of doing things" (Wenger et al., 2002, p. 38) in the field of professional development in K-12. Members know of common approaches, standards, performance, and accountability expected from themselves as promoters of CPE as well as from their clients, the teachers. Literature says that over time members also share a repertoire of communal knowledge and resources that helps them to work effectively (Lave & Wenger, 1991; Wenger, 1998; Wenger & Snyder, 2000; Wesley & Buysse,

2001). Interestingly, Daley (2002) cites a similar view of “occupational communities with *tie-signs*, a complex system of codes which enable the members of an occupation to communicate to one another an occupationally specific view of the work world” (p. 81). The EA community’s practice reflected a set of frameworks, ideas, tools, information, stories, language, and documents that members shared. Several participants spoke of exploring ideas either with the whole community or in their subgroup. Wenger (1998), Wenger et al. (2002), and Brown and Duguid (1991) identify that a community of practice develops its own language as it evolves. The EA community used common jargon related to education such as curriculum, circle-time, and a period as a unit of school-time. Some of the other things that members share are tools such as a flow-line (session plan), lesson plan, annual planner, video-clips; stories of their school visits, workshop or a demo experience; models that they use in their sessions; best practices, successes, and gaps they identify to bridge within EA community. Together they also design documents such as session feedback forms for teachers as well as for themselves, workshop and training modules, and resources to use in their work. These collective activities point to members’ practices that evolve as a community product. Besides all these explicit understandings of their professional practice, members also had tacit understandings such as subtle cues and untold rules of thumb that they used in their work.

According to literature, CPE refers to a formal or informal educational activity that professionals undertake to understand and improve practice. Additionally, two important characteristics that emerge from the literature suggest that CPE is (1) intentional, and (2) ongoing. Thus, the key focus of CPE is to continuously enhance professional practice through professional learning. Learning, according to Flagello (1998) is the tool that not only empowers but also drives change in beliefs, attitudes and practice of a professional. Moreover, in the field

of CPE, the need for collective learning about practice is acknowledged by Schon (1987), Daley (2000), Daley and Mott (2000) as well as Cervero (2003). Cervero (2003) states that involvement in professional groups as “collective practice” (p. S16) will foster and influence practice and learning. In the next part of the discussion I draw upon the two characteristics of CPE, that it is intentional and ongoing, as well as the envisaged need in field for collective learning to the findings of this study. I discuss how intentional, ongoing, and collective learning within the EA community leads to its professional growth.

### *Learning in the EA Community of Practice*

With reference to the EA community I explicate three principles of a social perspective on learning that Wenger (1998) uses: “Learning is a matter of engagement” (p. 227), “Learning constitutes trajectories of participation” (p. 227), and “Learning means dealing with boundaries (p. 227).”

*Learning is a matter of engagement.* Wenger (1998) elaborates that learning “depends on opportunities to contribute actively to the practices of communities that we value and that values us, to integrate their enterprises into our understanding of the world, and to make creative use of their respective repertoires” (p. 227). Members of the EA community have several opportunities to contribute actively to the practice of the community as a valued member such as discussions and reflections during meetings and in-house training, or even through their written session feedback forms. Opportunities also allow members to integrate the community’s enterprise and to make creative use of the community’s knowledge and practices.

Learning in the EA community occurs through interaction as well as constant fine-tuning among members’ competences and experiences that result in new insights about the community’s practice. Vinay spoke of guided reflection. Several participants like Arjun and Nina



spoke of approaching specific colleagues for help in an area of their expertise. Learning happens through the various conversations, formal or casual, of which every member is a part.

Interviewees commonly spoke of frequent interactions within the EA community. For example, Meena spoke of how as an organization there is a lot of talk and discussion in EA, a view that Sangeetha and Nina confirmed. Sometimes interactions are structured, meaning interactions occurred because opportunities to meet each other were planned in advance, such as meetings or training programs. Such interactions are times to debate, discuss, update, problem-solve, share successes and the not-so-successful stories with each other as well as to arrive at a collective understanding on certain critical issues. These structured interactions help the EA community to develop common understandings about its practice.

Hung et al. (2006) state that one of the reasons for the success of nurturing a community of practice in their study was in keeping it informal. Daley (2000) confirmed this view earlier. In the study of four professions Daley (2000) found that daily interactions with colleagues helped in creating a socially constructed identity and increased a professional's allegiance to the profession. The ambiance in the EA community was favorable for members to have frequent informal interactions. Often conversations from meetings and training, or discussions and debates of other topics of interest continued into a lunch session in the kitchen, or over coffee or between tasks within smaller groups around workstations. Besides, participants referred to seeking help informally from peers who had expertise in specific areas. For instance, Arjun and Nina both spoke of approaching Mala for tips on facilitation and theoretical understanding and Vinay spoke of approaching Arjun for issues with translation of content for a training module.

Wenger (1998) states that engagement "does not entail homogeneity but it does create relationships among people" (p. 76). Harmony, happiness, disagreements, and tensions are all

natural in relationships. Findings indicate that members energize the community and there is a synergy among members in the community. Yet, there were also small cliques and gossips among members. Members of the government school projects interacted more amongst themselves. Shaila mentioned that these members met outside of work from time to time.

*Learning constitutes trajectories of participation.* A learning trajectory is temporal and occurs in a social context. Individual members learned within the EA community and built their personal histories in relation to the histories of the community. Thus every member's ongoing learning, inclusive of their past learning and future goals, is linked with the collective history of the EA community.

Lave and Wenger (1991) coined the term "Legitimate Peripheral Participation" (LPP) to refer to the characteristic of varying degrees of participation. LPP is "the process by which newcomers become included in a community of practice" (Wenger, 1998, p. 100). Through LPP experienced members of a community assist newcomers to negotiate meaning till the newcomers, in turn, become experienced members of the community, adopting more of the community's ways and norms (Lave & Wenger, 1991; McDermott, 1999; Wenger, 2000; Wenger et al., 2002). In time, newcomers also acquire the community's subjective viewpoints (Brown and Duguid, 1991).

Peripherality and legitimacy are two conditions that are required to make participation possible. Peripherality is described as minimal participation to allow for exposure to the practice of the community. Participation also legitimizes a newcomer to be treated as a member. If newcomers are not legitimized by the community they will not be privy to what the community considers as competent practice. Participants in the study described how they felt welcomed into the community and how everyone was always treated equally.

LPP suggests there is a constant sharing of knowledge among members which changes and reshapes the practice of the community. Participants who have been a part of the EA community for a few years now, such as Vinay and Arjun, spoke of how the more experienced members had supported and shared their knowledge with them when they were new. They also articulated their desire to replicate with newcomers the support they had received. LPP helps us to understand participation of newcomers who are of two types in this study. Either a member is a novice to the field as well as the EA community, or a member is a novice to the EA community but with years of experience in the field.

Spandana, as a new entrant to the EA community was initiated into the community's ways through an orientation program. Her actual learning of the practice of the EA community happened as she began to engage in the practice with others "on the floor" (Wenger, 1998, p. 99) through shadowing and working with peers, exchanging understandings, and learning the nuances of what the EA community's practice is in "real time." These activities show movement in Spandana's peripheral status as she became more encultured into the community. LPP in Gowri's case helps to understand the learning that occurs when an experienced person joins a new community of practice in the process of taking on a new job. Like Spandana, Gowri has also recently joined the EA community. However, Gowri is a retired teacher educator and has several years of experience in the field of teacher education. Yet she is aware of her peripheral status which is revealed by the fact that she is biding her time to share her ideas with the community: "I am newcomer and am so hesitant. Let me learn from them [others in the EA community] and then I will share [my ideas for activities]." From the time she joined the EA community, Gowri has been a full member in relation to the domain of the community of practice but she still needs to establish herself and be accepted by the community. Thus Gowri seems to be learning to be a

peripheral member. Gowri's example reveals that, "the extent of peripheral status can vary for the same person, even at the same time" (Fuller et al., 2005).

With new entrants, there are generational continuities and discontinuities in a community's practice. Learning occurs across the community as new entrants bring in new ideas and perspectives which reshape the community's practice. Thus, experts in the community also negotiate new meanings. Mala, Shaila, and Savitri who are the experienced members in the EA community affirm that their learning is ongoing.

An interesting finding in this study is how an expert member *intentionally* learns from a novice. Wenger (1998) frequently emphasizes constant learning and change in practice as new meanings and identities are negotiated when newcomers enter the community. However, the process of learning and change is often subsumed in the practice of the community. LPP elaborates how a novice intentionally learns to become a member of the community. An expert member of the community intentionally learning from a novice is not visible in the discussions. Findings in this study showed experts approached novices intentionally to learn a new skill. Varun who has been in the EA community spoke of approaching and learning computer skills from a new member in the community. Sangeetha also spoke of how she had requested and learned to use particular software from Spandana who was a novice. Fuller et al (2005) point to the absence of the role of teaching. There are several instances of members of the EA community teaching another member which is embedded in the process of learning.

Participation of members in a community of practice also varies from time to time. It can happen unintentionally depending on what work the member does. Or it can happen intentionally. The EA community is in an organizational setting. Varying participations occur depending on how the work is structured within EA. Work structures impact how members

intentionally or unintentionally participate and what they learn. “Lurking” is actually a form of intentional participation that is characteristic of a few participants of this study. The term refers to members who observe and listen and do not participate publicly. In a way lurking is attributable to the process of coming up to speed on the working of the community, meaning it permits an individual member to get enculturated into the community of practice. While lurking is more visible in an online environment, this study also showed that members often lurked within the EA community. Spandana and Sangeetha spoke about deliberately spending time observing and listening to their colleagues. Lurking allowed them to understand members’ views on certain practice as well as some practices of the EA community.

