

Non-native English-speaking novice researchers developing research skills in the ESL research community¹

Ruth WONG

The Hong Kong Institute of Education, Hong Kong

How do non-native English-speaking (NNES) novice researchers develop their research skills and seek participation in the ESL research community? The aim of this paper is to compare novice NNES researchers' and experienced NNES researchers' research practices. The study surveys participants working in ESL teacher education or ESL teaching in Vietnam, Cambodia, Laos, China or Thailand. All are non-native speakers of English with ages ranging from mid-thirties to early sixties and with research experience ranging from one to twenty years. The participants were categorized according to their years of research experience: novices were those with less than 5 years of research experience whereas experienced researchers had ten or more years of experience.

Some of the problems novice researchers encounter when conducting research are identified. This paper also examines how experienced NNES researchers' practices can be categorized under Zimmermann's (1998, 2000) self-regulated framework so that the framework can serve as a road map for novice researchers which can help them develop their research skills better and move from the research periphery to the centre.

Introduction

The way expertise is developed has been explored in a wide variety of domains but there are few studies in ESL research (Downie 1992; Ericsson 1996) or in how non-native English-speaking (NNES) novice researchers in Asian countries develop their research expertise. Studies have only investigated the writing process NNES researchers have experienced (ElMalik & Mesi 2008) or the general issues of periphery researchers' academic writing, but not how NNES novice researchers develop their research skills. St. John (1987) and Salager-Meyer (2008) have analysed the writing processes of scientists publishing in English, while Flowerdew (1999, 2000) has looked into Hong Kong researchers' problems in writing for scholarly publications. Studies in the past only described the road for publishing academic papers, but the description can hardly be generalized to a complete picture of research apprenticeship (Cummings 2003; Morgan 2003; Pavlenko 2003). Past studies related to research apprenticeship only studied how postgraduate students learn in a broad sense (Brooks 1996; Darabi 2005). Only recently did Carr-Chellman Gursoy, Almeida & Beabout (2007) study how educational technology postgraduate students, staff and the faculty benefited from an IT-based mentoring program. Other related studies only emphasized cognitive apprenticeship in relation to research (Collins, Brown & Holum 1991; Ducan 1996).

Developing research skills is a way for NNES novice researchers to join the centre of the research circle from its periphery. Novice NNES researchers in the periphery often face linguistic difficulties and are unable to fit into the research practice 'norms' (Belcher & Braine 1995; Braine 1999; Flowerdew 1999; Hyland 2000, 2006; Oda 1999; Canagarajah 1999; Phillipson 1992). Many have also commented that seeking

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participation in the centre of a research community can be a long, stressful, and lonely journey (Belcher 1994; Braine 2005; Casanave 1998; Flowerdew 2000) as success in terms of getting published is determined by experience (Swales 2004).

In light of this, the aim of this paper is to compare experienced NNES researchers' and NNES novice researchers' research practices. Problems NNES novice researchers encounter when conducting research are also identified. This paper also attempts to fit experienced NNES researchers' research methods and habits into Zimmermann's (1998, 2000) self-regulated framework so that novice researchers can view it as a 'road map' to guide them through the journey of developing research skills. This road map will be of help to NNES novice researchers to identify research practices which develop their research skills better at different stages, overcome the research difficulties they have, and move from the periphery to the centre of the research community.

Novice Researchers and Experienced Researchers in the Centre-periphery of the ESL Research Community

In this paper the research community is seen as having a periphery and a centre. NNES novice researchers, who are non-native English-speakers and possess basic research skills but have little research experience or idea on how to write and publish their research works, are at the periphery of the research community (e.g. Cambodia, Laos and China). Experienced researchers in the centre such as the USA, the UK and Australia include NNES researchers who are 'research active'. They are authors of journal publications, based on their original research. Novice researchers and experienced researchers are defined in a loose sense in this paper.

Deliberate Practice and Self-regulated Learning

'Deliberate practice' refers to activities conducted over a period of time designed to improve performance (Ericsson 1996). In this paper, practice refers to the strategies and methods that researchers use to extend their knowledge and skills in the domain of ESL research. In order to move from the periphery to the centre of the research community, novice researchers need to self-regulate the way they learn a task, which requires 'will' and 'skills' (Beltrán 1996; McCombs & Marzano 1990; Blumenfeld & Marx 1997). For this reason, novice researchers need to be aware of their own thinking, to be strategic and to direct their energies in order to play a role at the centre of the research community.

There have been different models of self-regulated learning proposed in the past. There was research focused on a constructive perspective of self-regulated learning (Paris & Brynes 1989), on the social foundations of self-regulated learning (Pressley 1995), on psychological developmental changes in self-regulated learning (Paris & Newman 1990), and on instructional tactics for promoting self-regulated learning (Butler & Winnie 1995). However, these studies are not applicable to this present study which requires an integrative self-regulated learning model focused on metacognition and skill-based developmental changes. According to Zimmermann (1998, 2000), there are four stages of learning in which self-regulated learning is interwoven with the acquisition of domain knowledge and skills (see Figure 1). At the observational stage, learners can learn from watching a model's task performance as well as associate self-regulatory aspects such as

performance standards and goal orientations. At the emulation stage, learners need guidance to correct the skills they have applied in order to improve their performance. At the self-evaluated stage, learners will start intensive self-directed practice in which they monitor their own performance. At the ultimate stage, learners will now be able to focus their attention on publishing their research. Therefore, Zimmermann's framework of self-regulated learning serves as the conceptual framework for this paper for the categorization of the practices employed by experienced researchers, enabling novice NNES researchers to monitor their progress better as they seek participation in the centre of the research community.

