

CHAPTER 13.

ENGLISH ACROSS THE
CURRICULUM COLLABORATIVE
PROJECTS: A FLEXIBLE
COMMUNITY OF PRACTICE
MODEL AT THE CHINESE
UNIVERSITY OF HONG KONG

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While Writing Across the Curriculum (WAC) initiatives have a history stretching back several decades in the West, their development in Asia has been more recent. This paper discusses the development and implementation of an institutionalized initiative, the English Across the Curriculum (EAC) project at The Chinese University of Hong Kong. This campus-wide movement differs from many Western initiatives in that it utilizes Community of Practice (CoP) collaborative projects which include applied linguists and ESL specialists as well as content specialists. Additionally, due to student diversity and the unique language policy of the university, the project has eschewed adopting a fixed implementation model, instead allowing alternative forms of collaboration and implementation approaches to emerge based on needs and specific domains. This paper specifically explores

the similarities, differences, challenges, and keys to success of four CoP projects that have been implemented in four departments: statistics, information engineering, music, and psychology.

Writing Across the Curriculum (WAC) initiatives have been prevalent for decades at institutions throughout the United States and the United Kingdom (Jones & Comprone, 1993; McConlogue et al., 2012; Wingate, 2016; Zawacki & Cox, 2014; Zawacki & Rogers, 2012), where the majority of students use English as a first language (L1), and in Europe (Boch & Frier, 2012; Dalton-Puffer, 2007; Zuckermann et al., 2012), where English is generally a second language (L2). In recent years, WAC has also gained popularity in Asia (Wu, 2013), notably in Hong Kong, where English L2 students commonly face English as the medium of instruction (Braine & McNaught, 2007; Lughmani et al., 2016).

At The Chinese University of Hong Kong (CUHK), an institution-wide language enhancement English Across the Curriculum (EAC) initiative has been implemented over the past two years with government funding. This initiative extends the WAC tradition and previous WAC implementations at CUHK, which exclusively focused on academic writing (Braine & McNaught, 2007), to include all language modalities in an L2 setting, allowing English acquisition for students to proceed beyond traditional English as a Second Language (ESL) courses directly into their chosen disciplines.

The EAC project at CUHK differs from traditional implementations in several ways. Unlike WAC administrators in the US who are often composition specialists for L1 writers, EAC supervisors at CUHK are either applied linguists or ESL specialists dealing almost exclusively with L2 learners. Furthermore, the EAC team not only works closely with content teachers, but also directly with students, who are mostly L2 learners in need of assistance in both higher- and lower order concerns. In other words, assumption of monolingual learners with L1 proficiency simply does not hold, and, as a result, EAC interventions can neither ignore lower-order concerns nor allow them to overwhelm higher-order concerns. As universities in the West increasingly address multilingualism, a situation described by Hebbard and Hernández in “Becoming *Transfronterizo* Collaborators: A Transdisciplinary Framework for Developing Translingual Pedagogies in WAC/WID” (this volume), approaches implemented in multilingual environments may be of interest. In this paper, we will first introduce the setting in which this EAC project has been implemented. Then, we will justify the adoption of a flexible model for developing Community of Practice (CoP) collaborative projects, four of which were selected for further explanation due to their unique requirements. Based on the experiences and insights gained, we will discuss the similarities, differences, challenges, and keys to success of the four

CoP projects with four departments in question: statistics, information engineering, music, and psychology. We hope that this discussion can not only show the diversity of situations into which EAC interventions are being introduced, but can also highlight some of the commonalities found across these projects.

The EAC movement at CUHK owes much to the WAC scholarship despite its predominant focus on L1 settings. In return, it is our humble hope that, by sharing our experience in this article, our implementation of EAC in an L2 setting would be seen as a practical implementation of the “mutually transformative model of ESL/WAC collaboration,” advocated by researchers within the L2 writing field (see Matsuda & Jablonski, 2000) and by WAC advocates such as Cox (2011), Ferris and Thaiss (2011), and Zawacki and Cox (2014).