*Learning means dealing with boundaries.* Boundaries arise because of multimembership or participation in multiple communities. Brokering refers to the relation of a member in one community of practice with other CoPs. Brokers make “new connections across communities of practice, enable coordination, and ... open new possibilities for meaning” (Wenger, 1998, p.109). They engage in “import-export” (Wenger, p. 109) through their multimembership in various CoPs emphasizing the significant continuities between practices as well as introducing elements from one into another (McArdle & Ackland, 2007).

Brokering can happen in varying degrees as findings showed. Vinay, Spandana, and Pavitra keep contact with ex-colleagues within the field of teaching at school and college levels that bring in new perspectives and insights into their respective work with teachers at EA. At the same time, these members are also able to share new ideas and perspectives they gain from the EA community with their ex-colleagues. Brokering in Vinay’s or Pavitra’s case influences their personal beliefs and practice.

On the other hand, as Wenger (1998) suggests, some members, especially those who are experts in a community of practice, have a wider influence on the community. Mala and Savitri, the most experienced within the EA community and hence with more legitimacy, are able to influence the EA community through their brokering. Moreover, their work within EA also provides them with opportunities to import and implement ideas. Savitri develops content and with Mala often conducts the in-house training programs. Hence they can influence the development of new practices, mobilize attention, and also address conflicting interests in the process of aligning different perspectives. Savitri mentioned how she tried to initiate a culture of questioning into the modules she developed for EA's workshops after she had observed the young teacher in rural Rajasthan creating such a culture in his class. Mala spoke of introducing new perspectives during meetings or training programs.

Wenger (1998) claims, "The job of brokering is complex: It involves processes of translation, coordination and alignment between perspectives" (p. 109). Mala's words exemplify the complexity of bringing in new ideas and perspectives that she has gained from participating in seminars or partner forums. She conveyed that although other members in the EA community may not accept her new views quickly it is still a good way to bring in new perspectives to widen the community's perceptions:

It [new ideas] may not be received with immediate understanding or acceptance because it is still an alien idea or thing for somebody else or part of people. But I would not lose heart because I think these are all ways as tilling the soil, of sowing the seeds and at some later point real learning, or making sense or meaning happens. But unless one does that one does not sow the seeds, one can't really think of any kind of growth at a later point of time.

Straddling CPE and CoPs, Triggs and John (2004) challenge the linearity embedded in traditional models of professional knowledge dissemination and re-model the relationship between the intersecting communities of research and practice. Referring to an omni-directional nature of knowledge movement in the “layers of communities” made up of teams of teachers, teacher educators, and researchers, the study findings show the development of the “enabled professional” (p. 437). Individuals in Triggs and John’s study remained members in all the three communities of practice but operated differently between them. The authors conclude that these layers of communities effectively generate or disseminate professional knowledge and support professional development.

The movement between layers of communities in the study by Triggs and John (2004) reflects the concept of brokering within one structure. Subgroups within the EA community as well as the whole group may be perceived as the layers of communities. Learning was omni-directional between subgroups as well as between subgroup and whole group. Members like Sangeetha who straddle both government school and private school projects exchange ideas and practices from one subgroup to the other. Members also import and export ideas and practices from whole group meetings into their subgroups or vice versa. For instance, Nina spoke of an incident during a whole group meeting where she had shared her experiences with using reflective journals. Spurred by Nina’s success members of the government school projects decided to re-introduce reflective journals in their projects.

### *Learning through Reflection*

An intrinsic tool to learning and improving practice is through reflection. Critical reflection changes the profession as well as facilitates change in professional and client relationships. As professionals open themselves up to change, learn new behaviors and practices,

and develop new relationships, they discover more about themselves and their world. When a professional becomes critically reflective they are empowered and enable other professionals and clients toward growth.

Schon (1987) emphasizes reflection-in-action for professionals to gain “professional artistry” to deal with day-to-day problems in practice. Members of the EA community work with educators in workshops or in school settings. In both settings they are required to make decisions on the fly and in the “real world.” This becomes the active and dynamic world of the community’s practice. CPE literature emphasizes an additional need for collective reflection-on-action (Cervero, 2003; Daley, 2000) which Eraut (1994) and Karlsson et al. (2008) advocate should have a deliberate disciplined approach with the right people.

Findings from this study suggest that reflection is a common vehicle to gain new insights about practice within the EA community. In particular, findings support the view shared by both Eraut (1994) and Karlsson et al. (2008). For several members, planned meetings serve as venues for collaborative reflection. Such reflection allowed one to gain clarity or new perspectives on practice. Sangeetha spoke of listening to others and understanding her own practice better. In fact, a few participants like Ratna and Sangeetha mentioned that they missed not having the regular meetings in the last few months because of too much travel of members in lieu of the national-level conference that EA was planning later in the year.

Reflection in this study also happened in two other ways: self reflection and guided reflection. Members like Arjun, Savitri, Nina and Sangeetha mentioned that they often reflect on their own on what went right in their workshops and what can be improved for the next time. They then made necessary changes based on their new insights. Guided reflection, as in Vinay’s case, also is practiced within the EA community whereby an experienced member guides another



member to reflect on situations through specific questions. This practice of guided reflection supports findings from the study of nursing managers by Stralen (2002). Stralen's study used eight reflection-action cycles where external facilitation helped the managers to gain new perspectives through a four-step process of reflection on experiences.

*Conclusion Two: A Professional Evolves Through Participation in a Community of Practice*

Two of the four research questions that guided the study inquired into (1) What knowledge was produced in the community? and (2) How did membership in the community of practice influence individual's practice? Participants of this study identified both personal and professional growth after joining the EA community. The discussion of this conclusion begins with the topic of personal growth briefly and elaborates on three aspects of professional growth: (1) gain in professional knowledge, (2) adopting new roles, and (3) change in beliefs and practices.

Evidence shows that participants developed a better understanding of their own strengths and weaknesses in both their personal as well as professional lives. Members acknowledged gains in confidence and maturity in handling situations, identified latent talent, and improved people skills in and outside of work. This personal growth also had a definite impact on the members' professional growth. For instance, when Pavitra joined EA it was her first experience in having to deal with government officials. Her anxiety levels were very high as she was shocked at the slackened approach of the officials and the slow pace at which the government projects moved in spite of her personal persistent efforts. Gradually she became calmer and more accepting of the working styles in the government system. This acceptance, Pavitra added, enabled her to execute the role of center coordinator more ably irrespective of the continued

concerns with dealing with the government officials. Similarly, Mala's realization that it is difficult to please everyone allowed her to make business decisions faster.

In the context of mandatory attendance in CPE for re-licensure and participation, Queeney (2000) affirms that participation in CPE programs does not guarantee improved practice. Rather, Queeney emphasizes that for any change to happen in practice, the most important aspects are professional skills, performance abilities, and knowledge to be able to function competently. Findings in this study support Queeney's view as it showed that members of the EA community developed knowledge, skills, and abilities.

### *Gain in Professional Knowledge*

Members of the EA community gained procedural and professional knowledge. I discuss members' procedural knowledge under my third conclusion as the topic fits better under the overarching idea of context. By professional knowledge, I refer to an individual's knowledge specific to his or her scope of work within the EA community. It is what a member knows about the field of professional development as well as knowledge of specific skills that was relevant to their day-to-day practice. Professional knowledge is not formal knowledge such as achieved by specialized years of training in a field like medicine or engineering. There is no formal training to become a professional developer in India. None of the members in the EA community are formally trained to be professional developers or adult educators. The majority of them have been trained to be a teacher in K-12 settings while a few have worked as a lecturer in teacher training colleges. One may perhaps include the trainings members have had related to specific aspects of their jobs as coming closest to formal knowledge.

Findings showed that after joining the EA community, members gained a better understanding of topics specific to their field of work such as adult learning and content

development. In addition, participants also learned about communication, observation, and facilitation skills. All of the above knowledge was critical to their work with teachers and was immediately translated into their day-to-day practice whether it was school support or facilitating workshops. Arjun said that he understood that teachers learned only what they thought was of value to their work. Savitri realized the challenge in teaching adults is that they come with set ways and so are not open to change quickly. Identifying gaps in the understanding of peers, like Savitri and Mala perceived, also indicate an evolutionary phase in a member's practice because that understanding paves the way to find ways or create opportunities to bridge the gaps.

### *Adopting New Roles*

Wenger (1998) states “learning is the source of social structure” (p. 96). Social structure within a community is through the roles people take. People take on formal as well as informal roles in a community, meaning not all roles are designated. In their study of heads of departments from eight cluster schools in Singapore, Hung et al (2006) mention how roles emerged as the community of practice evolved. However, the study identified that the leader in a community of practice identified other members who showed promise and gradually delegated specific roles to the members. Thus a flexible leadership involves “the ability to entrust specific roles to individuals within the CoP and develop mutuality and trust through these roles” (p. 311).

