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**Abstract:** The last decade has witnessed an increasing interest in literate identities. However, little attention has been paid to ESP reader's identity. As ESP reading is possibly the most powerful role in influencing EFL learners' academic and professional development (Han & Anderson, 2009), this study aims to investigate whether ESP reading relates to EFL learners' identity and how they relate to each other if there is a link between the two. Via purposeful sampling, an experienced Taiwanese ESP reader in her 40s was recruited and received three life-story interviews. Borrowing Wenger's (1998) notion of social identity, the participant's ESP reading history is examined along: (a) mutuality of engagement, (b) accountability to an enterprise, and (c) negotiability of a repertoire. The results show that ESP reading is tightly interwoven with the three dimensions. It is therefore determined that the two are related. Moreover, it is found they are interdependent and isomorphic as the participant's ESP reading proficiency varies with her positions in the communities of practice: at the peripheral, she read with difficulties while at the core she read with competence. Pedagogical implications relate to the need for teachers and ESP readers to raise their awareness of the learners' literate identities.

Dear Editors,

I submit the manuscript of my full-length article titled “ESP reading literacy and reader identity: Narrative inquiry into a Taiwanese EFL learner” to your prestigious journal. Your assistance to process the reviewing is much appreciated.

Best regards,  
Beryl Chinghwa Lee, PhD  
Associate Professor  
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Coupled with the trend of globalization, English for Specific Purposes (ESP) has become an international phenomenon (Belcher, 2006). One of ESP's central concerns is to produce linguistically competent students and workers to approach academic or occupational goals. Although ESP studies focus mostly on surface forms like academic vocabulary or CARS model, researchers now begin to understand the relationships among print literacy, learners, and their context, following a cross-disciplinary trend called a "massive social turn," (Gee, 2000) which moves a focus on individual behaviors and minds toward a focus on social and cultural interaction. Due to the movement, in recent years, a number of studies have centered on the interplay of nonnative speakers' identities and literacy in particular (e.g. Block, 2007; Hawkins, 2005; Ivanic, 1998; Jimenez, 2000; McKay & Wong, 1996; Menard-Warwick, 2008; Moje, Luke, Davies, & Street, 2009; Peirce, 1995; Rex, Bunn, Davila, Dickinson, Ford, Gerben, Orzulak, & Thomson, 2010). The development has been recognized as a new paradigm in TESOL field (Canagarajah, 2006), as evidenced by the 1997 special issue of the leading journal *TESOL Quarterly*, guest edited by Norton (1997) as well as more recent publication of *Second Language Identities* by Block (2007). The conceptualization of identity in the paradigm has been heavily influenced by poststructuralist theories, which depict the individual as diverse, contradictory, dynamic, and changeable over time and social space, a notion opposing many definitions of the individual in SLA (Second Language Acquisition) research which presupposes that every person has an essential, unique, fixed, and coherent core identity, say, extrovert versus introvert or motivated versus unmotivated (Norton & Toohey, 2002).

Research on learners' identities and literacy has focused more on identities of L2 writers and speakers (e.g., Ivanic, 1998; Menard-Warwick, 2008; Morita, 2004; Peirce, 1995). Specifically, Ivanic (1998) contributes a whole volume to discuss academic writing and identity. Although English reading, as argued by Anderson (2006; Han & Anderson, 2009), is possibly the most powerful role in an EFL context in influencing the learners' academic and professional development (see also Chia, Johnson, Chia, & Olive, 1999), little attention has been paid to reader identity. To explore the issue, the study aims to investigate whether ESP reading relates to EFL learner's identity and how they relate

to each other if they are connected.

### **THEORIZING LITERACY AND IDENTITY**

Literacy is a fairly recent English word (Barton, 1994); it was not highly noticeable until 1990s. For centuries, literacy had been believed to lead to higher-order cognitive abilities. The assumption gives rise to the Great Divide theories, which presupposes that fundamental cognitive differences exist between literate societies/individuals and non-literate ones and that literacy was the *sine qua non* of sophisticated and complex cultures (Gee, 1996). As a result, primitive societies had been characterized as non-literate, incapable of abstract thought, and thus inferior to modern or civilized societies.

In the early 1980s, the Great Divide theories confront many attacks, not least of which is post-structuralism which criticized that the differences between types of societies, modes of thought, and uses of language made by the dichotomies are simplistic and exaggerating. Moreover, ample empirical evidences called into questions the causality of literacy in social development and in individual cognition. For example, Heath's (1983) classic study *Ways with Words* indicate that school kids' failure/success of academic studies depends largely on their home literacy practices in their own communities. Most importantly, Scribner and Cole (1981) point out what matters to literacy is the social practices into which people are apprenticed as a part of social group, but not literacy as some decontextualized ability to write or read. They reframed literacy by the new concept of literacy practices, which view literacy as a set of socially organized practices. Literacy practices are more than observable episodes, activities, or behaviors as they involve values, attitudes, feelings, social relationships, and the others. To be more specific, they are a cultural conception of particular ways of thinking about and doing reading/writing in cultural contexts (Street, 2001). Barton and Hamilton (2000) regard literacy practices as basic units of a social theory of literacy, which offer a powerful way of conceptualizing the link between reading/writing and the social structures which they are embedded in and help to shape. They also emphasize that literacy practices are "more usefully understood as existing in the relations between people, within groups and communities, rather than as a set of properties residing in individuals" (Barton & Hamilton, 2000, p. 8).

The research interests mentioned above are sometimes called “vernacular literacies” (Barton & Hamilton, 1998, p. 4), as they focus mostly on everyday literacies. However, differences between everyday language and academic language have long been noticed. To distinguish the two, Cummins (1986) coins the terms BICS (Basic Interpersonal Communicative Skills) and CALP (Cognitive Academic Language Proficiency) to draw educator’s attention to the timelines and challenges that L2 learners encounter as they attempt to keep up with their peers in academic aspects of the school language (Cummins, 2008).