SETTING

Since 2012, all universities in Hong Kong have adopted a four-year undergraduate curriculum, and local students are admitted based on the Hong Kong Diploma of Secondary Education (HKDSE) Examination results, a public university entrance examination administered to students upon the completion of a six-year secondary schooling. This is to replace the former Hong Kong Certificate of Education Examination (HKCEE) and the Hong Kong Advanced Level Examination (HKALE) (Hong Kong Examinations and Assessment Authority, 2015). Due to this territory-wide educational reform, all freshmen are now admitted with one less year of advanced English language training, which has adversely affected the linguistic landscape of CUHK, as students are less able to communicate in English at the levels required by various departments.

The Chinese University of Hong Kong (CUHK) is a comprehensive research university that has eight faculties (equivalent to a “college” at most U.S. universities) with an annual intake of over 4,000 undergraduate students. It is the only local university to adopt a biliterate (Chinese and English) and trilingual (Cantonese, Mandarin, and English) language education policy, which allows departments flexibility in determining their language of instruction. The proportion of Chinese and English used in an individual department is then based on the nature of their academic subject, student activities and available course materials (Chinese University of Hong Kong, 2006). Regardless of their discipline, all students, except English majors, are required to take credit-bearing English language courses for graduation requirements.

The English Language Teaching Unit (ELTU), where the EAC project team comes from, is tasked with the responsibility of developing and offering credit-bearing English language courses to undergraduates across the university. A nine-credit ELTU curriculum spanning three years has been in place since

2012, covering courses on English for Academic Purposes (EAP), English for Specific Purposes (ESP), English for Professional Purposes (EPP), as well as interest-based courses. However, some credit-bearing courses cannot adequately prepare students for genre-specific/domain-specific disciplinary requirements necessitated by different departments, resulting in a gap between what students are expected to do and what they are able to do. Hence, additional language enhancement funding from the University Grants Committee (UGC) in Hong Kong is often made available through pedagogical projects.

The University Grants Committee (UGC) under the Hong Kong Government provides both recurrent grants and capital grants to eight universities in Hong Kong, including The Chinese University of Hong Kong (University Grants Committee, 2017a). Teaching Development and Language Enhancement Grant (TDLEG) is one of the capital grants to encourage innovative language enhancement activities, with a total of \$512.8 million allocated in the 2016–2019 triennium (University Grants Committee, 2017b). Universities have the autonomy to decide on the use of the funding according to their institutional needs. At CUHK, the need to bridge the gap between expected outcomes and actual student abilities, especially in terms of developing disciplinary literacies in English, became apparent due to the replacement of HKALE by HKDSE, which resulted in students receiving one less year of advanced English language input. This gap was further confirmed by the one-year pilot project titled “EAC at CUHK (2015–2016)” funded by the University’s Community of Practice (CoP) Grant. To address this specific need, ELTU further proposed to launch a large-scale English Across the Curriculum (EAC) initiative, comprising collaborative Communities of Practice (CoPs) on campus.

ENGLISH ACROSS THE CURRICULUM (EAC)

With the support of the Teaching Development and Language Enhancement Grant (TDLEG), a three-year institutionalized EAC project (2016–2019) was launched by the English Language Teaching Unit (ELTU) at CUHK to complement the existing curriculum by extending the acquisition and use of English from traditional language course settings to other disciplines, beyond ESL classes. Consistent with the ELTU mission statement of “seeking out opportunities to work with departments and faculties across the university to address the specific English language learning needs of their students” (ELTU, 2018) and modeled on U.K. “disciplinary literacy” (Lea & Street, 1998; Wingate, 2012, 2016; Wingate & Tribble, 2012) and U.S. WAC practice (Anson, 2002; Zawacki & Rogers, 2012) whereby subject specialists collaborate with language specialists to empower students in their use of English within their discipline, the aims of

the EAC project at CUHK have been to further enhance students' academic literacies beyond formal ESL class settings and to help content professors and students develop a heightened awareness of disciplinary literacy. It is hoped that students will acquire language and knowledge transfer skills (Graff, 2010) by incorporating what they have learned from the EAC interventions into their respective disciplines.