Participants in this study revealed that they expanded their repertoire of skills and responsibilities after joining the EA community. As in any organizational structure Mala plays the role of a director at EA. There are also two heads who oversee the two sections related to government and private schools. However, as it was evident in the meetings, members within the EA community took lead roles if they felt it was their responsibility to get something done. Unlike Hung et al.'s (2006) study where leadership identified other members' capabilities, this

study showed that besides being delegated, roles emerged in other ways too. Members volunteered to try a new role because they were interested. At other times peers encouraged a member to take on a new role because peers identified a special ability in the member that would suit the role. It was in this way that Shaila has become the “budget expert” within the EA community although she did not have any prior experience. In a few cases, members realized their potential after taking on a new role. Savitri and Nina identified latent talent in specific areas such as creativity and structure respectively and used it in their practice. Roles also emerged in critical times like the time when everyone worked in different areas to complete and send a proposal to the funder by a deadline. The synergy within the EA community facilitates members to voluntarily accept roles and responsibilities as a way of their contribution.

With new roles come new responsibilities as well as new skills which contribute to professional growth of a member. Members also mentioned that they adapted to situations and used opportunities to take on new roles and responsibilities. New learning and knowledge intertwine with practice as people learn by doing, gaining new insights which in turn help them to execute their new roles better. Thus individual members develop a strong sense of what is the “practice” of being a professional developer. Evidence also showed that participants learned new skills or honed existing skills in the course of their work after joining this community such as computer skills, communication skills, and facilitation skills. As Schon (1987) would term it, we find much of the learning and knowledge that members of the EA community gained is actually “in the swamp of practice.”

#### *Change in Beliefs and Practices*

Literature on CoPs claim that more participation in a community of practice leads a member to adopt more of the community’s ways, norms, as well as subjective viewpoints

(Brown and Dugid, 1991; Lave & Wenger, 1991; McDermott, 1999; Wenger, 2000; Wenger et al., 2002). Membership in the EA community caused a change in members' beliefs and understanding about certain aspects of practice gradually. Through interactions with other members, by being initiated into the community's stance in training, and by being involved in the community's practice were ways the change occurred. For instance, Spandana explained the change in her earlier understanding and practice of sharing feedback. She was used to a one-sided and subjective feedback that was common in the corporate world. Spandana shadowed Nina during a school observation and saw a participatory process of giving feedback that is advocated by the EA community. Additionally, Spandana read through several feedback forms to get an idea of how to conduct an observation and give feedback and also attended an in-house workshop on the same topic. Similarly, Arjun described that he had to move away from the perceived "magic formula" that he was used to as a lecturer in a teacher training college to consider thinking "out of the box" in this community.

*Conclusion Three: Socio-cultural Factors in a Context Impact Professional Practice*

Two concepts in CPE literature are vital to this conclusion: the context of practice, and procedural knowledge that professionals require for successful practice. Context refers to where the practice is situated. Practical or procedural knowledge is knowledge that is situated in action and socially constructed in the context of practice. It is the knowledge of how to do something, and implies dynamic learning. A major component of Wenger's (1998) theoretical framework of CoPs is practice. Wenger (1998) posits that practice is a place and a process as well as the source of coherence of a community. Thus the concepts of context and practice are intertwined in the CoPs as practice occurs within the community and through members' participation in it.

For this discussion the context of practice for the EA community is in its organizational setting. I begin this discussion from a narrow focus of the practice setting and progress to a wider view of practice setting of the EA community. The discussion is under three headings: the micro context of practice, the meso context of practice, and the macro context of practice. The micro context considers the EA community in its organizational setting, meso context positions the EA community within the field of education in India, and the macro context considers the EA community within the context of Indian culture

### *The Micro Context of Practice*

The strong link between learning, context, and practice is emphasized in the CPE literature (Daley, 2001; Daley & Mott, 2000; Kwakman, 2003). Kwakman's study of teachers in the Netherlands concluded that teachers learned most from, and in, performing daily activities in their schools. Daley (2001) defines context as a "place where professionals provide care or deliver services to clients" (p. 38). Often these places are the workplace settings or organizations in which professionals deliver their services. Daley (2001) hypothesizes that professionals make meaning going back and forth between their practices and learning environments. Bierema (2002) and Daley (2002) consider every organizational setting as a unique context of professional practice. Bierema (2002) adds as each organization has its own combination of values, culture, uniqueness, and social norms that coalesce into a complex sociocultural system, organizational factors and organizational dynamics impact practice of individuals as well as that of the organization.

Congruent with Daley's (2001) definition of context, the EA community qualifies as a practice context by providing services. In addition, the community also affords learning opportunities for members' application to practice. Participants in the EA community discuss

and reflect upon practice and actually carry out their practice within and through the community. Thus the EA community becomes a vehicle, venue, and recipient of learning strengthening all components of practice.

Findings from this study support Daley's (2001) hypothesis that professionals make meaning going back and forth between their practice and learning environments. There are numerous examples of how the practice of individual members as well as the practice of the EA community changed and developed to suit the context in which they worked. Commonly found evidence in this study was how differently the EA community planned and implemented the government school projects and private school projects because work settings and the clients' needs in these two types of projects differed.

Daley (2002) suggests that CPE should begin to consider individual agency and positionality as a major influence on professional learning. This study showed that the context of individual members influenced the community's practice. The members of the EA community come from a variety of socio-cultural backgrounds as well as a variety of past work experiences. These differences showed subtly in observing which members hung out with whom in their free time. Differences also showed up in the levels of participation during whole group meetings. According to Mala, members' social contexts "where somebody has not knowingly spoken or if they necessarily only followed orders" limit not only their participation levels at meetings but also influence how fast they absorb new perspectives.

Differences in a member being a local or being a non-local also influence the community's practice. Having a local member like Vinay helps the EA community to establish relationships with, and understand the ways of the government officials. On the other hand, having a member who does not look like a South Indian also benefits the community's practice.

Anjali, a member of the EA community but who was not interviewed, is typically North Indian in her looks and demeanor. She is of a very fair complexion and is assertive. She is different from a typical South Indian who has a medium to dark complexion and is generally known to be not too assertive. During one of my observations, Anjali commented that she finds it easier to get entry into schools that EA community considers as probable new clients because she looked and spoke differently from the people the schools were normally used to.

### *The Meso Context of Practice*

The meso context refers to the EA community's practice situated within a wider frame of the field of education in the Indian context. Cervero (2003) advocates that in today's needs for successful CPE, "Place matters" (p. S15). He proposes that professionals need a systems understanding as "Decision making takes place in a highly charged political-economic context" (p. S10). System includes the professional-client interaction, the organizational systems and processes that comprise the practice, and the wider professional and political-economic systems that frame practice (Cervero, 2003). Other writers in CPE literature (Cantor, 2006; Queeney, 2000; Wilson, 2000) also advocate adopting a systems dimension.

In alignment with the need for a systems understanding in CPE, the study findings showed that the EA community has knowledge of the complex systems in which its practice is situated. It is apparent that members constantly negotiate their practice with visible as well as invisible stakeholders. The EA community negotiates and implements projects differently with government and private schools. For instance, while working with government school teachers, the EA community keeps in mind the needs of these schools, the resources that are available to the teachers, as well as the students who attend the government schools. The community's practice does not stop there. The EA community is also aware that a change in teachers' practice



involves other people such as government officials who supervise government schools, and teacher educators from government colleges who often conduct in-service programs for government school teachers. Therefore, EA also conducts programs now and then for officials as well as teacher educators.

Understanding the system also meant getting a grasp of power relations within the Indian bureaucracy at the central and local government levels, within a school setting, or recognizing the scope and limitations of a probable project that can get approval for funding. Complex procedures to gain and sustain government projects hamper the community's enthusiasm but at the same time the community also realizes that funding opportunities and creating visibility in the market come by getting involved with government schools. The EA community also works to create visibility in the market for its products and services as one way to establish its practice in the public eye.

### *The Macro Context of Practice*

In relation to the context of practice, CPE literature advocates exploring the organizational setting, individual agency and positionality (Daley, 2002), and a systems understanding (Cervero, 2003; Queeney, 2000; Wilson, 2000). There are hardly any studies in CPE that have focused on socio-cultural aspects through the lens of culture. In this part I introduce the socio- cultural factors within the Indian context that influenced practice of the EA community.

Culture perhaps is not explored much in CPE as it veers more towards anthropology and cultural psychology. Or, maybe because CPE literature is still confined to a single culture where many events are taken as natural and a part of human nature and so are not considered as variables. Culture is difficult to think about, "Like fish in water, we fail to "see" [quotes in the

original text] culture because it is the medium within which we exist” (Cole, 1998, p. 8). Like several other contributing factors to context such as organizational culture or positionality, culture is also invisible. So the challenge I face is to make visible the invisible.

India is one of the ancient civilizations in the world. Its culture is rich and is deeply ingrained in its people. Traditions and values have been handed down for generations. Social factors also are embedded within the culture. Socio-cultural factors play a role in shaping and reshaping values depending on what contributes to the day-to-day lives of individuals and families. Socio-cultural factors also influence professional lives of individuals as well as organizations. This study showed that the community’s practice was influenced by being Indian and being located in India. I discuss factors of age, gender, and language under socio-cultural factors. I also add a factor called the legacies of the British Raj as colonial rule embedded certain attitudes and customs that have become an inseparable part of the Indian culture.

*Age.* Respect for age is a given in India. I add respect for teachers under this because teachers merit the same regard as “elders” get in this culture. Touching the feet of an older person for blessings, folding both hands to greet, maintaining a physical distance, a lower tone of voice, and addressing with a plural pronoun if speaking in a regional language, are accepted marks of respect given to elders. These are the superficial manifestations of showing respect that Ratna mentioned in her interview. Teachers and elders are looked up to for wise counsel and are not treated as equals. Respect is not often articulated but it is reflected in the attitude one exudes in interactions.