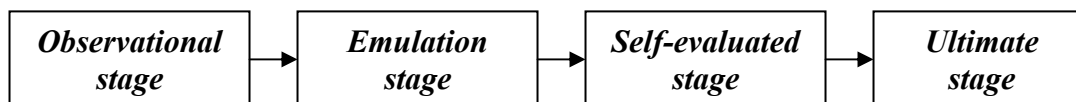


Figure 1. Stages of self-regulated learning (Zimmermann 1998, 2000)

Research questions

In this paper, answers to the following questions will be sought:

1. What are the practices employed by experienced NNES researchers?
2. To what extent can the practices employed by experienced NNES researchers fit into the framework of self-regulated learning?
3. What are the differences between the practices employed by novice NNES researchers and those of experienced NNES researchers?
4. What are the difficulties novice NNES researchers face when conducting research?

Participants

This study surveys 34 participants all of whom work in ESL teacher education or ESL teaching in Vietnam, Cambodia, Laos, China or Thailand. All are non-native speakers of English. Their age ranged from mid-thirties to early sixties ($M = 42.2$ years), and their research experience ranged from one to twenty years ($M = 7.6$ years). The participants were categorized according to their years of research experience: novices were those with less than 5 years of research experience whereas experienced researchers had ten or more years of experience.

Instruments and Procedures

Both qualitative and quantitative methods (i.e. interviews and questionnaires) were employed to answer the research questions. The language used in the questionnaire and interviews was English as it was the only common language shared by the interviewees and the interviewer. First, four of the eight experienced researchers were interviewed and their interviews were audio-taped. The first round of interviews with the four experienced researchers was done to gain insights into their practices that could contribute to the development of research knowledge and expertise. These practices were then categorized under the framework of self-regulated learning. The qualitative data gathered from the

experienced researchers were used to form a questionnaire to be given to all participants (novice and experienced researchers).

In this way, a detailed questionnaire was constructed and given to all participants in order to collect quantitative data of the general research methods of both groups. The questions were categorized into two types: research strategies employed when doing research; and difficulties encountered when doing research. A four-point Likert scale was employed to classify responses.

To make sure the questionnaire was valid, a reliability test was conducted to test its internal consistency. The Reliability coefficient (Cronbach alphas) was high, with an alpha value of 0.886, which means the questions set in the questionnaire were internally consistent.

Once the statistical results had been analysed, face-to-face and semi-structured interviews were conducted. As certain results needed to be explained by respondents, interviews helped in providing explanations. Five of the eleven novice researchers and four of the 22 experienced researchers were randomly interviewed. All semi-structured questions were also based on two areas – research strategies employed and the difficulties encountered when doing research.

Analysis

The first research question was answered by conducting interviews with four experienced researchers. Their responses were coded, labeled and categorized. Responses gathered were also used to develop a questionnaire.

To compare the practices employed by the two groups of researchers, descriptive statistics such as mean, standard deviation and mean difference were used to illustrate the basic differences in terms of the research practices both groups employed when doing research.

Problems novice researchers encounter when doing research were graded and the data collected were analysed with the use of descriptive statistics – mean and standard deviation. Novice researchers were then interviewed to explain their research difficulties. Experienced researchers were also interviewed again to see how their past experience could be of help to novice researchers to tackle the research difficulties they encounter. The sequence of the research is presented in Figure 2 below.

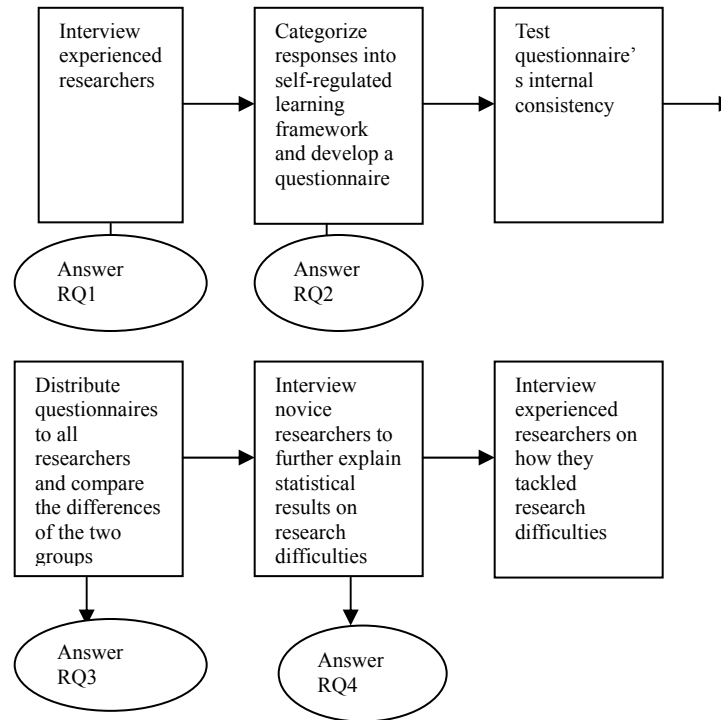


Figure 2. Flow chart of research design

Results and Discussion

RQ1. Deliberate Practices Employed by Experienced Researchers

Based on the responses given by the four experienced researchers, reading journals and books, browsing the library and its catalogue, finding information from the Internet, asking help from colleagues and experts in the field comprised the practices they employed during the observational stage. Following the observational stage, improving academic writing skills and language competence were the main features of the emulation stage. Respondents indicated that attending research-based conferences and giving presentations were two common features of the self-evaluated stage. Practices like reading journals and asking for advice from experts and colleagues reoccurred in the self-evaluated stage. The ultimate stage was to publish academic papers in international refereed journals.