To cater the need of students’ academic language learning, Johns (1997) proposes socioliterate views of academic literacies. She advocates a shift away from the learner-centered approach, which she believes carries insidious benevolence by overemphasizing individual and creative reading/writing (Johns, 1997). It is also pointed out that discourses are socially constructed and that students are quite aware that they are under the influences and judgments of the cultures from which they come and into which they hope to enter. On this account, Johns suggests equipping learners in the literacy classes with strategy to cope with their future rhetorical situations. Nonetheless, Johns admits that the full impact of the complexity of academic literacy cannot be fully experienced unless the learners go outside and witness how literacy is practiced in the real world.

Like literacy, identity was not perceived as a social phenomenon until very recently. Identity used to be understood primarily as referring to individuals belonging to the province of psychology (e.g., Erickson, 1959). In the late 1960s, traditional and modern forms of authorities began to be challenged. As the self ceases to be taken for granted, identity becomes an issue (Delanty, 2003). Individuals’ self-constitutive capacities to face social fluidity and disorder bring out the concept of multiple identities, which features in the postmodern era (Bauman, 1997). Under the impact of poststructuralist inquiry, SLA researchers re-conceptualize their views of the learners: L2 learners are perceived as individual agents with multiple identities, which are subject to change over time (Pavlenko, 2002). Notably, Peirce (1995) foregrounds the shift by her widely-referred longitudinal ethnographic study. On the basis of Bourdieu’s (1972/1977) metaphor of capital, Peirce displaces motivation by the concept of investment, which renders her able

to depict the L2 learner as one bearing multiple dimensions, conceptualize L2 learners' social identity as a site of struggle, and therefore capture more effectively the complex relationship of the learners to the target language.

Peirce's approach moves to the fore the learners' inequitable power relationships and opportunities to interact with L2 speakers to practice the target language. It also moves SLA research from structural- to interactional perspective of social context (Siegel, 2003). The structural view sees a person's social identity as the result of the particular social group, in which power, prestige, and other aspects of social context are determined by the social structure as well as the historical forces that shape this structure. In contrast, the interactional point of view sees a person as one with multiple social identities, and the one identity that emerges in a particular situation is determined not only by the person's group membership but also by the social interaction, during which social identities and relationships may undergo continuous changes and renegotiation.

A recent SLA research on identity and academic literacy is Morita's (2004) multiple case study, which explores the academic discourse socialization experiences of six female Japanese graduate students in Canada and indicates that in the higher education setting, the negotiation of entry into the discourse is full of challenges. Likewise, access to its legitimate membership is difficult to obtain. However, despite the initial appearance of noncompliance or nonparticipation, the participants of the study in effect negotiated their multiple identities actively. The participants' silence, for example, is often context-specific, not a phenomenon attributed solely to gender, culture, or language. The participants' co-construction of learner agency and positionality is full of complexities, involving closely with a web of power relations and competing agendas.

The bond between reading literacy and social identity is linked by Gee's (2001) sociocognitive perspective on reading. Central to the reading model is the notion of Discourse with a capital D. Gee (2001) argues that discourse is not just language in use. Rather, it is heavily involved with being a social role (i.e., identity) as well as doing a social role (i.e., practice) and interplay of the two makes a Discourse. Gee (1992) suggests considering Discourse as identity kits in which specific devices (e.g., ways with words, thoughts, values, interactions, tools, etc.) enable us to enact a specific identity and to engage in specific activities related to the identity. To learn to read about "light" in

physics, for instance, one has to be immersed in a specific community to experience the way of “light,” say, as a bundle of waves of different wavelengths (Gee, 2001). According to Gee (1996), there are primary Discourse and secondary Discourse. The former refers to the first identities acquired during the primary socialization as members of particular families while the latter is about the identities acquired in public worlds beyond families. On this account, ESP reading belongs to the secondary Discourse.

### **THEORETICAL UNDERPINNINGS**

The main theoretical framework of the study is Wenger’s (1998) notion of social identity, which has roots in the theory of situated learning (Lave & Wenger, 1991) known for the idea of “communities of practice” (COP), which is defined as “an aggregate of people who come together around mutual engagement in an endeavour” (Eckert & McConnell-Ginet, 1992, p. 464). As for “practice,” it is about “doing in a historical and social context that gives structure and meaning to what we do” (Wenger, 1998, p. 47). Accordingly, practice is always social. For instance, preparing for a presentation in a hotel by oneself is social as the activity implicitly involves, for the least, the audience to whom the presenter attempts to get his ideas across (Wenger, 1998). Practice has the potential for enabling learning and changing identity. As a result, “community” can be defined by practice through three aspects: (a) mutual engagement, (b) a joint enterprise, and (c) a shared repertoire. Simply put, the three are respectively about (a) how a COP functions, (b) what it is about, and (c) what capability it has produced (Laat, 2001, as cited in Rock, 2005).