Within the EA community as a workplace age did not influence practice. However, this study showed that respect for age influenced the community’s practice with respect to the schools and teachers with whom the members interacted. Older members like Varun and Gowri

perceived that teachers respected their age, while witnessing a non-traditional teacher-student relationship struck Ratna as a lack of showing respect to the teacher. If other participants did not comment on this topic of age and respect, it may be because they visit run-of-the-mill schools where nothing contradictory occurs.

*Gender.* India is still predominantly a patriarchal society. Girls are still not educated in a few pockets in India although in most urban areas women get equal opportunities as men. Education in India is dominated by women especially in K-12 environments. The EA community also is predominantly of female members. Having hardly any men in the EA community constrains its practice from benefiting from male perspectives on issues. On the other hand, as school teachers are mostly women the female members of the EA community find it easier to establish good relationships with them, even to have a woman-to-woman chat.

Findings showed a few socio-cultural practices subtly pervaded member's subconscious thinking and influenced the community's practice. An interesting occurrence in the findings in relation to gender related to rural India. Often while referring to India it is common to speak of the country with an imaginary divide, the North and South, because the cultures are drastically different. A general understanding is that people in rural areas in India, especially in North India, are not much educated and that they are extremely traditional. Males in the rural North are in complete control of their families. Both Savitri and Ratna were surprised as they had experiences that were contrary to the generic view of rural North Indian men. Ratna spoke of the traditional male teachers in Rajasthan as being more open to change than the male teachers she came across in metros. Savitri mentioned that teenage burka-clad Muslim female students attended schools rather than as customary to being married off by their parents. Besides, Savitri added that the girls were also being encouraged to question their male teacher. A gradual change is happening

within education and gender and the change is reaching into the interiors of India unlike previously. EA community's practice negotiates with these changes when it works with schools and teachers in rural areas.

Yet another topic with gender and traditional practices is related to participants' comments on how male teachers prefer to be physically seated separately from the women. Findings showed that this preference for seating is a common occurrence in the most progressive schools in cities such as Mumbai and Bangalore as well as in rural areas. Traditional Indian custom does not encourage intermingling of genders in public spaces; it is still not welcome or easily accepted. Although this custom is changing slowly, the EA community does not force gender intermingling if the teachers show or voice discomfort. Rather, members of the EA community adapt their practice to respect teachers' seating preferences.

*Language.* India has 22 official languages with most states having its own regional language. With the television and constant movement between people in cities, most Indians are fluent in at least two Indian regional languages. Hindi, the national language, is widely spoken and understood in North India and only to some extent in the south. English is additional and often scores ahead of the second Indian language in most middle and high income families.

The EA community is small. They have a good sprinkling of people with fluency in a few languages, apart from Hindi and English. Working at grassroot levels requires mastery over that region's language. At the same time mastery in other regional languages helps business to venture beyond one region. The community's practice has benefited by having members who can work at different sites that require different language fluency. It has helped the community to take its practice into towns and rural areas within Karnataka as well as across the country and even outside of India. For instance, Vinay and Arjun who are fluent in Kannada work in towns

and rural areas of Karnataka while Savitri and Mala who do not speak Kannada but are fluent in Hindi work with projects in the north. Meena spoke about her fluency in Tamil that helped the EA community to work in Sri Lanka. However, lack of fluency in a regional language also poses issues for the community's practice. Recruiting people with teaching background, fluency in Kannada, and driven by the same passion and perspectives on education as of the EA community is not easy. Thus in the process of prioritizing fluency in Kannada and a teaching background while recruiting, Mala spoke of an urgent need to help members' understand the organization's mission and vision.

*Legacies of the British Raj.* One cannot talk of India without connecting it to the British rule for about 100 years. Colonial rule left behind a large legacy that has become a part of the Indian culture. I elaborate three areas that are related to education as their impact is still visible and have an influence on the EA community's practice. First, I discuss the role of the teacher in the educational system that was set up by the British in the nineteenth century. Second, I explain the influence of the English language as it gained a dominant status in India, and third, the superiority of anyone who is white and anything that is Western.

The British set up an education system that caused several schools to mushroom across the country. However, the system crippled a teacher's role. Kumar (2005) comments on how teaching became a weak profession. Teachers had a poor professional identity and status and had no say in the curriculum (Kumar, 2004, 2005). The dominant role of the examination system resulted in the phenomenon of a "text book culture" which made "the prescribed text as the *de facto* curriculum rather than as an aid" (Kumar, 2005, p. 67). Thus, as Kumar (2005) adds,

The teacher's job was reduced to preparing the student with the right kind of answers to be reproduced in the examination copybook, and the rational way to do this was to restrict teaching to the content of the textbook (p. 86).

Kumar (2005) explains how a fear of deviating from the text book, running out of time from completing the text, and a fear of students not succeeding in an exam established a culture of teaching that still pervades. "Patterns of teaching, once established, do not give way easily. They become part of the culture of education" (p. 87).

As a spin off the assigned low status of teachers still continues and has resulted in low motivation (Ramachandran, Pal, Jain, Shekar & Sharma, 2005). Other issues with government school teachers' in particular that are in the literature are: absenteeism and lack of accountability (Dyer, 2000); male teachers having alternative sources of income (Ramachandran, et al., 2005); and teachers' profession being highly politicized (Ramachandran et al., 2005). The EA community is caught in the challenge of making a change in teachers' practice that is embedded in such a system. Findings showed the challenges members faced with government teachers are congruent with the issues of absenteeism, lack of motivation and accountability in CPE programs.

The second legacy of the British to Indian culture is that English today enjoys the rank of one of India's official language. While the positive thought is that the mastery of English has helped the Indian economy, imposing the English language on the public has left behind negative influences too. English has become a medium of instruction and as the commonly spoken language among several Indians. Knowing and not knowing English has created a divide between the elites and the masses. In Mala's words, "In our country language is equated with the kind of background you come from, what kind of schools or colleges you went to. And

unfortunately English is seen as the far more dominant language.” She perceived that the divide “hampered and handicapped people who cannot speak English” as it closed many doors to new opportunities. Within the EA community, all the work in the EA community is done in English. Different language abilities in English among members results in a subtle divide among those who are fluent in English and those who do not. As Mala explained:

Dialogue and discussion just enhances one’s understanding of an idea, and the moment conceptually you understood it, then language is not such a barrier. Otherwise, language is a barrier. Somebody who does not understand the concept very well but can speak using it fluently in English can take over somebody who can make a deeper sense of it but is struggling because he does not have the words in language to speak it out.

Finally, rightly or wrongly, The British exuded an attitude of superiority that still has left a strong residue in the minds of Indians. Indians associate anyone with “white skin” and anything being Western as better than brown skin and what is Indian. This includes education. Although Indian higher education institutions have been established in foreign countries, they still are very few in number. Western universities have entered the Indian market in numbers although not many in the area of teacher education. The EA community conducts an international diploma program for teachers from a recognized foreign university. Findings showed that accountability was very high in the cohort of teachers enrolled in this program. Conducting this program has benefited the EA community as it has established a recognition and relationship with a foreign university. This gives the community a competitive edge. In addition, the EA community’s practice has widened its own ability and has incorporated several ideas from this program for domestic use.

In this section I discussed three conclusions. The first conclusion was that learning is central to the professional advancement of a community of practice. I began with the basic elements of a community of practice, domain, community, and practice. I then discussed that learning is central to EA community. Learning happened through engagement, trajectories of participation, dealing with boundaries, and reflection. The second conclusion was that a professional evolves through participation in a community of practice. Briefly touching upon personal growth the discussion dwelt on how members evolved professionally through gain in professional knowledge, adopting new roles and responsibilities, and change in beliefs and practices. The last conclusion was that socio-cultural factors in a context impacts practice. Under this conclusion I considered the EA community at a micro, meso, and macro level of the context situating it as an organization first, then the organization in a wider context of the field of education, and finally the organization in the larger context of the Indian culture.

#### Implications for Practice

This study has implications for the field of CPE in professional environments such as professional associations, workplaces, as well as in the field of education. I consider these three settings for implications. This study revealed how members of the community learned with each other in the context of their practice drawing upon knowledge and learning back and forth from the community and their individual tasks. The study also showed individual members as well as the community evolved in practice in a non-traditional environment.

Professional associations are usually the gatekeepers of a profession. Professional associations often take the role of providers and certifiers of CPE. It is also common knowledge that recertifying agencies are reluctant to try any mode that deviates from formal education. This case study discovered that CoPs was a possible valuable resource for professional education and



practice development in a non-traditional environment. Informal and non-formal ways like CoPs may be counted towards CPE by providers and certifiers. To understand the concept of CoPs professional associations, providers, and certifiers can look more carefully at the CoPs they belong to and also maximize opportunities that allow for CoPs to evolve around their professions.

The study was set in an organization. It showed that the individual's practice as well as the practice of the community evolved through membership. Workplaces can benefit from this study by creating an ambience that will be favorable for CoPs to form and evolve. Frequent informal interactions seem to be one of the key factors that help CoPs to evolve as seen in this study. Studies by Hung et al (2006) and Niesz (2007) also confirm this view. Thus, rather than consider time spent informally as a waste of productive time, workplaces need to be open to perceiving that building social relationships at work is a step to effective practice. Organizations that exist in socio-cultural environments where community building is a way of life need to make a deliberate effort to create spaces and opportunities at work that will encourage frequent interactions. Out-of-office-space and outside of office time activities can be an option in other cultures where time away from one's workstation is not looked upon favorably. While the out-of-office activities do not tread on a cultural perspective it also simultaneously allows for frequent interactions that can help interpersonal relations.