RQ2. Fitting Practices Employed by Experienced Researchers into a Self-regulated Learning Framework

To take the above results further, Figure 3 shows the development of practices with reference to the framework of Zimmermann's self-regulated learning. It shows that the conventional framework of self-regulated learning had to be modified and it needs to be further studied in terms of developing research skills in the context of ESL.

The following chart shows that certain practices, which are highlighted, are repeatedly employed by experienced researchers at different stages of their development. Reading journals and books is considered by experienced researchers as crucial for seeing how an academic paper should be written. Experienced researchers can also reflect on how they can improve their performance in conducting research and writing academic papers. Meanwhile, reading academic materials is also a key element for experienced NNES researchers to monitor writing of academic papers and in updating their subject knowledge. Publishing entails writing and reading, and probably re-reading and re-writing so as to build up intertextuality skills in the ESL research world.

As for asking for help from colleagues and experts, experienced researchers not only see these practices to be used in the stage of observation but also in the self-evaluated stage because asking for advice can reassure them their research is going in the right direction and changes to their work can be made. In other words, Zimmermann's framework of self-regulated learning should not be considered as a static model (see Figure 3) as it involves a lot of re-observing, re-emulating and re-self-evaluating.

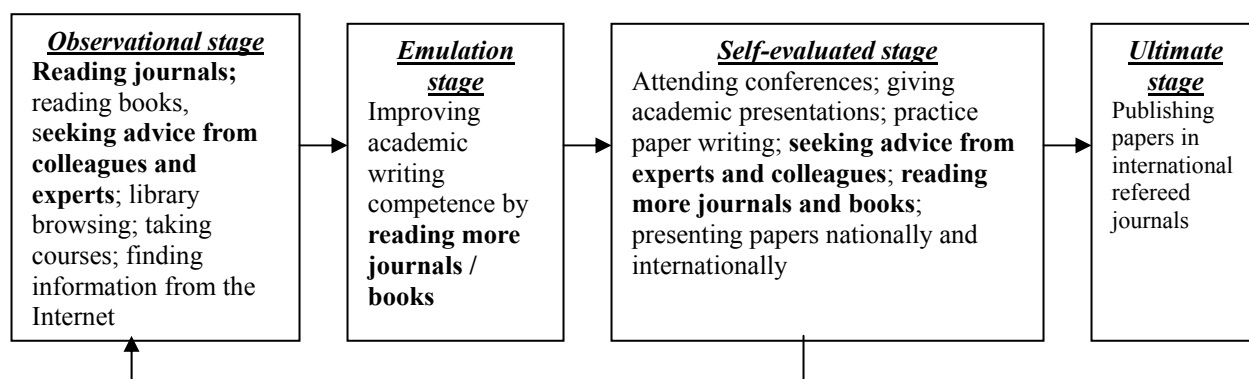


Figure 3. Stages of ESL researchers' professional development

Note: practices highlighted are the practices employed in more than one stage.

RQ3. Comparisons Between the Practices Employed by Novice Researchers and Experienced Researchers

To help the novice researchers from the periphery to join the centre of the ESL research community, it is necessary to understand the different research practices between the experienced and novice researchers so that novice researchers can gain insights from more experienced colleagues.

Research Strategies Employed

Participants were asked to indicate how frequently they employed certain practices during the research process. Table 1 shows the results.

Table 1. Related activities undertaken by novice researcher and experienced researchers

	Experienced researchers (N=11)		Novice researchers (N=23)		Mean Difference (b-a)
	Mean*(a)	SD	Mean* (b)	SD	
<i>Reading journals (hardcopy)</i>	2.43	1.2	2.72	0.29	0.12
<i>Surfing Internet for information</i>	2.42	1.5	1.83	1.23	-0.59
<i>Reading e-journals</i>	2.60	0.3	1.50	1.50	-1.1
<i>Browsing library database and catalogue</i>	1.71	1.14	1.91	0.94	0.20
<i>Reading books</i>	2.14	1.81	2.67	0.23	0.53
<i>Seeking advice from colleagues</i>	1.86	2.10	2.67	0.33	0.81
<i>Seeking advice from experts</i>	1.57	1.74	2.33	0.78	0.76
<i>Browsing library bookshelves</i>	1.43	2.34	2.09	0.88	0.66
<i>Attending conferences</i>	2.38	0.65	1.54	0.89	-0.84
<i>Taking courses</i>	1.63	1.33	1.67	1.12	0.04

*3=always, 2=sometimes, 1=rarely, 0=never

Reading Journals

Results from the above table show that reading journals is very common for both groups of researchers. The mean scores are 2.43 and 2.72 respectively. Reading journals plays a significant role throughout the whole process of self-regulated learning. For novice researchers, reading journals is of great importance at the observation and emulated stage because they need to read more journals in order to “learn from models” and “gain more ideas”. This echoes Van Lehn’s (1996) claim that learning from models is important for novice researchers during the process of learning because examples prove to be an effective tool for skills acquisition.

Though experienced researchers admitted that reading journals was the very foundation for building up research skills, they also saw it with an extended function – it was “the only way to keep themselves updated in the international research field”. That is, not only does reading journals play a significant role in the first two stages of self-regulated learning, experienced researchers also believed that reading journals could help novice researchers to self-evaluate their expertise and refine their research skills at the emulation stage.

Surfing the Internet for Information

“Surfing the Internet” was not a very common practice for novice researchers (M=1.83) because they indicated that they were concerned about the accuracy of the information on the Internet. Several novice researchers also stated that access, technical and financial problems were the obstacles that stopped them from surfing the Internet. However, experienced researchers used the Internet to look for information more often (M=2.42) because it was “a useful tool” and it was “fast and efficient”.