The EAC project also hopes to encourage content professors to see beyond their disciplinary specialization to assume stronger ownership in fostering language education. To this end, the EAC team has invited disciplinary specialists and language specialists to cooperate in establishing collaborative Community of Practice (CoP) projects (after Wenger, 1998). According to social anthropologists Etienne C. Wenger, Richard McDermott and Williams C. Snyder (2002), CoPs are "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (p. 4). This definition has been subsequently characterized by three key coexisting elements—the domain, the community, and the practice (E. Wenger-Trayner & B. Wenger-Trayner, 2015)—which keep the CoP together. When translated into our setting, content teachers and language teachers are collaborators of CoP who share a common domain (a shared problem of students' limited academic literacy), form a community (in which constant interactions and negotiations take place), and establish a practice (from which shared resources, outcomes, and repertoire are found).

Given the widely diverse contexts within which each CoP is operating, as Jaena Alabi and colleagues note in "Embrace the Messiness: Libraries, Writing Centers, and Encouraging Research as Inquiry Across the Curriculum" (this volume), we have chosen not to employ a single top-down, fixed-model approach. Instead, we have adopted a flexible approach, where each individual CoP is encouraged to develop any type of intervention that would be most appropriate and useful within the context in which it is being implemented. This was decided largely because of the diversity in academic backgrounds of our partnering content professors, as well as the diverse levels of English proficiency among the students in different departments. As a result of these differences, the language needs being addressed by the EAC team are also diverse, and highly genre-specific/domain-specific. To account for this diversity, the EAC project has been supportive of a variety of alternative forms of collaboration and approaches in implementing CoP projects.

The EAC team is currently working with all eight faculties at the university, including collaborations with more than 40 professors in the development of more than 16 collaborative CoP projects. In the following sections, four of these collaborative CoP projects—statistics, information engineering, music, and psy-

chology—will be described and then discussed in terms of similarities, differences, challenges, and coping strategies shared amongst them. The four projects presented here were chosen primarily because they represent well the diversity of contexts faced by different collaborators. By highlighting this diversity, we hope to show the value and necessity of maintaining a flexible model. Tables 13.1 and 13.2 highlight these diversities, including differences in subject domain, student proficiency and motivation, linguistic contexts, and motivations for intervention.

Table 13.1. Summary of four communities of practice: Characteristics

Community of Practice	Proficiency	Motivation	Medium of Instruction	Target Language Output
Statistics	Low	Low	English	Evaluative Report
Information Engineering	Low	Low	English	Final Year Project Report
Psychology	High	High	Mixed	Web Discussions
Music	Mixed	High	Mixed	Examination Writing & Reflective Writing

Table 13.2. Summary of four communities of practice: Interventions

Community of Practice	Intervention Type	Scheduling	Content Professor Attendance
Statistics	Classroom Workshops, Debriefing Sessions	During class hours	Yes
Information Engineering	Lecture-style Workshop, TA Training	Outside class hours	No
Psychology	Lecture-style Workshop	During class hours	Yes
Music	Classroom Workshops	During class hours	Partial

STATISTICS

The Department of Statistics, which uses English as its medium of instruction, was one of the earliest to show interest in the EAC initiative, which was piloted with full support of a content professor who was also a member of the university's senior management team. She had learned from ELTU about the previous attempt of WAC at CUHK (Braine & McNaught, 2007) and was pleased that the unit would like to rekindle and expand this good practice through implementing EAC as an institutional movement. This professor was interested not

only in improving outcomes in an individual course, but more broadly in exploring the practicality, effectiveness, and sustainability of EAC at CUHK. The course identified for a pilot intervention was STAT3005: Applied Nonparametric Statistics, which is taken by year two and three students who are generally considered to have low motivation for language learning and relatively weak English language skills. The aims of this intervention were (a) to enhance the level of language awareness and language use among the students in writing an evaluative report; and (b) to enhance the competence and confidence of the content teaching assistant (TA) in awarding language marks for the reports. The evaluative report was chosen for the intervention because it is a commonly used genre but often poorly handled by statisticians in the workplace. Despite the students' competence as statisticians, they were having difficulty communicating research findings or recommendations to non-specialists in their reports.