Workplaces may not be as small as EA is in this study. However, with subgroups forming within EA the study showed possibilities for small as well as big CoPs mushrooming in an amiable environment (Hodkinson & Hodkinson, 2003; Wenger, 1998; Wenger et al., 2002). While CoPs may be made up of varied numbers of members (Wenger et al., 2002) the study

showed smaller numbers helps members to gain trust and familiarity with each other thus creating a stronger bonded community.

CoPs can be a good option as part of staff development programs. Seeding and nurturing CoPs can create an agency among members. Wenger et al. (2002) suggest “finding the triggers to catalyze evolution” ( p. 73) of CoPs. Those who design staff development programs can benefit by identifying thought leaders in an organization and work with them to find triggers in the form of a few broad topics of interest and value to the employees (McDermott, 1999). According to Hunt (1992) and McDermott (1999), recognition of CPE musters implicit organizational support as well as participant accountability. Hence, aligning the goals of CoPs to the goals of the wider context (Brosnan & Burgess, 2003; Wenger, 1998), namely those of the organization as well as the needs of the market is essential (Cervero, 2003; Robertson et al., 2003; Wilson, 2000 Wenger, 2002).

This study also points to the importance of an organizational culture that helps the organization to cope with its environment. The organizational culture in EA exudes values and norms that enable a supportive and collegial workplace. Strong interpersonal interactions within and between subgroups has resulted in EA’s culture. Additionally, members are empowered through adopting and establishing a process of inquiry to contribute to a healthy blend of progress for the individual and the organization. Leadership has obviously played a major role in creating a favorable environment for CoPs to evolve and sustain in EA. Leaders in other organizations can aim for establishing such an organizational culture. While subcultures exist in many organizations it is imperative that the subcultures abide by the core values and norms of the organization to ensure the overall progress of the communities as well as the organization is at the heart of its endeavor.

In cultures like in India, as this study showed, organizations working in the area of teacher professional development may have people from a medley of fields with no direct exposure to adult education. With no requirements for certification or license, the onus to develop practice rests within the members as well as the organization. CoPs could be a good way to stimulate the development and quality of practice in such cultures.

Within the specific field of education, this study has implications for CPE of teachers, and those in managerial and administrative positions within K-12 environments. Public school teachers have mandated hours of CPE for relicensure and recertification. Schools and school districts could identify existing CoPs and nurture them through characteristics identified in this study.

#### Recommendations for Future Research

In reflecting on this study and its goal to understand how a community of practice fostered CPE, I identified several suggestions for future studies on this topic. Although this qualitative study explored a unique environment some findings lend opportunities for further exploration.

First, the study perceived the whole organization as a community of practice. However, there were several subgroups within EA arising from their work structures, each having its own dynamics as well as in relation to the whole community of practice. Subgroups within this organization were smaller CoPs which were not explored in-depth. A future study can investigate relationships between several CoPs within an organization. A good lens to probe with can be the concept of brokering where members import and export knowledge and ideas into and out of the various CoPs to which they belong.

Second, this study focused on CPE and CoPs of adult educators. Working in the area of K-12 education required a specific set of skills and knowledge that contributed to daily work at EA. However, each profession dictates what skill sets and knowledge are required depending on its scope of work. A future study can focus on CPE in CoPs of other professions. It will be interesting to find how a profession directs the way professionals learn within a community of practice.

Third, this study considered a setting in India and identified socio-cultural factors unique to Indian culture that influenced the professional practice of a community of practice. Similarly, each culture is different and so the socio-cultural factors that shape a community as well as its members will vary. Future research can explore other cultures and identify what socio-cultural factors affect CPE. Studying different cultures in the context of work will help to develop models of learning and development in CPE to meet the diverse client needs of today's workplaces.

Fourth, from the perspective of organizational culture, EA was characterized by a manageable number of employees, effective leadership and open communication. Research can further delve into specific aspects of organizational culture to identify how they can be optimized. For example, a future study can be on what type of leadership roles will be best suited for a community of practice. Or, as leadership roles are fluid and emergent within the community, a study can explore how leadership roles emerge in CoPs. Future studies can also be directed towards the optimum number of members in CoPs.

Methodological recommendations for future research on this topic include the use of cross-case or multiple-case studies rather than just one community of practice as done in this case study. Cases representing the same profession of adult education have two possibilities. Cases may be CoPs of adult educators working in various levels of education or cases may be

focused on K-12 education. Either way, cross-case or multiple-case studies would throw light on the phenomenon giving us more insights into the complexities of CoPs. Revisiting the same community of practice at a later date to investigate what changes have occurred over time will make a good longitudinal study.

### Summary

This chapter began with three conclusions and discussion. The first conclusion was that learning is central to the professional advancement of a community of practice. Discussing EA through the basic elements of domain, community, and practice helped to establish EA as a community of practice. I then discussed how learning occurred in the EA community. The second conclusion was that a professional evolves through participation in a community of practice. The discussion explicated personal and professional growth of members. Change in practice occurred through increased professional knowledge, adopting new roles and responsibilities, and change in beliefs and practices. The third conclusion was what socio-cultural factors in a context impact professional practice. I considered the EA community at a micro, meso, and macro level of the context.

The second part of the chapter is the section on implications and recommendations for future research. I suggested future research should attempt to investigate several topics related to CPE using CoPs and also include a study of other cultures.

## REFERENCES

- Anderson, J. R., Reder, L. M., Simon, H. A. (1996). Situated learning and education. *Educational Researcher*, 25, 5-11.
- Auerbach, C. F., & Silverstein, L. B. (2003). *Qualitative data*. New York University Press
- Azzaretto, J. F. (1992). Quality control in continuing professional education: Accountability, effectiveness, and regulation. In E. S. Hunt (Ed.), *Professional workers as learner: The scope, problems, and accountability of continuing professional education in the 1990's* (pp. 57- 92). Washington, DC: Office of Educational Research and Improvement, U.S. Department of Education.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1989). Social cognitive theory. In R. Vasta (Ed.), *Annals of child development: Vol.6. Six theories of child development* (pp. 1-60). Greenwich, CT: JAI Press.
- Bassi, S., & Polifroni, E. C. (2005). Learning communities: The link to recruitment and retention. *Journal for Nurses in Staff Development*, 21(3), 103-109.
- Beckett, D. (2001). Hot action at work: A different understanding of “understanding”. In T. Fenwick (Ed.), *Sociocultural perspectives on learning through work* (pp. 73-84). *New Directions for Adult and Continuing Education*, 92. San Francisco: Jossey-Bass.
- Belzer, A. (2003). Towards broadening the definition of impact in professional development for ABE practitioners. *Adult Basic Education*, 13 (1), 44-59.

- Benton, S., & Giovagnoli, M. (2006). *The wisdom network: An 8-step process for identifying, sharing, and leveraging individual expertise*. New York: American Management Association.
- Bickham, A. (1998). The infusion/utilization of critical thinking skills in professional practice. In W. H. Young (Ed.), *Continuing professional education in transition: Visions for the professions and new strategies for lifelong learning* (pp. 59-81). Malabar, FL: Krieger Publishing Company.
- Bielaczyc, E., & Collins, A. (2006). Fostering knowledge-creating communities. In A.M. O'Donnell, C. E. Hmelo-Silver, G. E. Erkens (Eds.), *Collaborative learning, reasoning, and technology*, (pp. 37-60, The Rutgers Invitational Symposium on Education Series). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Bierema, L. L. (2002). The sociocultural contexts of learning in the workplace. In M. V. Alfred (Ed.) *Learning and sociocultural contexts: Implications for adults, community and workplace learning*, (pp. 69-72). *New Directions for Adult and Continuing Education*, 96. San Francisco: Jossey-Bass.
- Bierema, L. L., & Eraut, M. (2004). Workplace-focused learning: Perspective on continuing professional education and human resource development. *Advances in Developing Human Resources*, 6(1) 52 – 68.
- Boud, D., & Middleton, H. (2003). Learning from others at work: CoP and informal learning. *Journal of Workplace Learning*, 15(5), 194-202.
- Brosnan, K., & Burgess, R. (2003). Web based continuing professional development: A learning architecture approach. *Journal of Workplace Learning*, 15(1), 24-33.

