Teaching Chinese graduate students of science to write for publication: An interview with Margaret Cargill

Background

Margaret Cargill, an applied linguist based in Adelaide, Australia, does not belong in the usual categories of expatriate academic staff coming to work short term in Chinese universities or research institutes. Rather than teaching in established English courses, her focus was on English for Research Publication Purposes (ERPP, Cargill & Burgess, 2008) at the point where novice scientists must write their manuscripts for submission to international journals. In the 15 years between 2001 and 2016, she made 21 trips to mainland China, often with her Australian scientist collaborator, Patrick O’Connor, to teach English publication skills workshops/courses to Chinese scientists, in particular novice scientists (graduate students). Key venues were a wide range of the Chinese Academy of Sciences (CAS) research institutes that are spread across the country. Many hundreds of participants have benefited from her workshops/courses. Her contribution to the new generation of Chinese scientists’ endeavors in international publication is unique.

The purpose of presenting an interview with Margaret Cargill here is multi-fold. Above all, EAP instruction represents an emerging paradigm of English language education at the tertiary level in China, as a re-orientation of the traditional, knowledge- and skill-based college English teaching (Cai, 2012). Secondly, in the larger framework of EAP, there is a growing interest amongst English teachers at Chinese universities in the instruction of English academic writing, not only because English publication has long become a graduation requirement for research students particularly in science disciplines at the doctoral level, but also as a result of the continuously growing societal need for high-level talents who can engage in academic and professional communication at the international level. Thirdly, the interview tells the “life story” of an EAP practitioner who has trod a path that is a little different from many other EAP practitioners who may be teaching regular EAP courses at a university, and less likely to be teaching English for Research Publication Purposes and less mobile. With the current dearth of attention in our field to the education and development of EAP practitioners (Ding & Campion, 2016), it is hoped that the interview takes a step towards drawing attention to the breadth of this area of practice and scholarship — building on a 30-year old edited collection of personal essays on becoming a language educator (Casanave & Schecter, 1997), and a recent collection on the life histories of some well-known applied linguists (Ellis, 2016). Finally, the views expressed here by Margaret Cargill based on her 15 years of experience of teaching in Chinese contexts might, hopefully, provide a valuable reference and food for thought for peer EAP practitioners who work in a variety of geographical and educational contexts, including English language professionals teaching at the tertiary level in China.

Yongyan Li (YL): What is your current role? In which contexts have you delivered International Publication Skills in Science workshops or courses?

---

1 This text is based on a series of interviews conducted by Yongyan Li with Margaret Cargill during June 27-July 8, 2016, at Shanghai Jiao Tong University, China, where Margaret was teaching a 32-hour course on “Writing a Life-science Research Article for International Submission” to a class of students at the School of Life Sciences and Technologies.
Margaret Cargill (MC): I am currently an Adjunct Senior Lecturer affiliated to the School of Agriculture, Food and Wine at the University of Adelaide, Australia. This is not a salaried job, but involves me in running specialist workshops for our students enrolled in higher degrees by research (HDR). My paid work is consultancy-based, so that I work with students on their theses and manuscripts on a moderate fee-for-service basis. I also do a lot of training for Government departments, other parts of my own University, other Australian universities and other research-based groups who need to publish their scientific results internationally. On the overseas front, as well as travelling to China annually since 2001, I have recently started to offer workshops in Indonesia. I have also presented talks (e.g., Cargill, 2016) and run training workshops (e.g., Cargill, 2013) for English language professionals and manuscript editors in Europe at conferences and universities.

My long-term scientist colleague, who has co-run many of the training workshops with me in different contexts since 2000, is Patrick O’Connor, who is an Associate Professor in the Centre for Global Food and Resources at the University of Adelaide. He also works as a consultant, in the area of bio-diversity evaluation and monitoring. We jointly developed our CIPSE (Collaborative Interdisciplinary Publication Skills Education) approach (Cargill, 2011; Cargill & O’Connor, 2006), and the book that embodies it (Cargill & O’Connor, 2013) has been taken up by students, language professionals, and scientists working in a range of settings (e.g., Burgess & Cargill, 2013; Cargill, O’Connor, & Li, 2012; Cargill & Smernik, 2016).