Noting the importance of written communication skills both in the academic and professional settings, the professor agreed to adopt a writing-to-learn pedagogy (Gere, 1985; Herrington, 1981) by incorporating short writing tasks in class and including several more substantive writing tasks as part of higher stakes assessments. She also agreed to allocate 10 percent of the marks for each of these assessment tasks to language use.

To emphasize the importance of language training, all workshops and debriefing sessions were conducted during content lecture hours, with the content professor present. The initial step was taken by the professor who asked her students to discuss in class what constitutes an effective briefing paper, in order to raise students' awareness of the genre. Their written responses based on these discussions were collected and subsequently collated for comparison. Interestingly, the criteria and relative weightings produced by the students were surprisingly similar to those devised by the EAC team based on genre features, reducing the need to create student "buy-in" for the language-related intervention in subsequent meetings.

To obtain a baseline understanding of students' needs and to prepare for the intervention workshop, the EAC team and the content TA from the Statistics department cooperated to analyze the mid-term examination papers of all the students in the class (around 60), using certain pre-defined criteria and weighting. At the same time, textual analysis was conducted by the EAC team to identify specific areas of improvement to be highlighted in the training workshops. It was determined that the focus of training would be on the structural and language features of the evaluative report.

To deepen students' understanding of the genre, interactive in-class activities were designed, with salient features exemplified in a model text developed by the EAC team with the concurrence of the content professor. The training also

included authentic student samples being shown on the screen, which seemed to capture the students' interest especially effectively, and a concise one-page handout outlining the most important structural and language features of an evaluative report (see Appendix A). Student uptake was tracked by including a similar question on the final examination, which was marked using the same set of assessment criteria. Results of this showed a statistically significant improvement in the students' final evaluative report outcomes.

Pleased with the results of this collaboration, the content professor and the EAC team decided to continue the collaboration for a second academic year. In this second iteration, in addition to the workshop on writing an evaluative report, the professor requested a workshop on writing a briefing paper, which is a proposal intended for non-specialists. The needs analysis for the briefing paper was done using take-home assignments from the previous semester, in which students were asked to explain technical statistical concepts to a nontechnical audience. The students were each given 15 briefing papers from this pool and asked to rank them for quality, and they were then asked to articulate the assessment criteria they had used in the exercise. This exercise allowed the students to infer connections between content knowledge and language use. At the same time, the EAC team and the content TA assessed the entire pool of briefing papers using a standardized rubric.

Materials for the briefing paper workshop were designed based on the findings of the needs analysis, and included a model text and student work presented with annotations. Although the workshop was initially scheduled for 45 minutes, the content professor spontaneously requested that it be extended to 90 minutes, noting students' active engagement with the learning tasks and the useful materials developed.

For the third academic year, student feedback was starting to imply that, while the workshops were helpful, the writing load for the class was becoming excessive. Thus, the intervention was limited to a single text type, the briefing paper. This genre was preferred as it requires both evaluative skills and business communication skills. Two workshops were conducted on this topic (rather than one, as in previous years), and students were again provided feedback on assignments and examination writing.

Results of this intervention were shared with students during a debriefing session in the language they knew best: statistics. In addition to descriptive statistics and evidence of improvement, in the same debriefing meeting, the team also shared key observations about student writing in terms of formality, structure, and quality of analysis. Finally, the team showcased examples of excellent work on screen, demonstrating to students that language improvement is something achievable, even for students with lower proficiency.

According to post-workshop surveys, students found the intervention practical and relevant. It was noted especially that the use of students' own writing samples during the workshops contributed much to their success. In addition, the content TA also found the exercise very valuable. Not only has he become more competent in assessing students' written language, he also found his own disciplinary literacy enhanced as a result. Invariably over the years, the success of this CoP hinges upon the continuous interplay between the content professor and the EAC specialist throughout the process, with each party assuming an active and key role at different stages of collaboration. Based on the successful experiences, continued collaboration between the Statistics Department and the EAC team is already being planned.