The different views between the two groups of researchers can be explained on two grounds: 1) experienced researchers have better resources and better technical support when conducting research; and 2) experienced researchers possess the necessary research knowledge to look for what information they need. Although lack of resources was what attributed to novice researchers’ limited access to the Internet, experienced researchers believed that professional judgement was a more fundamental step for novice researchers to join the centre of the ESL research community at the observation stage because once they had the necessary knowledge, “false information” from the Net could be distinguished. Meanwhile, experienced researchers believed the process of joining the centre of the ESL research community could be accelerated if Internet access were provided for novice researchers at the observation stage. The difficulty of “lack of resources” will be discussed in detail in section 4.4.

Reading E-journals

Results showed that experienced researchers read online journals more frequently (M=2.6) while novice researchers had little experience with e-journals (M=1.5). The difference, again, lies in the limited resources novice researchers have (further details will be discussed in section 4.4). Novice researchers said they had “no access to online journals”.

Two novice researchers also admitted that they had “no idea about what it is”. On the other hand, experienced researchers believed that e-journals were “convenient” and they did not need to “go to the library as long as Internet access was available”. They also admitted that reading e-journals was one of the most frequent research-related activities they had been engaging in throughout the process of writing up research papers, even more frequent than reading journals in hard copies (see Table 4). Referring to the limited access to e-journal databases the novice researchers possess, experienced researchers indicated that reading journal articles in hard copies would be a possible way out to remedy the situation. Interestingly enough, Table 4 shows that reading journals (hard copies) is the research strategy most frequently employed by novice researchers.

Browsing the Library Database Catalogue

Results showed that novice researchers browsed the library catalogue more often ($M=1.91$) than experienced researchers ($M=1.71$). Novice researchers indicated that “it is the most valuable source for relevant information”, and they “are always accessible” whereas the experienced researchers did not browse the library catalogue as often because they would be “updated by automatic journal or conference alerts which were simply sent by emails.” Again, this can be explained by the novice researchers’ limited resources.

Experienced researchers believed that browsing library database catalogues was an important step for novice researchers at the observation stage to have a general idea about “whose works they need to read in certain areas”, and they also suggested that novice researchers could sign up for free email alerts from journals or other academic publishers so as to be “included in the loop”.

Reading Books

Novice researchers read books more frequently ($M=2.67$) and they indicated that reading books was “the traditional way of learning and accumulating knowledge” and books were also “easy to find and available”. One stated: “Reading books gives me subject knowledge and ideas about how to write and what to write.” Okamura’s (1995) findings of the twin reasons for novice researchers’ reading academic works to acquire subject knowledge and to learn academic writing conventions were confirmed by the present study.

On the other hand, experienced researchers recalled that they would read books in two scenarios which could be of use to novice researchers: 1) when they needed an introduction to certain subjects; or 2) when there is an important work published and they would like to be updated at the self-evaluated stage.

Seeking Advice from Colleagues / Experts

Novice researchers sought advice from colleagues/experts more often than experienced researchers because they believed that seeking advice from colleagues/experts was a good way to generate ideas and they “need advice from people who are more professional”. However, one experienced researcher said he was too embarrassed to ask for advice from

colleagues/experts. When asked about the ‘face’ issues, experienced researchers admitted that they were more willing to ask questions when their research skills were still immature, particularly at the observation and self-regulated stage. They also recalled their experience that asking expert questions was in fact inspirational because a second pair of eyes could see things they could not see.

In this case, novice researchers are less concerned with the ‘face’ issue and they are keen to improve while experienced researchers needed to preserve their “face and reputation”, a common social value in Asian cultures (Bond 1986). It is also interesting therefore to see that novice researchers are willing to give up their dignity and pride despite the importance of ‘face’ in their cultures.

According to experienced researchers, novice researchers seeking advice from colleagues was a good step to build up research confidence at the stage of observation and self-evaluated stage. To further enhance their research skills and expertise, joining research special interests groups or co-authoring a research paper could be also beneficial at different stages of self-regulated learning as suggested by experienced researchers.

Browsing Library Bookshelves

Experienced researchers do not go to the library ($M=1.43$) as often as novice researchers ($M=2.09$) because they simply “do not need to while almost everything can be done online.” This again reflects the reality that some Asian countries do not have sufficient resources for professional research development.

When experienced researchers were asked how they remedy the situation, they admitted that browsing the library was in fact valuable for their research skills development because at the stage of observation novice researchers may “shop” for their research interests by reading bits and pieces of everything.

Attending Conferences

The mean score for experienced researchers attending conferences is 2.38, whereas novice researchers have a mean score of 1.54. Experienced researchers considered attending conferences very useful as it was an important means of academic exchange. Questions raised by the conference participants also refined their research papers and attributed to research publications. Two of the novice researchers, however, stated that they had “no contact” and “no chance” to attend conferences because of financial constraints. Table 2 shows the annual income per capita of the participants’ countries of origin in comparison with some native English-speaking countries in the centre of the research community. Few novice researchers from the research periphery can afford a conference registration fee ranging from approximately US\$100 to US\$150.

However, experienced researchers strongly suggested that novice researchers should attend conferences because it would allow them to understand the culture of the research community such as how presentations were done and how scholars of different countries communicated in academic events.