YL: How would you characterize your CIPSE (Collaborative Interdisciplinary Publication Skills Education) approach?
MC: The CIPSE approach is primarily designed to help inexperienced science writers to produce papers that are more likely to get a “respectful reading” (Mary Ellen Kerans, personal communication, cited in Shashok, 2001, p. 116) from reviewers or anyone passing judgement on the texts. By that I mean that the assessors can pay serious attention to the content of the argument because the language carries the author’s meaning clearly. The CIPSE approach is based on genre/stage analysis (e.g., Swales, 1990; Weissberg & Buker, 1990) and corpus linguistics (see Burgess & Cargill, 2013), and draws upon both ESP genre pedagogy (Dudley-Evans, 1997; Swales, 1990) and Australian genre pedagogy (Cope & Kalantzis, 1993; Martin & Rose, 2005). In short, it is corpus-informed, genre-based ERPP pedagogy. The CIPSE approach can be used in class by EAP professionals, or by scientists (see Cargill & Smernik, 2016), or jointly by the two parties. It can also be employed in one-on-one situations, by an EAP professional working with a student in improving a draft of a manuscript or a thesis (with a content take-home message having been previously signed off by the supervisor), or by a scientist supervisor, as a method for supervising students’ production of a text. The textbook can also be used as a self-study guide by researchers in the process of writing a manuscript.

It is worth noting here the concordance software program that has been developed to go with the CIPSE approach as it evolved: this is AdTAT (Adelaide Text Analysis Tool), which is freely available at https://www.adelaide.edu.au/carst/resources-tools/adtat/. Compared with AntConc (Anthony, n.d.), which is also free, AdTAT has been designed to be simpler — it has fewer features and may be faster to learn, and therefore potentially more user-friendly to students who are being introduced to corpus methods for the first time.

YL: How did you start to teach international publication skills in science in China? Which institutional contexts have you focused on in China? Who have been your students?
MC: Patrick and I first taught together in Vietnam in 2000, as a result of Patrick’s great fondness for Vietnam and his strong interest in helping Vietnamese scientists publish internationally. We wrote a short report for our campus newsletter on our return, and the idea was picked up by a visiting administrative staffer from the Chinese Academy of Sciences (CAS) office in Nanjing. The idea spread to the International Affairs section of CAS in Beijing as well, through the recommendation of a Chinese postdoctoral researcher colleague of Patrick’s, and together these two CAS units funded us to run two workshops, and it started like that. Very lucky, serendipitous, fortuitous development of the whole thing — and from the science side of the equation.

The present trip to China was my 21st since 2001. Up to now, most of my teaching activities, with Patrick joining me on many occasions, have taken place at research institutes of CAS in different Chinese cities, although I have also taught at some universities, including the University of CAS in Beijing (called GUCAS, Graduate University of CAS, until recently). Most years there was at least one institute-based and one university-based workshop, and sometimes more than one context within a city. The work at GUCAS and the institutes between 2006 and 2014 was funded by BHP-Billiton, an Australian mining company. When I was in China for this work, other universities or institutes sometimes took advantage of my presence and arranged additional workshops.

The students we taught at CAS institutes were those with a draft, or at least with analyzed data. They were typically in the second half of Year 2 or Year 3 of their PhD candidature. Patrick’s passion is in making the CIPSE approach work for scientists who are at the level of actually writing papers, and his motivation is getting good Chinese science published in good journals. As an EAP teacher, I also have an interest in getting our approach articulated and embedded through the universities or other training institutions. I want to see what we can take from that higher-level teaching and make it manageable for students at the beginning levels in universities. A big difference though is that the university contexts I have worked in, almost universally, have been less discipline-specific; the student groups have been more mixed in terms of discipline and research experience. That is a real issue for making CIPSE work in those contexts. However, looking back, I see the fact that I was so often based in CAS institutes, rather than Chinese universities, as potentially an advantage, for it gives me a kind of credibility in being able to talk about what scientists actually need when writing for international publication in English.

YL: How did you develop this career?

MC: I constructed this career out of being a trailing spouse to a pig vet! I followed my husband around the world, trying to create jobs in every place I found myself. I typed up the first draft of his PhD thesis, which was on veterinary microbiology, on a manual type-writer with carbon paper, in 1972 in Missouri, USA. So that was my first induction into that kind of academic writing. I also worked as a lab technician during the years we spent in America, which has also proved useful for working with my students’ methods sections. Later, in 1984, we went as a family to a small outer island of Tonga for one year as volunteers. In addition to my husband the vet they wanted me because they wanted English teaching. So to develop a post-secondary, technical level training program in an agricultural college, I applied my foreign language teaching methodology (I had originally been a teacher of German and French) and wrote an English teaching curriculum based on what the boys needed to learn, which was basically about how to grow bananas and other crops. Two years later we went back to the Tongan college for another three years, and my husband introduced a new one-year program in paraveterinary medicine. My English materials for that program were based on castrating pigs and pulling horses down with ropes. It was all very practical.
It was successful and the students loved it. So I came out of that quite convinced that the only way to teach English effectively to people who were not interested in language for its own sake was through whatever it was they wanted to do with the English. All the seemingly unrelated things that I have happened to do have come together, to first lead to my development, with wonderful colleagues, of the Integrated Bridging Program at Adelaide (Cargill, 1996; Cargill, Cadman, & McGowan, 2001), which is still operating in a revised form 20 years later, and then into this career (see Cargill, 2011, for further details).