INFORMATION ENGINEERING

The Faculty of Engineering was targeted because English is the official medium of instruction for the faculty but, ironically, these students tend to have the weakest language proficiency. A professor in the Information Engineering (IE) department responded to the EAC team's call for collaboration in order to address language shortcomings in written reports produced by fourth-year students as part of their *IERG 4998: Final Year Project* (FYP) course. The FYP is a required, two-semester capstone project that each student completes under the guidance of a faculty advisor. The grading guidelines for the project, derived from the department's accrediting engineering body, include the requirement that students display an "ability to communicate effectively" (Department of Information Engineering, 2018). As the Faculty of Engineering is an English-medium faculty, this requires that the communication be done in English.

To help students improve their written reports, the team analyzed past student work, while also completing a genre analysis of published work in the IE field (Wingate, 2012) to observe conventions of structure, language, and reference (Linton et al., 1994). Input from the IE department indicated their preference that interventions focus primarily on conventions of structure. One of the challenges faced was that the written guidance being given to students by the department for writing their FYP reports was limited, and seemed designed to provide flexibility rather than structure. This makes sense, as genre analysis confirmed that published articles followed multiple organizational patterns. However, student samples showed that this flexibility was leading to the omission of certain critical information, information that was present in all published articles, regardless of their exact organization.

The team initially designed two interventions to provide students with more direction. The first was a one-off student workshop delivered by a member of

the EAC team to around 90 students early in the semester. The workshop was held in a lecture theatre and was mandatory for all students enrolled in the FYP course. The primary goal for this workshop was to present a framework that students could use for writing their FYP reports, without imposing a rigid structure or overwhelming them with advice.

This framework was presented to students by organizing the workshop around “Seven Questions That Need an Answer” (see Appendix B). These seven questions were devised such that the answer to each would present critical information necessary for a complete, understandable report. The workshop emphasized the flexibility as to where this information could be included, depending on the organizational pattern agreed upon with the advisors, but also emphasized that all questions needed to be answered somewhere in their reports.

The second intervention was possible because the department agreed to allocate 10 percent of the final course grade to language issues and to provide three graduate student teaching assistants (TAs) to mark and provide feedback on student work, including preliminary drafts. Although these TAs were fluent L2 English speakers, their expertise was in engineering, with no prior experience marking for language issues.

Thus, the EAC team was left with a number of challenges: to come up with a scheme for determining how the 10 percent language mark for each report could be calculated; to find a way to train the TAs effectively; and to maintain a high level of transparency in order to dispel any possible confusion among students and advisors as to how language scores were being calculated. These challenges were addressed by creating a detailed rubric (see Appendix C), with criteria focusing not only on language, but also on whether language was used appropriately to further content goals. In order to provide necessary support to the TAs, detailed descriptors for each level were provided as well. Descriptors for the content goals were carefully worded to correspond to the stated learning outcomes of the course. This rubric provided a measure of objectivity and standardization to the TAs’ marking, as well as a support structure to assist them as first-time language markers, and elucidated expectations clearly for students and advisors.

TAs were trained by an EAC team member (an ESL specialist) to use the rubric for marking in an hour-long session and were given further instruction about providing students with limited, concrete, positive advice about improving subsequent drafts. The TAs also attended a standardization meeting led by the same EAC team member when the first draft of student work was submitted, as well as a moderation meeting at the end of the semester before final grades were submitted.

Student feedback obtained through a post-workshop survey was generally positive, with some even requesting that the workshop be longer. The TAs were

also positive about their work, believing that their role was “necessary,” but also noting with disappointment that some students seemed to ignore their advice. The TAs added that the experience caused them to reconsider aspects of their own writing process, and that they had gained content knowledge from their marking as well. Despite the heavy marking load, all three expressed interest in serving as TAs for the course again in the future. Finally, the FYP course professor was also positive about the collaboration. He believed that the collaborative efforts led to real improvement, and further noted that the Faculty of Engineering considers this collaboration as a possible model for future EAC collaborations with other departments within the faculty.