In the same vein, a member’s identity of COP is demonstrated through the dimensions of (a) mutuality of engagement, (b) accountability to an enterprise, and (c) negotiability of a repertoire (Wenger, 1998, pp. 152-153). Engagement refers to “active involvement in mutual process of negotiation of meaning” (Wenger, 1998, p. 173). In COP, we learn certain ways of engaging in action with other people; we develop certain expectations about how to interact, how people treat each other, and how to work together. To put in a different way, we become who we are by being able to play a part in the relations of engagement that constitute our community. In addition, the full complexity of mutual engagement is reflected as a result of a joint enterprise in the COP. Negotiating a joint enterprise gives rise to relations of mutual accountability among the members of

COP. That is, they know what matters and what does not, what to do and what not to do, what to pay attention and what to ignore. Moreover, a repertoire refers to a set of shared resources, including words, ways of thinking, speaking, tools, understandings, memories, and the others. All in all, a repertoire reflects a history of mutual engagement or a history of learning which is shared among members of the community. A repertoire is useful not only because it is recognizable in the relations to a history of mutual engagement, but also because they can be reengaged in new situations. That is to say, a repertoire is characterized by its negotiability, which brings with the possibility of new meaning (Wenger, 1998, p. 83). According to Wenger (1998), identity formation is composed of the dual process of negotiability and identification. On the one hand, identification is defined with respect to communities and forms of membership in them; on the other, negotiability is shaped by the degree to which we can make use of, control, or modify the meaning that we negotiate and then assert as ours. To sum up, identities of COP are demonstrated by (a) knowing how to engage with others (mutuality of engagement), (b) understanding why others do what they do (accountability to an enterprise), and (c) sharing the resources other members use for their activities (negotiability of a repertoire).

### **THE STUDY**

The study was part of a larger project using a narrative inquiry (Connelly & Clandinin, 1990). We follow in the tradition of life-story research, which presupposes that the stories told about experiences are not only the result of but also a window into “a confluence of social influence on a person’s inner life, social influences on their environment and their unique personal history” (Clandinin & Rosiek, 2007, p. 41).

Purposeful sampling was employed in the study to select “information-rich cases whose study will illuminate the question under study” (Patton, 2002, p. 230). Participant recruitment began from October of 2007. In three months, six participants allowed the researcher to walk into the midst of their stories. Each participant conformed to the following pre-set criteria, i.e., he/she was (a) a Taiwanese in his/her middle adulthood, (b) one who receives primary and secondary education in Taiwan, (c) a professional who is experienced in ESP reading, and (d) one who acknowledges that ESP reading is of great importance to his/her career development. The focal participant of the present study was one of the subjects who met the selection criteria. The participant was recommended to



one of the researchers by a common friend who had noticed the participant's heavy involvement with ESP reading. Notwithstanding her initial doubts, the participant agreed to join the study when given the guarantee of the confidentiality of her identity. For the very purpose, the participant agreed to use a pseudonym, Hue-Zhen.

Hue-Zhen was born in 1968 in a middle class family in a small town in Southern Taiwan. She received her education in Taiwan all the way from primary school to her doctoral program. When this study began, she had worked as a university teacher for fifteen years and had been involved in ESP reading for 20 years. She was interviewed three times from November of 2007 to February of 2008. The audio-taped interviews were conducted mainly in Mandarin, with occasional code switches to English and Taiwanese.

Before the first interview, Hue-Zhen was forwarded the interview protocol, which was informed by Belcher and Connor (2001), Ivanic (1998), McAdams (1993), and Lu (2005). Among the six core parts of the protocol, the most relevant ones are "A Profile of a Profession," "Landscapes of English Reading for Professional Purposes," and "Themes of the Life Stories." The main data source was the verbatim transcribed from the audio-taped interviews. Data analysis process was discursive, involving repeated reading, open coding, and data reduction. Via dialogical listening to the voices of the participant, the theoretical framework, and reflections (Lieblich, Tuval-Mashiach, & Ziber, 1998), Hue-Zhen's life story was first organized into two categories, i.e., literacy experiences rooted in primary as well as secondary Discourses. The quotations were translated from Chinese into English by the researchers. At the end of 2008, Hue-Zhen received a hard copy of her English written life story and was invited to undergo member checking. After she agreed that her voice was correctly reproduced and her character was appropriately represented, the story was re-visited for further thematic coding. Specifically, the researchers looked for data which explained the relation—or the lack thereof—of the participant's ESP reading and the three dimensions of identity, namely (a) mutuality of engagement, (b) accountability to an enterprise, and (c) negotiability of a repertoire. Due to the inherent intimate relation among the three, the coding relies on the value of salience, i.e., what dimension one event represents more than the other two.

## **THE LIFE STORY OF HUE-ZHEN**

### **Mutuality of Engagement: “I Cannot Achieve It Totally by Myself”**

Hue-Zhen admitted that she relied heavily on Chinese language for her academic studies in her college days. She reflected, “More often than not, I studied Chinese textbooks, read Chinese-written test items, and responded to the questions in Chinese” (2007/11/22). A notable exception was reading for her immunology course. In this case, approaching the subject matter by reading a Chinese-written textbook translated from its English version was found unproductive, notwithstanding all Hue-Zhen’s efforts and attempts. She said:

It was strange enough that I had very little understanding via reading in Chinese [for Specific Purposes] in spite of my intimate knowledge of all the characters. In reflection, I determine that the translator did not have a good command of the domain knowledge to fully explain the phenomena in Chinese. After all, at that point scientists just began to push back the frontiers of immunology. (2007/11/22)

As Hue-Zhen had great interest in the new discipline, she asked for help from one of her male senior schoolmates who was more knowledgeable in this regard. After Hue-Zhen was tutored in Chinese, she ventured into the English textbook and found the text became much more comprehensible. Afterwards, she made frequent use of the bi-modal pattern, i.e., L1 listening plus L2 reading. To be more specific, before she processed English textbook, she managed to grasp the gist of the domain knowledge by listening either to her peers’ talks or to the subject teachers’ lectures in L1.

Another revealing example of Hue-Zhen’s mutuality of engagement of ESP reading was a specific type of laboratory meeting called “the journal club,” which was experienced by Hue-Zhen in her doctoral program.