YL: What level of difficulty exists for Chinese science students who need to write in English for publication?
MC: The situation in China is particular in that there is a graduation requirement for the science research students of international publication in SCI journals, which is not the case, for example, in Australia. Yet the problem for these Chinese students is that the English that is needed for the task is not being taught. They have often had so little experience in writing anything academic in English; it seems there are hardly any authentic academic tasks in English required of students, not until they get to the paper-writing level. So there is a very large gap between the task they need to achieve (writing for publication), and what they think they can do on the page, struggling with sentences. If a university is serious about students being able to effectively write their own paper by the end of their PhD, they have got to start them writing academic English earlier, more than just 150 words on a general topic in a College English Test (CET).

There have been recent moves to address these problems through English-medium instruction or bilingual teaching, and these have great potential — but when a native-English-speaking lecturer is called in to deliver content in English to fulfill these requirements from the policy level, students’ potential language learning is likely to be seriously undercut if there is no collaboration with the English department, to prepare the students and to take full advantage of the benefit for English learning that could be available from having content delivered in English. To have the will and the impetus from the top to conduct English-medium instruction at universities, and then to implement it without seizing all the potential it offers is a missed opportunity, from my point of view.

YL: How can these Chinese students be supported?
MC: As an early step, I think a good thing that English teachers could do, preferably from some point in the senior undergraduate years, is to focus on an authentic reading task, a scientific article reading task, in a content area that co-ordinates with what the students have to do in their content courses. This reading course would ideally need to happen for students in the Schools or Colleges of all disciplines. The School of Foreign Languages staff would need to run an English class for life science students using life sciences papers, and another one for engineering students using engineering papers, because if they do not do that, we are back to the question of how do you teach advanced EAP generically? How can it be useful rather than artificial? I do think that if content teachers are expecting their students to read papers at the undergraduate stage, then that is where English teachers should be; the English teachers cannot be in control of the language in such a scenario, but effective courses can still be designed. Content lecturers could be encouraged to suggest papers that are well-written but not impossibly complex. Corpus approaches would need to be incorporated into such a reading-based course, with corpora built from disciplinary academic texts and searched by AdTAT to create vocabulary learning lists and learn how the language works in that field.
The next step would be for a course to be offered to the master’s and new PhD students who have had limited academic English reading and writing experience previously. I call this one Preparing to Write an International Science Article (PWISA), which is a fledgling form of CIPSE. This could be a summer school course, taught maybe at the end of the first year in the students’ study when they are still trying to fulfill their coursework credits. In Chinese university contexts, I may be wrong but I think that there is often little structural possibility for English teachers to work with students in the final research years when the students are at that intense data collection, manuscript-writing stage, because it is past their coursework time. In my experience, unless the university science supervisors understood the value of our workshops and told their senior year students to attend it, few of them did so. In this PWISA course for beginning Chinese master’s or PhD students, we need to introduce them to the basic ideas: how to analyze a paper so that it is read for the language and argument, as well as for the science, along with concordancing and sentence templates (Cargill & O’Connor, 2013). Later, in their senior years when they are producing data in the laboratory and want to write their manuscript for submission, then they can use our book (Cargill & O’Connor, 2013) as a self-study text, for they should be able to manage this on their own, if they were trained in the concepts in PWISA originally. It would be even better if English teachers can make contact with the supervisors and train them to mentor their students using the methods in the book, but this is a challenge even in my own context. I think this two-phase implementation of a CIPSE approach for master’s/PhD students would be a manageable process in the current institutional and curriculum structures in China.

YL: From your observation, how important do Chinese supervisors think it is for their students to improve their writing for publication skills?

MC: As far as I can see, on the part of many Chinese science supervisors there is a strong emphasis on the final product, on revising and polishing the final paper, often by soliciting the help of an overseas collaborator, who revises the paper and may get his/her name included as an author in the paper, or by using informal or formal editing help, rather than on developing students’ skills. But without the training in the skills, editing is often repetitive, and will be less effective than it could be. Many supervisors do not see it as their responsibility to contribute to the skills teaching. They may be happy to perhaps pay me to come and teach, but they are not prepared to spend their own time participating in that teaching. And with the big problem of time pressure on them, they often just do not see the benefit of spending time sitting in a classroom watching what we do so they can do it themselves next time.