Table 2. Annual income per capita, 2005 (published in 2006)

Rank	Country	Annual income per capita (in US\$)
6	USA	43740
10	UK	37600
19	Canada	32600
20	Australia	32220
86	Thailand	2750
108	China	1740
141	South Asia (including Laos)	684
145	Vietnam	620
163	Cambodia	380

Primary Source: World Bank

Secondary source: Finfacts Ireland

Taking Courses

Experienced researchers revealed that taking courses was only important at the observation stage because they needed the basic knowledge to conduct research. Though the statistical results showed that novice researchers perceived taking courses as more important, during the interviews they said “It’s not that we don’t want to learn or study. It is just that we don’t have the time.” On average, Vietnamese teachers work from 6 a.m. to 10:00 p.m. Long working hours forbade them from taking courses for professional development. Novice researchers revealed that lack of time was the main obstacle for them to develop their research skills (for further discussions, see section 4.4).

RQ4. Novice Researchers’ Difficulties Encountered When Conducting Research Difficulties in Developing Professional Research Activities

With a view to enabling novice researchers to join the centre of the ESL research community, this paper also examines some of the difficulties encountered by the novice researchers (RQ4) when they attempt to join the research community. In RQ3, two major obstacles were already identified, namely *resources* and *time*. Experiences from experienced researchers were also cited in order to address their research difficulties. The difficulties expressed by novice researchers were from two data sources: questionnaire and interviews.

Quantitative Data & Qualitative Data: Difficulties Encountered by Novice Researchers

Table 3 provides an overall picture of what difficulties novice researchers encountered. Language, research paper writing conventions and resources are the main difficulties (M=2.00). Money (M=1.91) and lack of expertise (M=1.18) are less of a problem.

Table 3. Difficulties encountered by novice researchers

Difficulties encountered	Mean*	SD
<i>Language</i>	2.00	0.88
<i>Research paper writing conventions</i>	2.00	0.76
<i>Resources</i>	2.00	0.74
<i>Money</i>	1.91	0.56
<i>Expertise</i>	1.18	1.24
<i>Confidence</i>	0.91	1.52

*3=always, 2=sometimes, 1=rarely, 0=never

Language

Novice researchers said language was the main difficulty they had when writing research papers. Casanave (1998) and Flowerdew (2000) found the disadvantage of being in a non-English-speaking environment is linked to being on the periphery as opposed to the centre of the discourse community. Language is the greatest obstacle to joining the centre of the research community (Li 2005), especially to NNES novice researchers. Being a non-native English speaker was a disadvantage for them because most international journals were published in English. One novice researcher mentioned: “Even if I was English subject-trained, my English is still not native. How can I compete with native English speakers when talking about getting published? If I were a reviewer, I am sure I would feel a lot more comfortable to read English research articles written by native speakers than the non-native ones.” Another novice researcher from China also pointed out that “When I write, I need to think in Chinese first then translate them in English. L1 transfer errors are inevitable.” This particular language problem was investigated by Flowerdew (1999, 2000). He found NNES researchers admitted that they were disadvantaged when writing for publications in English because they take longer to write, the authors have a poorer facility of expression, a simpler writing style, a limited vocabulary and L1 interference in the writing process. This and similar studies also echoed these results (see Burrough-Boenisch 2003; Cho 2004; Gosden 1992; Woodall 2000).

As for experienced researchers, they also expressed their concern. They admitted that “facility of expression, a simpler writing style, a limited vocabulary and L1 interference in the writing process” were the major problems they faced when they were less experienced in writing up research papers. To tackle these language problems, simultaneously having language support from native English-speaking colleagues and learning from one’s own language errors were the strategies employed by experienced researchers. As indicated by one of the experienced researchers, proof-reading by native English speaking colleagues was an effective way to minimize the language problems. He said the purpose of proof-reading is to identify grammatical errors which impede communication, suggest better syntactic word choices and provide suggestions and comments from a reader’s point of view. Another experienced researcher also recalled similar experiences: “I asked a colleague I could count on to read my paper and give me suggestions on improving the paper in terms of language. He doesn’t need to give me comments on the content, simply focusing on the language I used, in particular word choice and point out my grammatical mistakes. I know I can’t rely on him every time I submit a paper, so I try hard to remember the common errors I always made: hopefully

my next paper can be written up with better language style. That's part of my learning process."

Research Paper Writing Conventions

The majority of novice researchers indicated in both the questionnaires and interviews that research paper writing conventions was also a major problem. They pointed out that writing research articles is like learning a "new subject" as it has its own writing conventions in terms of terminology, discourse, style and scope; however, they admitted that tackling this problem should be relatively easy and it was only short term because they knew all they needed to do was to "read more research articles from different journals".

Experienced researchers also agreed that reading more research articles was an important process for them to acquire the necessary research paper writing conventions so as to join the centre of the ESL research community. The most updated research journals provide a good model for novice researchers to learn "the rules of the game". Experienced researchers also added that acquiring research paper writing conventions first would enhance novice researchers' confidence in joining the centre of the ESL research community when compared with solving the language problem because understanding writing conventions was only a short-term problem whereas the language problem was long-term.

Resources

Lack of resources was found to be one of the major problems novice researchers have from the previous section. Novice researchers indicated that lack of funding to conduct research, no Internet access and not having enough relevant and updated literature available were the main resource problems for them, unlike experienced researchers who could have access to the university library and Internet access.

These findings again echoed previous research conducted by Flowerdew (1999), Benfield & Howard (2000), Burrough-Boenisch (2003), Coates, Sturgeon, Bohanna & Pasini (2002), Kaplan & Baldauf (2005), Kramsch & Lam (1999) and Okumura (2005). Canagarajah (1996) and Braine (2005) reported the scarcity of materials resources and funding resources faced by academics from China and Sri Lanka.