Our teachers noticed that we were too occupied by lab experiments to update our discipline-specific knowledge. Therefore, they organized a journal club for us. In the weekly assembly, the teachers and the students took turns to report articles from the latest established journals, for instance, *Nature* or *Science*. Journal clubs are different from seminars of the doctoral program in the sense that the former may cover a broad array of topics while the latter targets at specific research interests. For example, the one I joined focused solely on virus. (2008/1/10)

Mutuality of engagement of ESP reading persists even after Hue-Zhen became a

university professor. Assuming the roles of senior members of their COP, Hue-Zhen and her colleagues organized laboratory meetings. In the weekly assemblies, they reported to each other their own research progresses to seek for mutual support and comments. They also guided students to engage in ESP reading and presentation. Hue-Zhen was surprised that some of the students were inadequate in ESP reading. She noted:

Weeks ago, one of my colleague's students presented an article on a certain agent which represses three substances. Somehow, he mentioned only two. When he was challenged by the listeners for missing the third, he argued that the one was not mentioned in the text. As a matter of fact, the very first figure of the paper was about it. The figure was there and the legend was short enough for everyone to understand. It surprised me that he could possibly ignore the most salient facts reported in the text. (2008/1/10).

Hue-Zhen was confident that her own students would not miss textual information like the presenter. She noted, "I told my students to accord the text with the figure or diagram so that they hold tight of the relationship between the experiment purpose and result" (2008/1/10).

The dimension of mutuality of engagement of ESP reading is also involved with ESP writing. As publication features in Hue-Zhen's workplace, over the years, Hue-Zhen had developed certain compensating writing strategies, which in one way or another were related to ESP reading. For instance, she was in the habit of building her own corpus by taking down useful English expressions while engaging in ESP reading. Hue-Zhen also co-worked with her peers to boost up the quantity of her publication. In the past few years, Hue-Zhen had worked closely with a postdoctoral researcher from India, who was good at chemical analysis and English writing. Hue-Zhen and the foreign researcher split the responsibility of writing for publication: Hue-Zhen reported the functions of the substances under investigation while her partner described their chemical structures. Although the two were in different disciplines, surprisingly, after a period of close cooperation, the foreign researcher could sometimes write from Hue-Zhen's stance by appropriating the language chunks via reading a number of research articles which center on a certain topic of Hue-Zhen's field.

Hue-Zhen's efforts led to a publication boom in a span of six years. In the spring of 2006, she filed for promotion to full professorship. Like many other higher education

institutions in Taiwan, Hue-Zhen's school quantified teachers' research performance by their publication and specified the threshold of minimal RPI (Research Performance Index) score for promotion application. Hue-Zhen's academic performance fulfilled the requirement. After a lengthy and strict reviewing process, her promotion was finally approved. Although Hue-Zhen attributed her success to many things, she specifically acknowledged the mutual engagement with her peer researchers. She noted: "I cannot achieve it totally by myself. Although I have my own research trunk, I need the integrated projects to produce some good green leaves. Without their help, the quantity and quality of my research could not have been recognized by the reviewers" (2007/11/22).

### **Accountability of the Joint Enterprise: "Science Is Not a Local Matter"**

Hue-Zhen admitted that in the graduate school days, she was involved in ESP reading to a rather limited extent. She employed it mainly for her seminar talks, which took place once a semester at best. After she finished the master program, Hue-Zhen started to teach in a private college as a lecturer. In the classroom, Chinese language assumed a dominant role. She said,

I taught in Chinese and gave students tests in Chinese. I also allowed them to answer the questions in Chinese. As a result, most of my students studied textbooks which were translated into Chinese from their English versions, just as how I did in my school days. (2007/11/22)

It was not until Hue-Zhen finished her doctoral program in 2000 that she began her wide ESP reading. In Hue-Zhen's workplace, her newly obtained degree made it possible for her to be promoted from a lecturer to an associate professor. The status upgrading imposed new duties on her. She reflected:

Concomitant with the new position was the responsibility of a PI [principal investigator]. In my field, a PI is an independent director of a lab. I am expected to come up with research design on my own. As science is not a local matter, it is essential to learn the worldwide development of the topic that engages my interest. After I became a PI, I approach the database like *PubMed* or *Medline* to gain access to international science reports. I printed out key papers to study so as to gain an insight into the universal trend of science. My wide reading was launched at that point for the very specific purpose. (2007/11/22)

At the very beginning, Hue-Zhen experienced tremendous difficulties of ESP

reading. Her reading speed was painfully slow. However, in a three-year span, her ESP reading proficiency improved by leaps and bounds. The gain was not disclosed until a telling episode happened:

I did not realize my change until one day a graduate student came to me to ask about the meaning of a passage. I browsed the research paper for seconds; then I started to explain the details. In admiration, the student cried out “Teacher, how come you could read so fast?!” Without the exclamation, I would not have noticed my betterment in this regard. For me, to read is to do things come next. I had been so focused on the doing coming after the reading that I totally lost sight of my improvement. (2007/11/22)

### **Negotiability of the Repertoire: “One Cannot Grasp the Idea of a Recipe Without Cooking Experiences”**

Hue-Zhen reported that in her graduate school life, in addition to laboratory experiments, seminar presentation was an arduous task. As a routine, graduate students were required to present English journal articles. The language of the talk was Chinese but the *PowerPoint* slides were noted in English. It is in the very first seminar presentation that Hue-Zhen’s inadequacy of ESP reading was detected. She noted, “After the presentation, my teacher and classmates raised their questions about the study. At the moment that I attempted to answer the questions, I came to realize that I hadn’t read the research paper with full understanding” (2008/1/10). When looking back, she commented:

The comprehension gap was not so much a language problem as a problem of the subject matter. Generally speaking, English language of the scientific papers is simple and straightforward; their surface structures are not difficult to understand. In the case of my first presentation, it was my limited understanding of the research method of that paper that resulted in my incomplete comprehension. (2008/1/10)

The scientific procedures of my research area are rather abstract. A reader cannot fully understand the text of my discipline without direct participation in experiments, just like one cannot grasp the idea of a recipe without cooking experiences. (2008/2/19)

On a teacher-student conference, the limitation of Hue-Zhen’s presentation was commented by her advisor. He noted: “Your report sounds like a shopping list”

(2008/1/10). To show her an effective way of academic information release, the professor guided Hue-Zhen to rehearse an upcoming seminar presentation in person. He showed her how to accord the text with the figure or diagram so that the relationship between the experiment purpose and result could be understood in a coherent picture. Hue-Zhen said, “Thanks to his tutoring, I learned that there is a story line of a research article. As long as I grasped the line and followed it, I could read and present the paper with clarity” (2007/11/22).