- Brown, J. S., Collins, A., & Duguid, P. (1989). Situation cognition and the culture of learning. *Educational Researcher*, 18(1), 32-42.
- Brown, J. S., & Duguid, P. (1991). Organizational learning and communities-of-practice: toward a unified view of working, learning, and innovation [Special Issue]. *Organization Science*, 29(1), 40-57.
- Brown, J. S., & Duguid, P. (2001). Knowledge and organization: A social-practice perspective. *Organizational Science*, 12(2), 198-213.
- Bucher, R. & Strauss, A. (1961). Profession in process. *American Journal of Sociology*, 66, 325-334.
- Cantor, J. A. (2006). *Lifelong learning and the academy: The changing nature of continuing education* (ASHE Higher Education Report, 32-2). San Francisco: Jossey-Bass.
- Carew, D. (2004). Educating the 21<sup>st</sup> century citizen. *The Catalyst*, 34(1), 3-9.
- Cervero, R. M. (1988). *Effective continuing education for professionals*. San Francisco: Jossey-Bass.
- Cervero, R. M. (1989). Continuing education for the professions. In S. B. Merriam, & P. M. Cunningham (Eds.), *Handbook of adult and continuing education* (pp. 512-524). San Francisco: Jossey-Bass.
- Cervero, R.M. (1992). Professional practice, learning, and continuing education: An integrated perspective. *International Journal of Lifelong Education*, 11(2), 91-101.
- Cervero, R. M. (2000). Trends and issues in continuing professional education. In V. W. Mott, & B. J. Daley (Eds.), *Charting a course for continuing professional education: Reframing*



- professional practice* (pp. 3-12). *New Directions for Adult and Continuing Education*, 86, San Francisco: Jossey-Bass.
- Cervero, R. M. (2001). Continuing professional education in transition, 1981–2000. *International Journal of Lifelong Education*, 20 (1/2), 16-30.
- Cervero, R. M. (2003). Place matters in physician practice and learning. *The Journal of Continuing Education in the Health Professions*, 23, S10-S18.
- Chalmers, L., & Keown, P. (2006). Communities of practice and professional development. *International Journal of Lifelong Education*, 25(2), 139-156.
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. London: Sage.
- Chindgren, T., & Wiswell, A. (2006). Creating a research agenda for communities of practice. In F. Nafukho (Ed.), *AHRD 2006 International Conference Proceedings, February 22-26, 2006*. Bowling Green: Academy of Human Resource Development.
- Cole, M. (1998). *Cultural psychology: A once and future discipline*. Cambridge, MA: Harvard University Press.
- Cordingley, P., Bell, M, Rundell, B. & Evans, D. (2003). The impact of collaborative continuing professional development (CPD) on classroom teaching and learning. *Centre for the Use of Research and Evidence in Education (CUREE)*. Retrieved on March 31, 2008 from [http://64.233.179.104/scholar?num=100&hl=en&lr=&q=cache:Qs3Ya8kFSR0J:www.gtc.org.uk/pdfs/EPPI\\_RoM.pdf+continuing+professional+development+education+-medical](http://64.233.179.104/scholar?num=100&hl=en&lr=&q=cache:Qs3Ya8kFSR0J:www.gtc.org.uk/pdfs/EPPI_RoM.pdf+continuing+professional+development+education+-medical)

- Cornelius, S., & Macdonald, J. (2008). Online informal professional development for distance tutors: experiences from The Open University in Scotland. *Open Learning*, 23(1), 43-55.
- Cox, A. (2005). What are communities of practice? A comparative review of four seminal works. *Journal of Information Science*, 31(6) 527-540.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.), Thousand Oaks, CA: Sage Publications.
- Creswell, J. W. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (2<sup>nd</sup> ed.). Upper Saddle River, NJ: Pearson.
- Cross, P. (1998). Why learning communities? Why now? *About Campus*, 1-11.
- Cushion, C. J., Armour, K. M., & Jones, R. L. (2003). Coach education and continuing professional development: Experience and learning to coach. *Quest*, 55, 215-230
- Daley, B. J. (2000). Learning in professional practice. In V. W. Mott, & B. J. Daley (Eds.), *Charting a course for continuing professional education: Reframing professional practice*, (pp. 33-42). *New Directions for Adult and Continuing Education*, 86. San Francisco: Jossey-Bass.
- Daley, B. J. (2001). Learning and professional practice: A study of four professions. *Adult Education Quarterly*, 52(1), 39-54.
- Daley, B. J. (2002). Context: Implications for learning in professional practice. In M. V. Alfred (Ed.), *Learning and sociocultural contexts* (pp. 79-88). *New Directions for Adult and Continuing Education*, 96. San Francisco: Jossey-Bass.
- Daley, B. J., & Mott, V. (2000). Continuing professional education: From vision to reality. In V.W. Mott & B. J. Daley (Eds.) *Charting a course for continuing professional*

- education: Reframing professional practice*, (pp. 80-85). *New Directions for Adult and Continuing Education*, 86. San Francisco: Jossey-Bass.
- Daley, B. J., & Jeris, L. (2004). Boundary spanning. *Advances in Developing Human Resources*, 6 (1), 5-8.
- Daniel, B., Schwier, R.A., & McCalla, G. (2003). Social capital in virtual learning communities and distributed communities of practice. *Canadian Journal of Learning and Technology*, 29 (3). Retrieved on September 20, 2006 from [http://www.cjlt.ca/content/vol29.3/cjlt29-3\\_art7.html](http://www.cjlt.ca/content/vol29.3/cjlt29-3_art7.html)
- Dawson, S., Burnett, B., & O'Donohue, M. (2006). Learning communities: an untapped sustainable competitive advantage for higher education. *International Journal of Educational Management*, 20 (2), 127-139.
- Dede, C. (2004). Enabling distributed learning communities via emerging technologies—Part two. *Technological Horizons in Education Journal*, 32(3), 16-20.
- Dirkx, J., Gilley, J., & Gilley, M. A. (2004). Change theory in CPE and HRD: Toward a holistic view of learning and change in work. *Advances in Developing Human Resources*, 6(1), 35-51.
- Dreyfus, H. L., & Dreyfus, S. E. (1986). *Mind over machine: The power of human intuition and expertise in the era of the computer*. Oxford, UK: Basil Blackwell.
- Driscoll, M. P. (2000). *Psychology of learning for instruction* (2nd ed.) Needham Heights, MA: Allyn & Bacon.
- Dufour, R., & Eaker, R. (1998). *Professional learning communities at work: Best practices for enhancing student achievement*. Alexandria, VA: Association for Supervision and Curriculum Development.

- Dyer, C. (2000). *Operation Blackboard: Policy implementation in Indian elementary education*. Oxford, UK: Symposium Books.
- Dyson, A. H., & Genishi, C. (2005). *On the case: Approaches to language and literacy research*. New York: Teachers College Press.
- Eraut, M. (1994). *Developing professional knowledge and competence*. Washington, D.C.: Falmer Press.
- Eraut, M. (2004). Informal learning in the workplace. *Studies in continuing education*, 26 (2), 246-273.
- Esterberg, K. (2002). *Qualitative methods in social research*. Boston: McGraw Hill.
- Ezzy, D. (2002). *Qualitative analysis*. Crows Nest, Australia: Routledge.
- Fenwick, T. (2000). Putting meaning into workplace learning. In A. Wilson, & E. Hayes (Eds.), *Handbook of adult and continuing education* (pp. 294-311). San Francisco: Jossey-Bass.
- Fenwick, T. (2001). Tides of Change: New Themes and questions in workplace learning. In T. Fenwick (Ed.), *Sociocultural perspectives on learning through work* (pp. 3-17). *New Directions for Adult and Continuing Education*, 92, San Francisco: Jossey-Bass.
- Fjortoft, N. F. (2006). Design and assessment learning outcomes and behavioral changes with a pharmacy continuing professional education program. *American Journal of Pharmaceutical Education*, 70 (2), 1-6.
- Flagello, J. R. (1998). Continuing education for the professions: The catalyst for workplace empowerment. In W.H. Young and R. M. Cervero (Ed.), *Continuing professional education in transition: Visions for the professions and new strategies for lifelong learning* (pp. 93-110). Malabar, FL: Kreiger Publishing Company.

- Friedman, A., & Philips, M. (2004). Continuing professional development: Developing a vision. *Journal of Education and Work*, 17(3), 361-376.
- Fuller, A., Hodkinson, H., Hodkinson, P. & Unwin, L. (2005). Learning as peripheral participation in communities of practice: A reassessment of key concepts in workplace learning. *British Education Research Journal*, 31(1), 49-68.
- Garcia, L. M., & Roblin, N. P. (2008). Innovation, research and professional development in higher education: Learning from our own experience, *Teaching and Teacher Education*, 24 (2008) 104–116.
- Gellert, U. (2008). Routines and collective orientations in mathematics teachers' professional development, *Educational Studies in Mathematics*, 67 (2), 93-110.
- Gherardi, S., & Nicolini, D. (2000). The organizational learning of safety in communities of practice. *Journal of Management Inquiry*, 9 (1) 7–18.
- Guskey, T. R. (2000). *Evaluating professional development*. Thousand Oaks, CA: Corwin Press.
- Hager, P. (2004). Lifelong learning in the workplace? Challenges and issues. *Journal of Workplace Learning*, 16 (1/2), 22-32.
- Hakkarainen, K., Palonen, T., Paavola, S., & Lehtinen, E. (2004). *Communities of networked expertise: Professional and educational perspectives*. Amsterdam: Elsevier.
- Hansman, C. A. (2001). Context-based adult learning. In S. B. Merriam (Ed.), *The new update on adult learning theory* (pp. 43-51). *New Directions for Adult and Continuing Education*, 89. San Francisco: Jossey-Bass.