The experience of this collaboration has left us with several takeaways. First, to really help students with their disciplinary literacy, it is imperative that EAC team members for each project familiarize themselves with both the standards of that discipline and the reality of what students are producing. The diversity of situations being encountered demands that this be done afresh for each new project. Second, when dealing with such a large group of diverse stakeholders (100+ students working with 15+ advisors, in addition to the course teacher and TAs), transparency is vital. By designing the rubric carefully to make expectations and grading policies as clear as possible, everyone involved knew up front what would be happening, and we were able to avoid surprises.

MUSIC

Similar to how the other CoP projects have started, this CoP project in music was another result of the EAC team’s effort in reaching out to content professors. A professor in musicology and western music history from Department of Music who is a native speaker of English requested specifically a workshop on language awareness, grammar, and writing concise paragraphs for examinations on music history. Needs analysis, which involved a series of textual analyses, was conducted based on students’ previous writing samples collected by an EAC teaching assistant (TA) and with the input of the music professor. Based on these student samples and outcomes generated by the needs analysis, the music professor and the language specialist agreed that these music majors are highly motivated learners well-focused on their instruments but not on English and writing. When given a writing task, most students would formulate ideas quickly based on whatever came to mind, and record these on paper quickly with limited organization. Some did not revise these initial texts at all. Some also paid little attention to grammatical accuracy or word choice, as long as they considered the texts to be comprehensible. Consequently, it was determined that the students would benefit little from basic skills, such as sentence structure, but

instead needed explicit guidance on organization, and on musical and academic literacies with sample texts that they could learn from. Students with a lower level of writing proficiency could also learn by adapting their writing directly from the model texts given.

A series of three workshops, conducted during regular lecture hours, were given to year two and three music majors. These 45-minute workshops, which involved mini-lectures, group discussions, reading activities and writing activities, were developed with an aim of helping students with the written component of the course MUSC 3233: History of Western Music II. This first workshop that focused on language awareness and examination writing was requested specifically by the music professor. English has become a de facto requirement in classes where professors are not Chinese speakers. Consequently, even though students might benefit little from basic skills, being able to write effectively in English in an exam situation was still critical.

Part one of the first workshop required students to identify a series of common grammatical errors in sentences and correct them, while part two involved a teacher-demonstration and then a student activity on organizing and formulating concise written paragraphs. In this activity, students received a reading text and an accompanying question, as well as a sample written response to learn from. After this, students were given a new writing question to work on, and were asked to generate their own written responses based on the texts provided. According to feedback from students, these writing workshops were interactive, engaging, focused and effective, despite their limited scale and short duration.

In contrast to the first workshop, the foci of workshops two and three were completely different—reflective writing. Writing reflective texts such as reflective journals has been an ongoing assignment for these music students. Workshop two involved a mini-lecture on “why do musicians reflect” and the different types, functions and organizations of reflective texts, followed by a reading and writing activity in groups on analyzing the structure and language features of a theatre review of the Broadway musical *The Lion King*. Workshop three was a feedback session on the actual reflective journals that students produced during the semester.

As mentioned, students generally enjoyed these workshops and found them useful, because they were highly contextualized and relevant to their major and assessments. However, students have also expressed the need for more or longer workshops in the future. Because the sessions were only 45 minutes, structures and language features introduced were somewhat limited. Moreover, it was difficult for students to see depth in what they did in the workshops when the language specialist was pressed for time. There was also no time for students to understand clearly how learning, knowledge and language were transferable between the workshops and other parts of their major.

Many of these challenges will be addressed in future collaborations between the EAC project and the Department of Music. The content professor has been supportive of the project, making it likely that the project will be sustainable. Future plans include collecting further student writing samples and continuing to develop and offer writing workshops where students can continue to develop their English language and content knowledge in music at the same time. It is our hope that language components such as grammar and vocabulary use can be included in future assessment rubrics used by the department.

PSYCHOLOGY

The CoP project with the Psychology Department is relatively new, having been implemented for just one semester. The Psychology Department uses English as the primary medium of instruction in student assignments and assessments, and follows the APA citation guidelines (Department of Psychology, n.d.). Although psychology majors have relatively high English proficiency, needs analysis of student samples indicated that they lack training in articulating content knowledge concisely in writing. Therefore, the main aim of the collaboration was to improve the students' English writing in a specific course assignment: interactive web discussions.