In reflection, Hue-Zhen attributed her proficient reading to multiple factors. For one thing, her reading competence accrued because of her unremitting efforts. Hue-Zhen reported that on average she spent about 30 hours a week on ESP reading and that about 90% of the print she processed was in English. She boiled down the process of her improvement to a Chinese expression “*shou neng sheng quia*,” meaning familiarity breeding dexterity.

Familiarity arises due in part to her selective reading. For instance, when Hue-Zhen’s ESP reading purpose was intended to seek for a good research design, she perused Materials Methods but skipped the other sections like Introduction or Discussion. The time and efforts saved were used to process more papers in greater depth, which in turn accelerated her reading speed and efficiency.

Nevertheless, she acknowledged that her familiarity comes mostly from her incremental intimacy with her domain knowledge—the more background knowledge she had, the more competent her ESP reading was. Hue-Zhen depicted the familiarity featuring in her ESP reading as rowing a boat in a small lake, a metaphor Hue-Zhen initially used to describe her early English learning experiences: “In junior high school days, English learning was like rowing a boat in a little lake. I was quite familiar with every detail of the water. I won’t miss anything within my eyesight” (2008/1/10).

After I have been involved in ESP reading, the feeling of boat-rowing in a lake came back. However, in the middle-school lake, the operation was straightforward. In most cases, what I needed to do was to determine a correct answer on the basis of grammatical rules. However, in the ESP-reading lake, things become much more complex mostly because it involves the process of information integration whereby I manage to transform text knowledge into my own knowledge. No matter how effectively I read, if I fail to turn text knowledge into my own, I read for

nothing. (2008/1/10)

To achieve the purpose of knowledge conversion, she devoted herself to *fan fu yue du* or repeated reading. She elaborated, “I have to read again and again to internalize the knowledge of interest. During the process of *fan fu yue du*, I am exposed to the same set of knowledge either from different resources or from the same resource but at different time points. By *fan fu yue du*, I ultimately turn the information into my own knowledge and commit it to my mind” (2008/2/19).

In spite of her ESP reading competence, Hue-Zhen described the transformation procedure as painful. She related one of her experiences to illustrate the hardship:

I have just given a Chinese talk on sports and immunology. For the 20-minute speech, I spent about two months collecting papers, reading them, taking notes, comparing and weighing information, struggling for what to present and what to ignore, selecting the ideas and converting them from English into Chinese ones in my mind, and painstakingly docking them in my mental database. The course of action was tedious, laborious, and afflictive. (2008/1/10)

On this account, Hue-Zhen concluded that the most daunting challenge of ESP reading was rooted in the transformation process, not in the language itself. She also pointed out that the knack of integration was difficult to pass down to other learners by languages. Basically, the process was a habitual self-practice and self-refining course, in which the readers rely on hands-on experiences to come to an understanding and to advance further in his/her discipline.

### **Coda of the Story: To Move Up One More Step**

In looking back, Hue-Zhen divided her ESP reading development into three main phases, i.e. “Awkwardness,” “New Car Break-in,” and “Dexterity.” The first stage referred mainly to her reading for academic purposes in the school days. After she became a PI, the reading course steered into the second stages, which joined the third one at some blurry point.

The journey of my ESP reading is like climbing invisible staircases. In spite of its intangibility, I know the staircases exist. I also know the flights were not steep as climbing did not make me out of breath. Moreover, between the “New Car Break-in” and “Dexterity” exists a transitory point, which

however is difficult for me to pinpoint. (2008/2/19)

I am grateful that my academic ladder stretches straight and smoothly from one footstep to another: I conducted the research, wrote the papers, and submitted them; they were accepted and published; the publication in turn helped me earn more credits and grants for more research. As the course loops upward steadily, the success came earlier than I had expected. (2007/11/22)

Due to Hue-Zhen's metaphor of staircase climbing, her life story is subsumed under the Chinese expression: "I intend to move up one more step although I have reached the top of a one-hundred-meter post." The expression is commonly used in Chinese society to encourage people to make further advancement after reaching a relatively high attainment. Hue-Zhen was pleased that she had reached the apex of the academic ladder of professorship. To her, the joy deriving from rank promotion was perfect and eternal. As Hue-Zhen reached the top of the academic hierarchy and became a full professor at the age of 40, she knew very well that she had to sail more than two decades in the water of academia before her retirement. She predicted that in the long voyage ahead, English language would maintain its dominant role in her field, regardless of the increasing prevalence of Chinese language. She commented,

My fellow researchers and I will not read and publish in Chinese unless there are leading Chinese scientific journals recognized worldwide for disseminating newly developed scientific knowledge. However, personally, I don't think the change will come to pass before my retirement. (2008/2/19)

### **THEORETICAL UNDERSTANDING OF THE STORY**

The first attempt here is to find out whether ESP reading literacy and identity are related. What is notable in the life story is that ESP reading is not an isolated cognitive activity. Unlike what is held in the common belief, Hue-Zhen's ESP reading involves ubiquitous mutuality of engagement. For example, in the case of the bi-modal learning, Hue-Zhen works together with her senior schoolmate in pursuit of the knowledge of immunology. There are more instances which reveal mutuality of engagement: the scaffolding of ESP reading and presentation provided by Hue-Zhen's advisor who brings to the fore the existence of a textual "storyline" in a research article; the seminars in



Hue-Zhen's PhD program; the journal club in which the teachers and students help each other to acquire the newly developed scientific knowledge; the lab meetings in Hue-Zhen's workplace in which the learners' peripheral participation of ESP reading and presentation are invited, to name just a few. Along her career development, mutuality of engagement of literacy practice helps Hue-Zhen's to build up her membership and make her conclude: "I cannot achieve it totally by myself."