When asked whether available resources make any difference to research publications, experienced researchers indicated that there were direct correlations. Resources are directly linked to publications because they provide researchers with the most updated literature via the Internet which does not require them to go to libraries in person. Also, research funding can be used for hiring research assistants and purchasing the necessary equipment which can save time and allow them to focus on analysing data, reading the literature and writing up research reports. Meanwhile, experienced researchers also admitted that finding resources to develop research skills could be fairly difficult because lack of resources could not be changed by individual effort. They also said this problem could only be changed when novice researchers were involved in tertiary education institutions or externally funded organizations like the local British Council.

Although problems of language, research paper writing conventions and resources were given the same mean value (M: 2.0) in the questionnaire by novice researchers, lack of resources turned out to be the most difficult problem to tackle, as was corroborated by interview findings. The language problem could also be seen as long-term, whereas research paper writing conventions could be considered as the first problem to be dealt with. Therefore, the sequence of steps to join the centre of the ESL research community can be summarized as: 1) acquiring research paper writing conventions by reading journal articles; 2) continuously improving language skills; and 3) looking for available resources where possible.

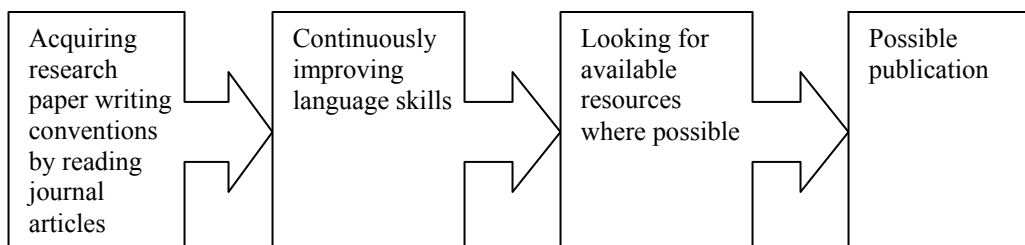


Figure 4. Sequence of solving research difficulties

Qualitative Data: Difficulties Encountered by Novice Researchers

When novice researchers were interviewed, they also reported that lack of time and concentration, encouragement, and cultural differences were the other difficulties they faced.

Time and Concentration

This study shows that there is a vast difference between the time invested in research-related activities by novice researchers and that of experienced researchers (see Table 4). Table 4 shows that novice researchers on average spend 6.4 hours per day on research-related activities while experienced researchers spend 4 hours a day. The reported difference between the two groups of participants is thus 2.4 hours per day.

However, self-reporting data need to be interpreted carefully, as there is a tendency to over-report (Cohen, Manion & Morrison 2001). Though the actual statistical difference between the time spent by the two groups of researchers might not be reliable, the overall information and the difference between the time spent on research-related activities is still significant.

Table 4. Time investment of novice researchers and experienced researchers

Subjects	n	Mean (b)-(a)	SD	Mean difference
Novice researchers	23	4 hours per day	6.02	2.4 hours per day
Experienced researchers	11	6.4 hours per day	3.04	

Novice ESL researchers indicated that they spent a lot of time “exploring the right things to do”. Some pointed out that they did not even know where to find the right references. They believed that if they knew what they were supposed to do, they could save time on

reading and on improving their research paper writing skills. The extra time they spent was mostly on “exploring the research environment”.

Similar results are to be found in Vandrick’s (2003) work. However, experienced researchers pointed out that having insufficient time was not just a problem for novice researchers. To be able to join the centre of the ESL research community, experienced researchers said novice researchers needed to learn better how to manage their time and tasks, and think how they could make the best out of their limited time. One experienced researcher suggested that compartmentalizing one’s time – i.e. setting aside some time only for research-related activities and following the time set accordingly – could be useful in achieving this goal.

Encouragement

Novice researchers also stated that they received no encouragement when conducting research. One of the novice researchers said, “Even though I have an MA, the course itself does not equip me well enough to do research at all”. Another novice researcher also recalled her experience of doing research:

My primary education was bad because my childhood was spent in the [Vietnam] war time, I received no formal primary education. This problem further discourages me if I want to conduct quantitative research [...] I remember I did not realize my concept of % had been wrong for all my life. I did not know 100% means 1 until last year when one of my colleagues pointed that out. He was mocking me [...] because of that, I know I can not do well in quantitative research [...] I was quite upset for quite awhile.

Having heard the above novice researchers’ experience, experienced researchers believed that lack of encouragement was in fact a recurring problem for all researchers regardless of their experience. They indicated that novice researchers did not get encouragement because of their lack of research skills. But experienced researchers also face the same difficulty: for example, submitted research papers may be rejected with rigorous comments. The way to deal with this problem is not to take the comments personally but positively because “once you have your attitude changed, you will be immune from the hard feelings you get from the comments.” “Learning how to stand on their own feet” is a survival skill novice researchers need to acquire in order to join the centre of the ESL research community.

Cultural differences

However, in the interviews, novice researchers indicated that cultural differences could be a problem for them when conducting research. Novice researchers pointed out that their “ways of thinking were different from the west” and when they wrote academic papers, they had to think from the ‘western’ point of view in the hope that their papers could be accepted. Braine (2003), Leki (2003) and Matsuda (2001: 35) supported the results found here: when writing academic papers, they had to make the texts “unmarked in the eyes of

native English users”.

Experienced researchers, on the other hand, held the opposite opinion. They disagreed that novice researchers should think from the westerner’s point of view. Instead, novice researchers should think from their “own” point of view because researchers from the periphery should also be treated in the same manner in the research community. “Erasing their identity” would certainly not contribute any new thinking to the international research community if peripheral researchers try to unmark their identity, as one experienced researcher warned. Meanwhile, experienced researchers encourage novice researchers by pointing out that there are many international journals which accept papers written in “World Englishes” by NNES researchers.