In contrast to that attitude, my scientist colleague Ron Smernik, at the University of Adelaide, has said that he thinks the best thing he can do for his PhD students is to make sure they leave able to write and publish effectively, because that is what is going to stand them in good stead for developing an academic career (Cargill & Smernik, 2016). But it is true that scientists all over the world often tend to say “teaching students how to write is not my job.” As soon as we focus on the importance of writing skills, and the need to develop them as something integral, we find we are butting our heads against the wall constructed by people who say: “but the really important thing is the content (science).”

Yet from my perspective, there is another potential benefit. Providing CIPSE-based EAP support to Chinese students based on collaboration between content and English teachers can have a motivational effect on the students. It is not uncommon for me to hear from supervisors and students in different contexts in China that a good number of science research students do not really want to build careers as scientists, and feel miserable at the prospect of having to do research.
and writing in order to graduate. Properly scheduled and effectively implemented CIPSE courses can potentially make a difference to their outlook by giving them tools to take control of the writing and boosting their self-confidence.

**YL: What about English language teachers in China? Are they interested in taking up what you do?**

MC: On this trip, I have been amazed to see the level of enthusiasm amongst the English language teachers who came to my seminars and who sat in my workshops for the Life Science students at Shanghai Jiao Tong University. This enthusiasm of wanting to pick it up and use it was something that I had not experienced in my previous visits to China.

I must say very limited take-up seems to have occurred on the whole, despite sporadic instances of effort at take-up of some components at one or two universities where we have taught in the past. Of course, I cannot read Chinese, so reports published in the Chinese-language literature may have escaped me — and people may be trying the ideas but may not have published about their outcomes yet. And only very recently, in 2016, I had a chance at Northwest Agricultural and Forestry University in Shaanxi to trial a version of the PWISA course, which is the most likely version to be useful in Chinese university contexts, I think. This course was developed over a 4-year action-research project at GUCAS in Beijing (Cargill, 2011), but the final version we proposed at the end of that project was never taught there to my knowledge because the external funding ended. So there are definitely pockets of interest!

**YL: What suggestions do you have for English language professionals who want to teach publication skills in science disciplines?**

MC: Although quite a few Chinese English language students or teachers who have observed my classes have said to me, “you looked so confident,” I have not always been this confident. I certainly was not when I started. It was a very gradual and staged learning process. I have worked across a really broad range of sciences in my teaching life, so even though in Australia people say to me, “you have obviously got a real knowledge of science,” I say, it is very broad but also really shallow — mostly from reading and analyzing papers and helping students with their writing. As I said, the different bits in my life experiences and being married to a scientist all came together to enable this career. But I do not think that everybody has to have the same collection of skills at the start. I think that people can seek out experiences that will build the extra skills that they think they will need. A lot of it can come from patiently reading and analyzing the target disciplines’ papers. It is also useful to say to a student sitting next to you in an individual consultation context: “I don’t understand; can you explain this to me?”, because having to explain to you is really good for them in clarifying their meaning in English, and also really helps you to understand the research field a little better. Another thing that I think an English teacher who wants to seriously work with scientists needs to do is to learn to understand scientific method, the way that evidence is used to support claims in a particular discipline. English teachers can try to form a connection with a scientist and ask if they can go to the lab and just sit and talk, and watch the students do experiments and ask them to talk about what they are doing. Ideally, it would also be good to run some basic lab sessions for groups of English teachers, to show them some of the basic techniques relevant to the field of science they want to support. Just to provide a little bit of a handle on things, so that the English teachers are not drowning in something they cannot visualize at all. Once we can understand the methodology to some extent, we can move on to manage the vocabulary issues...
with corpora we build, which can show us how words go together in sentences in that particular field.

**YL:** What research do you hope to see around CIPSE, in particular in relation to the Chinese context?

MC: China is such a fruitful place for conducting research in this area. I would hope to see investigation into how effective collaborations can be constructed between English language professionals and content-based teachers. What I have seen is that English teachers often have not had the confidence to present themselves as making an equal contribution to that of the scientists in the teaching of publication skills in English, and scientists have often not been prepared to spend the time required to learn what the new approach offers and what English teachers can contribute, especially in the early stages of the skill development process — I would hope to see research into how this attitude of separateness can be broken down. Small steps at the start, and different in each context, probably. The collaboration between English and content teachers in the Chinese context can produce a research area that would be really rich.