Examples mentioned in the previous section not only foreground ESP reading as mutuality of engagement but also reflect that ESP reading, along with research design, laboratory experiments, and journal publication, is part of the joint enterprise,. As a COP member, Hue-Zhen has the accountability of the joint enterprise. Specifically, she admits that her wide ESP reading is driven by her newly assigned role of PI. A job title, however, is more than a fixed form; it is infused with congealed human experience and practice (Wenger, 1998). As contended by Gee (1996):

Being a real Indian is not something one can simply be. Rather, it is something that one becomes or is *in the 'doing'* of it, that is, in the performance....there is no *being* (once and for all) a real Indian, rather there is only *doing being-or-becoming-a-real-Indian*. If one does not continue to 'practice' being a real Indian, one ceases to be a real Indian (p. 129).

In Hue-Zhen's case, to become a real PI, she devotes herself to tremendous "doing," not the least of which is ESP reading initiated by her understanding (or accountability) that "[s]cience is not a local matter." When Hue-Zhen positions herself and is positioned as a local member, she counts on Chinese language to read for specific purpose; she also positions her students likewise, which results in their heavy reliance on L1 for academic reading. However, as communities of practice develop in historical, social, cultural, and institutional contexts, they are not self-contained entities. Once Hue-Zhen realizes that the locally produced meanings via reading in Chinese have comparatively low value for a wide range of communities "in the recent forms of globalization," (Canagarajah, 2006, p. 197) she makes attempts to align with the wider scheme of globalization via the shift of her reading language to respond to the "distant demands" (Brandt & Clinton, 2002, p. 351). In brief, Hue-Zhen's awareness of the enterprise leads to her ESP reading, which renders her able to move from the peripheral

to the core as well as to respond to the local and global interplay.

Furthermore, as observed from the life story, one of the facilitating factors of Hue-Zhen's wide ESP reading is the database of *PubMed* or *Medline*, namely a communal resource or a repertoire. However, as argued by Wenger (1998), the most important repertoire of a COP is its members' history of mutual engagement, which over time is able to distinguish the insiders from the outsiders, namely defining a member's position in the COP. In Hue-Zhen's case, although ESP reading allows her to participate in the shared learning history of COP and to obtain access to legitimate membership, competence of her ESP reading at the same time depends on the extent of her participation in the communal history, as shown by the metaphor "one cannot grasp the idea of a recipe without cooking experiences." Many researchers (e.g., Freire & Macdeo, 1987; Gee, 1996) have referred to experiences as a crucial role in arriving at understanding of the meaning in language. Gee (1997) uses *coffee* as an example to illustrate that meaning is associated with specific patterns of experiences rooted in particular sorts of context in which one experiences the word differently. As a result, one assembles a different meaning in hearing "The coffee is spilled, go get the mop" from "The coffee is spilled, re-stack it." In other words, reading comprehension relies on negotiation of the written words and the reader's experiences. As negotiability of the repertoire plays a vital role in ESP reading, without participation in the learning history, Hue-Zhen's L1 reading for immunology course suffers in spite of her great proficiency of the surface forms (i.e., Chinese characters). In the same vein, due to the lack of mutual engagement in the discipline, Hue-Zhen translates her reading deficiency in the form of ignorance of the research method, which leads to her problematic ESP reading at her first seminar presentation.

On the other hand, significance of the negotiability of the repertoire is also brought to the fore by the event in which Hue-Zhen reads for a Chinese talk on sports immunology. The negotiation process is termed by Hue-Zhen as "knowledge conversation" and "integration" whereby Hue-Zhen makes sense of the text, uses the meaning he/she negotiates, and asserts as hers. As noted from the life story, in spite of using different names, Hue-Zhen places great emphasis on the negotiability of the repertoire and highlights that it is labor-intensive and has the most important role in ESP

reading. Noteworthy is that the negotiation of meaning is not an individual cognitive activity. As it is closely tied to participation in the shared learning history (or familiarity with disciplinary knowledge), negotiability is social.

As observed from above, ESP reading is connected to mutuality of engagement, accountability of the joint enterprise, and negotiability of the repertoire. On this ground, suffice is it to say that ESP reading literacy and identity are related. What intrigues us more is how the two relate to each other. During the moment-to-moment changes of ESP reading journey, it is shown that Hue-Zhen's ESP reading proficiency varies with her positions of the COP—at the peripheral, she reads with difficulties while at the core she reads with competence. The movement from the peripheral to the core can be translated into the trajectory from the unfamiliar to the familiar. When Hue-Zhen ventures into the unfamiliar territory, her reading suffers, due in part to the lack of the competence of her membership, as in the case of her ESP reading for her first presentation in the master program. The initial stage full of reading inability and non-membership is labeled by Hue-Zhen as “Awkwardness,” a term fully demonstrates the difficulties of not knowing how to engage with others; not understanding the subtleties of the enterprise defined by the community, and not having the shared resources (Wenger, 1998). However, after Hue-Zhen becomes a real PI, the picture of her ESP reading is completely different. A telling example is the event in which Hue-Zhen's graduate student exclaims “Teacher, how come you can read so fast?!” The exclamation in effect is a token of recognition of not only Hue-Zhen's ESP reading proficiency but also her membership. As informed by Gee (2001), identities are brought into being when recognized within a relationship or social contest. As a result, one cannot be a real Indian unless one “gets recognized as a real Indian in the practices of doing being-and-becoming-a-real-Indian” (Gee, 1996, pp. 129-130). On the ground, the graduate student's exclamation congeals and demonstrates Hue-Zhen's competent ESP reading and full membership.