Conclusion

This study has attempted to provide novice researchers with a road map to join the centre of the ESL research community from the periphery with reference to Zimmermann’s self-regulated learning framework (1998, 2000). It shows that the deliberate practices at the observational stage were of the utmost importance to novice researchers, and that reading journals and books, going to the library, taking courses, seeking information from the Internet and seeking advice from colleagues and experts were the fundamental deliberate practices they should employ first to develop their research skills. Deliberate practices like reading journals, seeking advice from colleagues and experts were to be repeated at the self-regulated stage so that novice researchers can self-regulate and monitor their learning progress. Meanwhile, reading seems to be the most important of all because it repeatedly appeared at all three stages and was also ranked highest in Table 5, except in the ultimate stage. Reading is no doubt important as it can provide novice researchers with the capacity to be self-reflective so that their repertoire of research strategies can be readjusted and enhanced. This also implied that developing research skills involves awareness of effective thinking or metacognitive aspects of strategies, referred to as declarative knowledge (what the strategy is), procedural knowledge (how the strategy operates), and conditional knowledge (when and why a strategy should be applied) (Paris, Lipson & Wixson 1983).

In terms of the difference in practices employed by the two groups of researchers, this study found that reading e-journals, surfing the Internet and attending conferences were the most significant (see Table 5). These three different research practices revealed that novice researchers needed to overcome tremendous non-discursive hurdles when attempting to join the centre of the ESL research community. These non-discursive hurdles included lack of time and resources.

Table 5. Comparison between practices employed by experienced researchers and novice researchers

Rank	Experienced researchers		Novice researchers	
	Deliberate practices	Mean*	Deliberate practices	Mean*
1	Reading e-journals	2.60	Reading journals	2.72
2	Reading journals	2.43	Reading books &	2.67
3	Surfing Internet for information	2.42	Seeking advice from colleagues	2.67

4	<i>Attending conferences</i>	2.38	<i>Seeking advice from experts</i>	2.33
5	<i>Reading books</i>	2.14	<i>Library browsing</i>	2.09
6	<i>Seeking advice from colleagues</i>	1.86	<i>Browsing library catalogue</i>	1.91
7	<i>Browsing library catalogue</i>	1.71	<i>Surfing Internet for information</i>	1.83
8	<i>Taking courses</i>	1.63	<i>Taking courses</i>	1.67
9	<i>Seeking advice from experts</i>	1.57	<i>Attending conferences</i>	1.54
10	<i>Library browsing</i>	1.43	<i>Reading e-journals</i>	1.50

*3=always, 2=sometimes, 1=rarely, 0=never

Novice researchers also reckoned that the level of linguistic skills was of paramount importance because they believed that they had to write like a native speaker in order to unmark their identity (Benfield 2007; Benfield & Feak 2006; Coates *et al.* 2002; Hewings 2006; Langdon-Neuner 2006; Man, Weinkauff, Tsang & Sin 2004). However, it is important to stress that being able to join the centre of the research community does not mean one has to think the same way as the researchers in the centre of the ESL research community do. As Braine (2005: 714) points out, NNES research needs “to free itself from the self-imposed dependence on Western criteria to measure its academic success”. Other research difficulties reported by the novice researchers included lack of encouragement and cultural differences.

Having identified the difficulties encountered by novice researchers, the experiences reported and advice suggested by experienced researchers provided useful insights for novice researchers when integrating with the ESL research community from the periphery to the centre. Based on the difficulties reported by novice researchers and on how experienced researchers overcame them, the remedies can in fact be categorized into two groups: 1) controllable solutions; and 2) uncontrollable solutions (see Figure 5).