- Hatch, J. A. (2002). *Doing qualitative research in educational settings*. Albany, NY: State University of New York Press.
- Hider, P. (2006). A survey of continuing professional development activities and attitudes amongst catalogers. *Cataloging & Classification Quarterly*, 42(2), 35-58. Retrieved on March 20, 2008 from <http://ccq.haworthpress.com>
- Hildreth, P., & Kimble, C. (2004). *Knowledge networks: Innovation through communities of practice*. London: Idea Group Publishing.
- Hodkinson, P., & Hodkinson, H. (2003). Individuals, communities of practice and the policy context: School teachers' learning in their workplace. *Studies in Continuing Education*, 25 (1), 3-21.
- Hofstader, R. A. & Munger, P. D. (1990). Education in the workplace: An integral part of the development of professionals. In R .M. Cervero, J. J. Azzaretto and Associates (Eds.), *Visions for the future of continuing professional education* (pp. 79-109). Athens, GA: University of Georgia Continuing Education Center.
- Hord, S. M. (2004). Professional learning communities: An overview. In S. Hord (Ed.), *Learning together, leading together: Changing schools through professional learning communities*. New York: Teachers College Press, 5-14.
- Houle, C. O. (1980). *Continuing learning in the professions*. San Francisco: Jossey-Bass.
- Hung, D., Chee, T. S., Hedberg, J. G., & Seng, K.T. (2005). A framework for fostering a community of practice: Scaffolding learners through an evolving continuum. *British Journal of Educational Technology*, 36 (2), 159-176.
- Hung, D., Chen, V., & Koh, T. S. (2006). The reverse lpp process for nurturing a community of practice. *Educational Media International*, 43(4), 299–314.

- Hunt, S.E. (1992). Professional workers as learners. In E. S. Hunt (Ed.), *Professional workers as learner: The scope, problems, and accountability of continuing professional education in the 1990's* (pp. 1-11). Washington, D.C.: Office of Educational Research and Improvement, U.S. Department of Education.
- Jarvis, P., Holford, J., & Griffin, C. (2003). *The theory and practice of learning*. Sterling, VA: Cogan Page.
- Johnson, C.M. (2001). A survey of current research on online communities of practice. *The Internet and Higher Education*, 4 (1), 45-60.
- Karlsson, J., Anderberg, E., Booth, E., Odenrick, P., & Christmansson, M. (2008). Reaching beyond disciplines through collaboration. *Journal of Workplace Learning*, 20(2), 98-113.
- Kerka, S. (2000). Career Certificates: High Quality and Cutting Edge? Trends and Issues Alert No. 16. *ERIC Clearinghouse on Adult, Career, and Vocational Education*, Columbus, OH.
- Kilpatrick, S., Barrett, M., & Jones, T. (2003). Defining learning communities. Discussion paper presented at Centre for Research and Learning in Regional Australia (CRLRA), Tasmania, and Australia. Retrieved November 17, 2006, from <http://www.crlra.utas.edu.au/files/discussion/2003/D1-2003.pdf>
- Kirshner, D., & Whitson, J. A. (1998). Obstacles to understanding cognition as situated. *Educational Researcher*, 27(8), 22-28.
- Kumar, K. (2004). *What is worth teaching?* (3rd ed.). New Delhi: Orient Longman.
- Kumar, K. (2005). *Political agenda of education: A study of colonialist and nationalist ideas* (3<sup>rd</sup> ed.) New Delhi: Sage Publications.

- Kwakman, K. (2003). Factors affecting teachers' participation in professional learning activities. *Teaching and Teacher Education*, 19, 149–170
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Lawler, P. (2000). Teachers as adult learners: A new perspective. *New Directions for Adult and Continuing Education*, 98, 15-22.
- Lenning, O. T. & Ebbers, L. H. (1999). The powerful potential of learning communities: Improving education for the future. ASHE-ERIC Higher Education (Report No. 26 -6). Washington, DC: ERIC Clearinghouse on Higher Education. (ERIC Document Reproduction Service No. ED428606)
- Lesser, E. L., & Storck, H. (2001). Communities of practice and organizational performance. *IBM Systems Journal*, 40(4), 831-841.
- Livingstone, D. W. (2001). Expanding notions of work and learning: Profiles of latent power. In T. Fenwick (Ed.), *Sociocultural perspectives on learning through work* (pp. 19-30). *New Directions for Adult and Continuing Education*, 92, San Francisco: Jossey-Bass.
- McArdle, K., & Ackland, A. (2007). The demands of the double shift: Communities of practice in continuing professional development. *Journal of Vocational Education & Training*, 59 (1), 107-120.
- McDermott, R. (1999). Learning across teams: How to build communities of practice in team organizations. *Knowledge Management Review*, (8) 32-36.
- Merriam, S.B. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey Bass.



- Merriam, S. B., & Simpson, E. L. (2000). *A guide for educators and trainers of adults* (2nd ed.). Malabar, FL: Kreiger Publishing Company.
- Merriam, S. B., Caffarella, R. S., & Baumgartner, L. M. (2007). *Learning in adulthood* (3rd ed.). San Francisco: Jossey Bass.
- Meyer, T. (2002). Novice teacher learning communities: An alternative to one-on-one mentoring. *American Secondary Education*, 31(1), 27-42.
- Monaghan, C. H. (2007). Communities of practice: Modeling lifelong learning skills. *The Journal of Higher Continuing Education*, 55(2), 10-16.
- Moore, J., & Barab, S. (2002). The inquiry learning forum: Communities of practice approach to online professional development. *Tech Trends*, 47(3), 44-49.
- Mott, V. W. (2000). The development of professional expertise in the workplace. In V. W. Mott, & B. J. Daley (Eds.), *Charting a course for continuing professional education: Reframing professional practice* (pp. 23-31). *New Directions for Adult and Continuing Education*, 86 San Francisco: Jossey-Bass.
- Murphy, C. & Lick, D. (2004). *Whole-faculty study groups: Creating professional learning communities that target student learning*, 3rd edition. Thousand Oaks, CA: Corwin Press
- Niesz, T. (2007). Why teacher networks (can) work. *Phi Delta Kappan*, 605-610.
- Retrieved on June 25, 2007, from [http://www.pdkintl.org/kappan/k\\_v88/k0704nie.htm](http://www.pdkintl.org/kappan/k_v88/k0704nie.htm).
- Nowlen, P. M. (1988). *A new approach to continuing education for business and the professions: The performance model*. Old Tappan, NJ: Macmillan.
- O'Sullivan, J. (2003). Unlocking the workforce potential: Is support for effective continuing professional education the key? *Research in Post Compulsory Education*, 8 (1), 107-122.

- Patton, M. Q. (2002). *Qualitative research and evaluation methods*. (3<sup>rd</sup> ed.). Thousand Oaks, CA: Sage Publications
- Queeney, D. S. (2000). Continuing professional education. In A. Wilson, & E. Hayes (Eds.), *Handbook of adult and continuing education* (pp. 375-391). San Francisco: Jossey-Bass.
- Ramachandran, V., Pal, M., Jain, S., Shekar, S., & Sharma, J. (2005). Teacher motivation in India. *Education Research Unit*, 1-41.
- Revans, R. W. (1997). An action learning trust. *Journal of European and Industrial Training*, 1(1), 1-5.
- Reyes, P., & Pazey, B. (1999). Creating student-centered classroom environments: The case of mathematics. In P. Reyes, J.D. Scribner, & A. P. Scribner (Eds.), *Lessons from high-performing Hispanic schools: Creating learning communities*. New York: Teacher College Press.
- Roth, G. L. (2004). CPE and HRD: Research and practice within systems and across Boundaries. *Advances in Developing Human Resources*, 6(1), 9-19.
- Sandars, J., & Langlois, M. (2006). Online collaborative learning for healthcare continuing professional development: Lessons from the recent literature. *Education for Primary Care*, 17, 584-92.
- Schell, A. B., & Schell, J. W. (2008). *Clinical and professional reasoning in occupational therapy*. New York: Lippincott Williams & Wilkins.
- Schlager, M. S., & Fusco, J. (2004). Teacher professional development, technology, and communities of practice: Are we putting the cart before the horse? In B. S., R. Kling, &

- J. Gray (Eds.). *Designing virtual communities in the service of learning*. Cambridge, MA: Cambridge University Press.
- Schön, D. A. (1983). *The reflective practitioner*. New York: Basic Books.
- Schön, D. A. (1987). *Educating the reflective practitioner: Towards a new design for teaching and learning in the professions*. San Francisco: Jossey Bass Publishers.
- Senge, P.M. (1990). *The fifth discipline: The art and practice of the learning organization*. New York: Currency/Doubleday.
- Shapiro, N. S. & Levine, J. H. (1999). *Creating learning communities: A practical guide to winning support, organizing for change, and implementing programs*. San Francisco: Jossey-Bass Publishers.
- Shellard, E. (2003). Using professional learning communities to support teaching and learning. Arlington, VA: Educational Research Service.
- Sherer, P. D., Shea, T. P., & Kristensen, E. (2003). Online communities of practice: A catalyst for faculty development. *Innovative Higher Education*, 27(3), 183-194.
- Srivastava, P. (1999). Management classes as online learning communities. *Journal of Management Education*, 23(6), 691-702.
- Sleezer, C. M., Conti, G. J., & Nolan, R. E. (2004). Comparing CPE and HRD programs: Definitions, theoretical foundations, outcomes, and measures of quality. *Advances in Developing Human Resources*, 6(1), 20-34.
- Stake, R. (2005). Qualitative case studies. In N. K. Denzin, & Y.S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (3rd ed., pp. 453- 466). Thousand Oaks, CA: Sage Publications.
- Stake, R. (2006). *Multiple case study analysis*. New York: Guilford Press