When comparing Hue-Zhen's ESP reading at the peripheral and that at the core, we have the understanding that Hue-Zhen's lack of membership is interlocked with difficulties of ESP reading while her full identity comes with high ESP reading proficiency. As ESP reading proficiency entails membership and vice versa, it is determined that Hue-Zhen's ESP reading and identity are interdependent. Moreover,

in the narrative, Hue-Zhen adopts the metaphor of climbing staircases for the journey of her ESP reading. She claims that her ESP reading ladder is at the same time the ladder of career development. Via this metaphor, the seemingly horizontal movement from the peripheral to the core can be translated into a vertical perspective, which renders us able to depict the development of the two as isomorphic: when one is low, the other is underachieved; when one is boosted, the other is enhanced. In brief, the growth of one entails the development of the other. At this point, it is found that ESP reading literacy and identity are not only related, they are interdependent and isomorphic.

### **CLOSING REMARKS**

The narrative inquiry shows that ESP reading and identity are intimately connected. The finding brings pedagogical implications, especially for educators who work within a sociopolitical milieu that cast a view of ESP reading as a matter of accrual skills and information. Accepting the idea that developing academic literacy involves shifting identities calls for the acceptance of the idea that learning ESP reading literacy is more than simply increasing academic vocabulary size or genre knowledge. As shown in the study, ESP reading is related to participation, interaction, relationships, and contexts, all of which imply how the ESP reader makes sense of the self and others, namely how he/she identifies and is identified. The social view of ESP reading calls for re-examination of current educational practices. In the classrooms, teaching activities involving mutual engagement should be encouraged to facilitate the accountability of the enterprise and the negotiability of the repertoire. To move the learners to profound new identities, ESP readers need to be provided with opportunities to revisit their early L1 and L2 reading histories and envision the community of practice they will enter. At the school or national level, educational policy makers should be cautious about using the results of standard proficiency tests for important decision, for instance, allowing or disallowing entrance or exit of certain educational programs.

Equally noticeable from the study is that local ESP learner's identity work is impressively tremendous. The reader not only deals with the internal issue of membership by moving from the peripheral to the core but also is in demand to

respond to the local-global interplay in the era of globalization. In Block's (2007) work on second language identities, issues of identity are examined in: (a) adult migrant contexts, (b) foreign language contexts, and (c) study abroad contexts. By "context," Block refers specifically to "the physical location of language learning as well as the sociohistorical and sociocultural conditions that accompany that physical location" (p. 4). The present research fits into the second category as the participant has finished her education all the way in Taiwan and has never had a long stay abroad for professional purposes. However, regardless of little physical location movement is involved, the identity work which the learner does in the local context is no less than what is done by language learners in the other two settings. On this account, we argue that ESP readers or learners in foreign language contexts are "immigrants in situ." Although there is an increasing interest in literate identities (Moje et al., 2010), learners of this category have not received due attention. In the age that English continues to spread as the language of science, technology, and advanced research in non-English-speaking countries, we call for more literacy-identity research to investigate interaction between immigrants in situ and their context.

## References

- Anderson, N. J. (2006). Crossing borders through reading. *Selected papers from the Fifteenth International Symposium and Book Fair on English Teaching* (pp. 1-9). Taipei, Taiwan: Crane.
- Barton, D. (1994). *Literacy: An introduction to the ecology of written language*. Oxford, UK: Blackwell Publishers.
- Barton, D., & Hamilton, M. (1998). *Local literacies: Reading and writing in one community*. New York: Routledge.
- Barton, D., & Hamilton, M. (2000). Literacy practices. In D. Barton, M. Hamilton, & R. Ivanic (Eds.), *Situated literacies: Reading and writing in context* (pp. 7-15). London: Routledge.
- Bauman, Z. (1997). *Postmodernity and its discontents*. New York: Norton.
- Belcher, D. D. (2006). English for specific purposes: Teaching to perceived needs and imagined futures in worlds of work, study, and everyday life. *TESOL Quarterly*, 40, 133-156.
- Belcher, D., & Connor, U. (Eds.). (2001). *Reflections on multiliterate lives*. Clevedon, UK: Multilingual Matters.
- Block, D. (2007). *Second language identities*. London: Continuum.
- Bourdieu, P. (1977). *Outline of a theory of practice* (R. Nice, Trans.). New York: Cambridge University Press. (Original work published 1972).
- Brandt, D., & Clinton, K. (2002). Limits of the local: Expanding perspectives on literacy as a social practice. *Journal of Literacy Research*, 34, 337-356.
- Canagarajah, A. S. (2006). Negotiating the local in English as a lingua franca. *Annual Review of Applied Linguistics*, 26, 197-218.
- Chia, H. U., Johnson, R., Chia, H. L., & Olive, F. (1999). English for college students in Taiwan: A study of perceptions of English needs in a medical context. *English for Specific Purpose*, 18, 107-119.
- Clandinin, D. J., & Rosiek, J. (2007). Mapping a landscape of narrative inquiry: Borderland spaces and tensions. In D. J. Clandinin (Ed.), *Handbook of narrative inquiry: Mapping a methodology* (pp. 35-75). Thousand Oaks, CA: Sage Publications.
- Connelly, F. M., & Clandinin, D. J. (1990). Stories of experience and narrative inquiry. *Educational Researcher*, 19(5), 2-14.
- Cummins, J. (1986). Empowering minority students: A framework for intervention. *Harvard Educational Review*, 56, 18-36.
- Cummins, J. (2008). BICS and CALP: Empirical and theoretical status of the distinction. In B. Street (Ed.), *Encyclopedia of language and education: Vol. 2. Literacy* (pp. 71-83). New York: Springer.
- Delanty, G. (2003). *Community*. London: Routledge.
- Eckert, P., & McConnell-Ginet, S. (1992). Think practically and act locally: language and gender as community-based practice. *Annual Review of Anthropology*, 21, 461-490.
- Erickson, E. H. (1959). *Identity and the life cycle*. New York: International Universities Press.
- Freire, P., & Macedo, D. (1987). *Literacy: Reading the word & the world*. London: Routledge and Kegan Paul.
- Gee, J. P. (1992). *The social mind: Language, ideology, and social practice*. New York:

- Bergin & Garvey.
- Gee, J. P. (1996). *Social linguistics and literacies: Ideology in discourses*. Oxon, UK: RoutledgeFalmer.
- Gee, J. P. (1997). Thinking, learning, and reading: The situated sociocultural mind. In D. Kirshner & J. A. Whitson (Eds.), *Situated cognition: Social, semiotic, and psychological perspectives* (pp. 235-259). Mahwah, N.J.: L. Erlbaum.
- Gee, J. P. (2000). The new literacy studies: From “socially situated” to the work of the social. In D. Barton, M. Hamilton, & R. Ivanic (Eds.), *Situated literacies: Reading and writing in context* (pp. 180-196). London: Routledge.
- Gee, J. P. (2001). Reading as situated language: A sociocognitive perspective. *Journal of Adolescent & Adult Literacy*, 44, 714-725.
- Han, Z., & Anderson, N. J. (2009). *Second language reading research and instruction: Crossing the boundaries*. Ann Arbor, MI: The University of Michigan Press.
- Hawkins, M. R. (2005). Becoming a student: Identity work and academic literacies in early schooling. *TESOL Quarterly*, 39, 59-82.
- Heath, S. B. (1983). *Ways with words: Language, life, and work in communities and classrooms*. Cambridge, UK: Cambridge University Press.
- Ivanic, R. (1998). *Writing and identity: The discursive construction of identity in academic writing*. Philadelphia, PA: John Benjamins Publishing Company.
- Jimenez, R. T. (2000). Literacy and the identity development of Latina/o students. *American Educational Research Journal*, 37(4), 971-1000.
- Johns, A. M. (1997). *Text, role, and context: Developing academic literacies*. New York: Cambridge University Press.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. New York: Cambridge University Press.
- Lieblich, A., Tuval-Mashiach, R., & Ziber, T. (1998). *Narrative research*. Thousand Oaks, CA: Sage Publications.
- Lu, Y-H. (2005). *Stories of teacher identity: A narrative inquiry into East Asian ESL teachers' lives*. Unpublished doctoral dissertation, the University of Maryland, College Park.
- McAdams, D. P. (1993). Exploring your myth. In *Personal myths and the making of the self* (pp. 251-275). New York: William Morrow and Company.
- McKay, S. L., & Wong, S-L. C. (1996). Multiple discourses, multiple identities: Investment and agency in second-language learning among Chinese adolescent immigrant students. *Harvard Educational Review*, 66 (3), 577-608.
- Menard-Warwick, J. (2008). The cultural and intercultural identities of transnational English teachers: Two case studies from the Americas. *TESOL Quarterly*, 42, 617-640.
- Moje, E. B., Luke, A., Davies, B., & Street, B. (2009). Literacy and identity: Examining the metaphors in history and contemporary research. *Reading Research Quarterly* 44, 415-37.
- Morita, N. (2004). Negotiating participation and identity in second language academic communities. *TESOL Quarterly*, 38, 573-603.
- Norton, B. (Ed.) (1997). *Language and identity*. [Special issue of *TESOL Quarterly* 31 (3).]
- Norton, B., & Toohey, K. (2002). Identity and language learning. In R. B. Kaplan (Ed.),

- The Oxford Handbook of Applied Linguistics* (pp. 115-123). New York: Oxford University Press.
- Patton, M. Q. (2002). *Qualitative research & evaluation methods*, Thousand Oaks, CA: Sage.
- Pavlenko, A. (2002). Poststructuralist approaches to the study of social factors in second language learning and use. In V. Cook (Ed.), *Portraits of the L2 user* (pp. 277-302). Clevedon, UK: Multilingual Matters Ltd.
- Peirce, B. N. (1995). Social identity, investment, and language learning. *TESOL Quarterly* 29, 9-31.
- Rex, L. A., Bunn, M., Davila, B. A., Dickinson, H. A., Ford, A. C., Gerben, C. Orzulak, M. J. M., & Thomson, H. (2010). A review of discourse analysis in literacy research: equitable access. *Reading Research Quarterly* 45, 94-115.
- Rock, F. (2005). "I've picked some up from a colleague": Language, sharing and communities of practice in an institutional setting. In D. Barton & K. Tusting (Eds.), *Beyond communities of practice: Language, power and social context* (pp. 14-35). Cambridge, UK: Cambridge University Press.
- Scribner, S., & Cole, M. (1981). *The psychology of literacy*. Cambridge, MA: Harvard University Press.
- Siegel, J. (2003). Social context. In C. J. Doughty & M. H. Long (Eds.), *The Handbook of second language acquisition* (pp. 178-223). Oxford, UK: Blackwell Publishing.
- Street, B. V. (Ed.). (2001). *Literacy and development: Ethnographic perspectives* (pp. 1-17). London: Routledge.
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge, UK: Cambridge University Press.



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