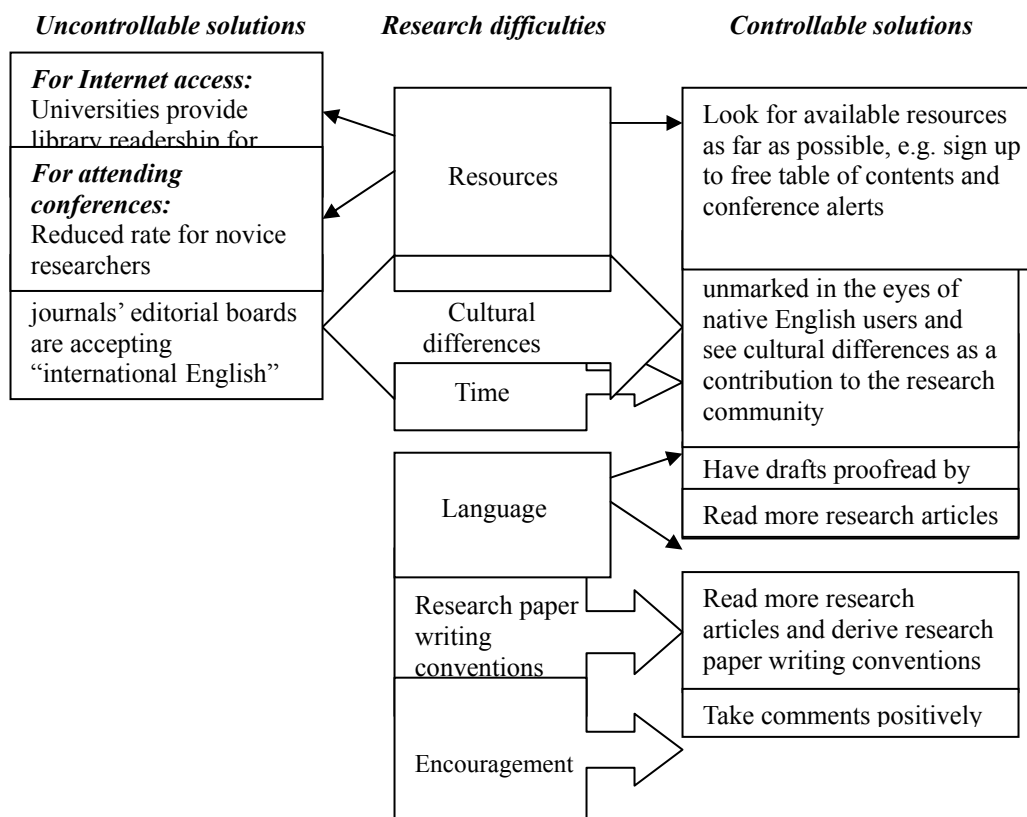


Figure 5. Categorization of research difficulties

Figure 5 reveals an encouraging picture for novice researchers. It shows that most of the difficulties encountered are in fact solvable, except for certain aspects relating to resources and cultural differences. Time, language, research paper writing conventions and encouragement can be dealt with by managing one's time better to read more research articles, then have the written work proof-read by a native English user, and take comments positively.

As for the uncontrollable problem of resources, it is hoped that reduced rates for attending conferences and free university library readership can be offered to novice researchers. Meanwhile novice researchers can try their best to search for available resources from organizations which promote research activities. As for cultural differences, it is important to provide training or mentorship programs to novice researchers to develop critical thinking and improve their skills by exploring the field of ESL research (Ferez 2005; Tardy 2005). Fitting into a standard rhetorical schema does not automatically lead to successful participation in the centre of the research community. To be an independent researcher with a critical mind is more important than "fitting into the English-speaking research culture". Last but not the least, as Flowerdew (2008) suggests, perhaps journal editors should also employ a more tolerant approach and regard members of the research periphery equitably when reviewing academic papers.

Based on the above findings and discussions, the following figure provides novice researchers with a roadmap to join the ESL research community with reference to Zimmermann's self-regulated framework.

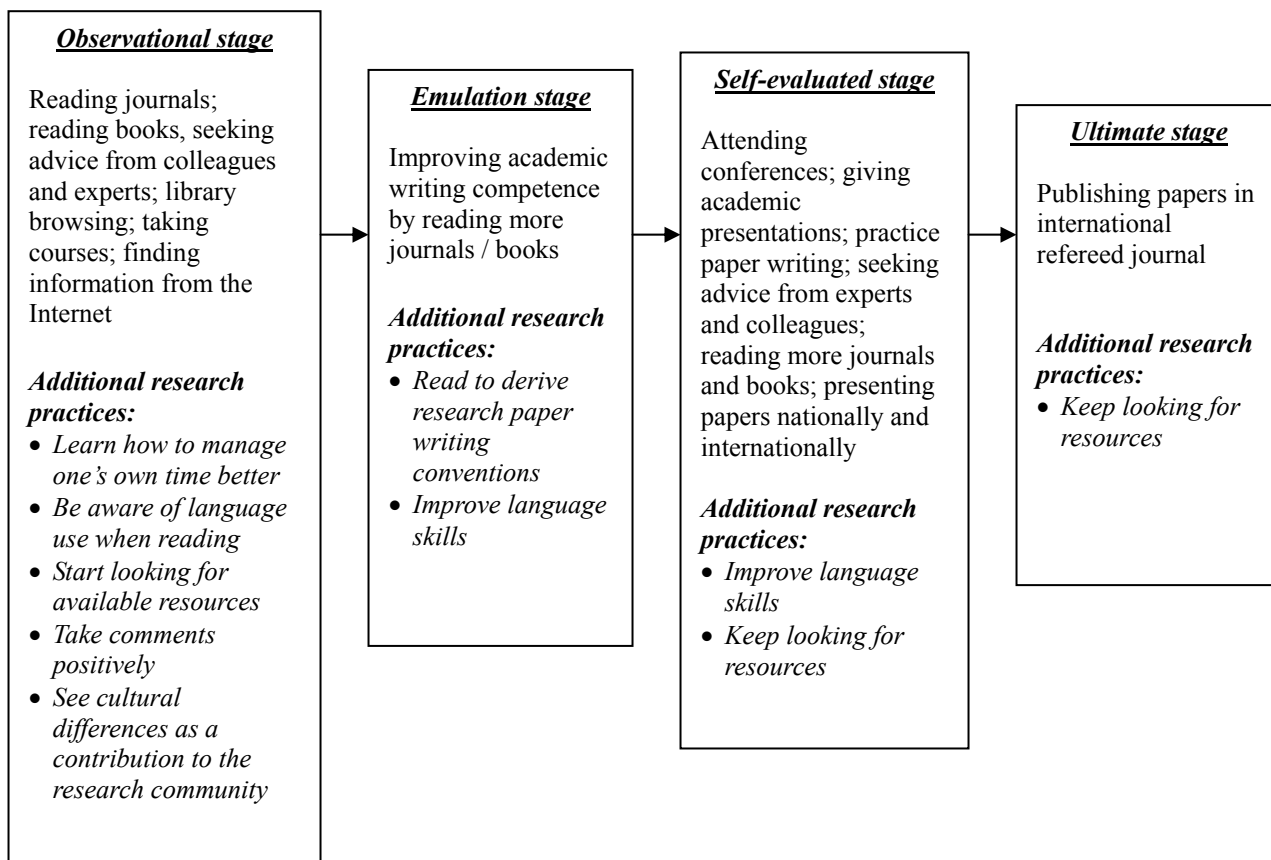


Figure 6. Stages of ESL researchers' professional development

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