- Stein, D.S & Imel, S. (2002). Adult learning in community: Themes and threads. *New Directions for Adult and Continuing Education*, 95, 93- 97.
- Stern, M. R., & Queeney, C. S. (1992). The scope of continuing professional education: Providers, consumers, issues. In E.S. Hunt (Ed.), *Professional workers as learners: The scope, problems, and accountability of continuing professional education in the 1990's* (pp. 13-34). Washington, D.C.: Office of Educational Research and Improvement, U.S. Department of Education.
- Storberg-Walker, J. (2005). Communities of practice and situated learning: A theoretical examination of a shift in individual power. *AERC, Conference Proceedings, University of Georgia, Athens, June 3-5. Retrieved on September 20, 2007 from* <http://www.adulterc.org/Proceedings.htm>
- Storberg-Walker, J. (2006). Exploring the role of communities of practice in judicial continuing education. *AHRD 2006 International Conference Proceedings, February 22-26, 2006*, (pp 548-555). Retrieved on 22 October, 2006 from <http://ahrd.org/publications/proceedings/2006Proceedings.pdf>
- Stralen, S. V. (2002). Making sense of one's experience in the workplace. *New Directions for Adult and Continuing Education*, 94, 13-21.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage Publications.
- Talbert, J. E., & McLaughlin, M. W. (1994). Teacher professionalism in local school contexts. *American Journal of Education*, 102(2), 123-153.
- Triggs, P., & John, P. (2004). From transaction to transformation: information and

- communication technology, professional development and the formation of communities of practice. *Journal of Computer Assisted Learning*, 20, 426-439.
- Watkins, C. (2005). Classrooms as learning communities: A review of research. *London Review of Education*, 3(1), 47-64.
- Wenger, E. (1998). *Communities of practice: Learning, meaning and identity*. Cambridge: Cambridge University Press.
- Wenger, E. (2000). Communities of practice and social learning systems. *Organization*, 7(2), 225-246.
- Wenger, E. & Snyder, W. M. (2000). Communities of practice: The organizational frontier. *Harvard Business Review*, Cambridge, 139-145.
- Wenger, E., McDermott, R., & Snyder, W. M. (2002). *Cultivating communities of practice*. Boston, MA: Harvard Business School Press.
- Wesley, P. & Buysse, W. (2001). Communities of practice: Expanding professional roles to promote reflection and shared inquiry. *Topics in Early Childhood Special Education*, 21(2), 114-123.
- Wiessner, C. A., Sullivan, L.G. (2007). Constructing knowledge in leadership training programs. *Community College Review*, 35 (2), 88-112.
- Wilson, A. L. (2000). Professional practice in the modern world. In V. W. Mott & B. J. Daley (Eds.), *Charting a course for continuing professional education: Reframing professional practice* (pp. 71-79). *New Directions for Adult and Continuing Education*, 86. San Francisco: Jossey-Bass.
- Wilson, B., & Ryder, M. (1998). Dynamic learning communities: An alternative to designed instructional systems. Retrieved November 20, 2006, from

[http://eric.ed.gov/ERICDocs/data/ericdocs2sql/content\\_storage\\_01/0000019b/80/14/a1/4c.pdf](http://eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/14/a1/4c.pdf)

- Wood, R., & Bandura, A. (1989). Social cognitive theory of organizational management. *The Academy of Management Review*, 14 (3), 361-384.
- Woodall, J. (2006, June). From individual learning to social learning: Reframing HRD theory and practice. *Human Resource Development International*, 9(2), 153–155.
- Yin, R. K. (2003). *Case study research: Design and methods* (3<sup>rd</sup> ed.). Thousand Oaks, CA: Sage Publications Inc.
- Yin, R. K. (2006). Case study methods. In J. L. Green, G. Camilli, and P. B. Elmore (Eds.), *Handbook of complementary methods in education research* (pp. 111-122). Washington, DC: American Educational Research Association.
- Young, W. H. (1998). Systematic efforts in continuing professional education focusing on mandatory continuing professional education. In W. H. Young (Ed.), *Continuing professional education in transition: Visions for the professions and new strategies for lifelong learning* (pp. 129-140). Malabar, FL: Krieger Publishing Company.
- Zelman, A. W. (2002). Nurturing intuition through group learning. *New Directions for Adult and Continuing Education*, 94, 33-41.
- Zhao, C., & Kuh, G. (2004). Adding value: Learning communities and student engagement. *Research in Higher Education*, 45(2), 115-138.

APPENDIX A  
INTERVIEW PROTOCOL

1. Tell me about a current project you are working on here in the company.
2. Who do you think have contributed most towards your learning in this workplace? How?
3. Mention an incident in the course of your work here that has contributed to an important learning.
4. Describe a new or challenging experience a colleague or you faced. How was this challenge overcome?
5. Describe for me a time, as a new member you felt that you were part of a group of people working together for a common goal.
6. Professionally, with which other groups in the same or related professions do you interact frequently?
7. How do you try out new ideas in your practice?
8. What are your views on the link between age, work, and learning?
9. Is there anything else that you would like to share about your experiences with colleagues, clients, projects, and your practice?

## APPENDIX B

### OBSERVATION PROTOCOL

(1) For routine on-site observations:

1. Places where participants frequently gather.
2. Who meets with whom/why?
3. Who spends free time with whom?
4. Which members eat together daily?
5. What is the topic of conversation during members' casual interactions? What language do they use?
6. What work-related topics are discussed during members' casual interactions?
7. How do participants speak to each other?
8. What routine behavior exists when people meet casually? Is it cultural?
9. How do participants relate to those not on their teams or sections?
10. What is the body language of participants during interactions?

(2) For observations of meetings:

1. How many attendees? Where is the meeting held? Planned or impromptu?
2. What is the prevalent mood of participants during these meetings?
3. Who initiates the meeting? What is the agenda?
4. How do others sustain or extend the discussion to other related topics?
5. Who participates? What and how are decisions made?
6. What routine/non-routine practices are observable? Which reflect Indian culture?



## APPENDIX C

## CODES AT DIFFERENT STAGES OF DATA ANALYSIS

**Stage One:** The first set of codes for the four research questions (RQ) totaled 54:

RQ1 – 24 codes	RQ2 – 11 codes
<ol style="list-style-type: none"> <li>1. attending whole group meetings</li> <li>2. attending small group meetings</li> <li>3. co-planning</li> <li>4. co-facilitation</li> <li>5. getting feedback – written (forms) – from colleagues</li> <li>6. in-house training</li> <li>7. getting feedback/critique – oral – from colleagues</li> <li>8. external training</li> <li>9. attending forums</li> <li>10. attending workshops,</li> <li>11. getting feedback, critique - from participants,</li> <li>12. osmosis</li> <li>13. casual conversations - in lunch room, office space, and the passage – personal stories, workshop experiences, and concerns.</li> <li>14. adopting ideas</li> <li>15. approaching colleagues for help (for their unique strengths and expertise)</li> <li>16. coaching/support – from colleagues</li> <li>17. offering to help/ support – to colleagues</li> <li>18. applying prior knowledge and skills to new situations</li> <li>19. assuming new roles and responsibilities</li> <li>20. initiating own ideas</li> <li>21. incorporating new ideas</li> <li>22. self -reflection</li> <li>23. guided reflection</li> <li>24. collective reflection</li> </ol>	<ol style="list-style-type: none"> <li>25. catering to the needs of stake holders – teachers</li> <li>26. catering to the needs of stake holders - government</li> <li>27. catering to the needs of stake holders - funders</li> <li>28. hone existing skills( computers, facilitation, communication, observation)</li> <li>29. market products and services</li> <li>30. understanding competition</li> <li>31. using external resources,</li> <li>32. event for online forum members</li> <li>33. generate/ update/ revise materials</li> <li>34. adult learning/audit/translation</li> <li>35. gaps in knowledge – of colleagues knowledge of roles</li> </ol>

RQ3 – 7 codes	RQ4 – 12 codes
36. expanding repertoire of skills 37. expanding responsibilities 38. understanding oneself –strengths 39. understanding oneself – weaknesses 40. change in practice 41. change in perspectives 42. accountability to colleagues and EA	43. impact of age -facilitators 44. impact of age -participants 45. impact of gender - facilitators , 46. impact of gender - participants 47. using technology 48. difficulties with transportation 49. issues because of electricity 50. poor facilities 51. impact of language -private schools 52. impact of language - Government schools 53. impact of teachers’ low motivation 54. impact of bureaucracy

**Stage Two:** The initial set of 54 codes for the four research questions (RQ) were coalesced to 23 codes.

RQ1 – 10 codes	RQ2 – 4 codes
1. meetings , in-house training 2. collaborative work 3. getting feedback from colleagues and participants 4. external training, attending forums and workshops 5. osmosis/casual conversations - in lunch room, office space, and the passage – personal stories, workshop experiences, concerns. 6. using new ideas 7. coaching/supporting colleagues 8. applying prior knowledge and skills to new situations 9. assuming new roles and responsibilities 10. reflection	11. catering to the needs of stake holders – teachers/ government/funders 12. understanding of roles and skills (computers, facilitation, communication, observation) 13. understanding about adult learning/ audit 14. marketing products and services
RQ3 – 4 codes	RQ4 – 5 codes
15. expanding repertoire of skills 16. expanding responsibilities	19. impact of age and gender 20. difficulties in civic amenities –

17. understanding oneself – strengths and gaps 18. change in practice and perspective	transportation/ electricity 21. impact of diverse language fluency 22. impact of teachers' low motivation 23. impact of bureaucracy
--	--

**Stage Three:** The final set of 12 codes for the four research questions:

RQ1 – 4 codes	RQ2 – 2 codes
1. structured interactions 2. informal interactions 3. hands-on experience 4. reflection	5. procedural knowledge 6. professional knowledge
RQ3 – 2 codes	RQ4 – 4 codes
7. expansion of repertoire of skills and responsibilities 8. increase in self-knowledge	9. age and gender 10. language 11. Indian education system 12. poor infrastructure