At the level of pedagogy, I would like to see research into what I see as the biggest dilemma facing us in publication skills development: once students know the genre, and what the referees are looking for, how can we then accelerate the teaching of accurate sentence writing within the genre? It is very difficult, I think, to ask the students to come to an English class to learn the structure of English sentences in discipline-specific writing until they see that they have to know it. They can recognize this need clearly when they have done the genre part, working out how research articles work and what reviewers and editors want. Yet at the same time, they should have relatively strong skills in building sentences before they come to be taught about genre – but they often do not! The pedagogy will seem to be backwards in a sense; but how can that happen? I would hope to see some research in that.

**YL:** Will you continue to come to China to teach as you have been doing for the past 15 years?

MC: We have done what we can do, I think, and it is up to Chinese colleagues to take this on now. Having demonstrated the role of genre analysis and corpus linguistics in supporting this kind of skill development, with teaching conducted by a non-Chinese-speaking English-native speaker, the CIPSE approach in the university context needs people who can take it to the next step and explain in more depth in Chinese to those who need that. We cannot go on expecting to bring in the foreigner to do the teaching when it is perfectly possible to do it by utilizing the expertise that is available in China!

On a personal level, I have become more and more interested in big pictures, and less and less satisfied with just making it work in the classroom. I know I can be successful with 30 people in the classroom — we have consistently had significantly raised confidence levels amongst our course participants in writing an English paper for publication and dealing with the publishing process (e.g., Cargill & O’Connor, 2012). But that is not the whole point now. It is the willingness to listen across the disciplines that is wanted in the Chinese context, I think. We need to have people higher up the hierarchy of teaching and administration who are prepared to pay attention to what is offered by this approach, and see how it can be implemented more widely. If there is interest to deliver training workshops or consultations at this level, getting it understood at a level above the individual teachers, then that would be a situation in which I would be prepared to come again, to try and help people to see what they could do at a curriculum level. I talk about myself
in Australia as a curriculum consultant for research education development in Asia and Australia, which is where my major interest and energy is now.

YL: As you look forward to seeing substantial take-up of your CIPSE approach in China, how do you think your Chinese colleagues can contribute in ways that you have not been able to achieve?

MC: From the feedback I have received from the student participants in my courses over the years, I have seen that early-candidature students tended to focus more on English development (i.e., aiming to improve listening comprehension and practise speaking through attending our workshops), than acquiring the content that I have been trying to get across about how to write a paper successfully in English. So Chinese EAP professionals can do better than me to make sure that the students get that content, even before they have the data to write a paper. Another area that I am not good at is at the point of revising drafts, to understand the reason why the writing is appearing the way it appears. I can show the students corpora examples — how experts are using these terms and sentence structures, but I cannot talk about what it is students are translating out of Chinese that is coming out in this inappropriate way. After they understand the genre and audience issues, what they need is detailed work, implementing the strategy in the sentences and paragraphs. Chinese speaking colleagues can do much better than me in this regard to provide the support that students need.

Needless to say, Chinese EAP professionals are also in a better position to get the message across to their scientist colleagues and institutions. When I was working with Patrick in a CAS research institute, he being a very articulate scientist, we could usually give one seminar in the time that we were there. We got some scientists to attend, but very often, particularly if we were further west in China, the oral-aural skills of the scientists who came were not at a level that enabled them to interact with us about this kind of content. We needed to be able to speak Chinese for that purpose, and neither of us does. So our intention of “training the supervisors” has not come to fruition. At the administrative level, and this is certainly an issue beyond China too, the people who make the decisions often do not have the necessary language expertise, or an educated understanding of the role of language in the creation of knowledge. They may think that people who help others acquire those language skills are doing something that anybody who can speak English can teach. Patrick and I have had that said to us so many times in Australia. These people are only “partially informed” stakeholders, so to speak. Chinese EAP professionals can take the lead in addressing in their institutional contexts the silos that we talked about in our joint paper (Authors, 2012); these are both physical, institutional constructs and intellectual, disciplinary ones, and they hinder mutual understanding of potential contributions to shared problems such as the need to develop independent publication skills in our graduate students.

YL: What is the future of CIPSE, from your perspective?

MC: This is such an interesting time to be in this field, as it starts to grow larger within the English teaching community. Before this trip I could see on ResearchGate that we were getting more downloads, more people asking me for papers and so I knew there was a bit of interest growing. Maybe it is just an idea whose time has now come. The number of citations to our papers is now starting to grow, only now — though a lot of those papers have been around for a long time (e.g., Cargill & O’Connor, 2006). I think that is perhaps what happens in our field — that it takes a while for the ideas to embed. As people are paying attention to what we have done, maybe they are going to pick it up, run with it, change it and develop it for their contexts, and that would be great.
References