The students targeted for intervention were 140 first-year students in PSYC1050/UGEB1570: Consciousness, a class containing both psychology majors and students from other departments. The class was made up of two sections, taught by the same content professor with identical learning topics and assignments. Student language proficiency and motivation varied but were generally medium to high relative to CUHK students in general.

Students from these two classes were asked to answer six web-discussion questions spread throughout the term, accounting for 80 percent of the final course grade. Students were expected to answer each discussion question with concise answers of 50 to 100 words containing high levels of language precision, assessing their understanding and application of concepts taught in class. According to the content professor, students were usually unaware of strategies that could be used to create a strong impression in a short piece of writing, as well as documentation skills for direct quotes.

Needs analysis was conducted using student samples across a range of grades from the previous year in order to identify common linguistic pitfalls in answering the questions. Initial findings were shared with the content professor, who concurred with them. However, discovering the reasons behind each individual grade was more difficult, as there was little in the way of a formalized assessment rubric. Thus, much of the EAC team's task was to try to piece together how ex-

actly the grades were being given. This was done largely through back-and-forth email communications with the content professor.

The intervention for this project took the form of a workshop held before the students' first assignment submission. The aims of the workshop were to teach students (a) how to write precisely, concisely, and professionally; (b) how to tackle the course assignments, namely web discussion questions, effectively; and (c) how to avoid plagiarism. Given the 90-minute, one-off nature of the workshop, the EAC team had to distill the workshop content down to most salient language issues that repeatedly emerged during the needs analysis. Due to the relatively strong linguistic profiles of the target students, the workshop centered on advanced linguistic elements such as academic writing style and sentence patterns rather than fundamental grammar.

The size of the workshop was another challenge, as over 100 students attended. To avoid turning the workshop into a one-way lecture, the EAC team decided to adopt a student-centered approach, allowing the learners to discover effective writing strategies by themselves. This was done by pairing carefully-selected strong and weak samples, and allowing students to discuss what they felt were strong and weak features of each. Each pair of samples focused on a single target element, and the workshop teacher constantly asked questions, provided immediate feedback on the students' findings and offering additional advice when necessary. A video was also used when recapping main points.

The feedback from the students was positive. A paper-form post-workshop questionnaire was administered immediately after the workshop, indicating that students greatly appreciated the organization of the workshop, the explanations of the teacher, and the use of authentic student samples. However, they also hoped for even more student samples, as well as greater transparency about how they were being graded.

Feedback from the content professor was positive as well. During a post-workshop meeting, he commented that most of the students who had received C-range grades and lodged grade appeals were those who had chosen not to attend the workshop, implying the effectiveness of the workshop in helping students better meet course requirements and enhance their performance.

Overall, the workshop has brought out the importance of using authentic student samples to facilitate teaching and learning in WAC-related workshops. Although future collaboration has not yet been finalized, it is hoped that it could involve two workshops during the semester, arranged before and after the students' first assignment, so that the learners could receive both guidance before the assignment and feedback afterwards. This kind of arrangement would also allow the EAC team to track students' performance over time to better ascertain the effectiveness of the intervention.

DISCUSSION

The above reports on four CoP projects with Statistics, IE, Music, and Psychology seem to validate the approach of adopting flexible CoP models for the implementation of EAC at CUHK. It is evident that each CoP collaborator had unique support requirements based on the students' language profile, expected learning outcomes, and practical considerations. Some requests from departments greatly exceeded expectations, leaving the team impressed by the readiness of these professors to go the extra mile for enhancing their students' disciplinary literacy. While it is true that we have learned unique lessons from each CoP (Table 13.1), some insights gained can be applicable to all cases and are worth spreading across the disciplines and across contexts. First and foremost, the importance of interplay between content professors and the EAC team is crucial to helping students bridge the perceived gap between content learning and language enhancement activities. In cases where the student population is large and diverse, transparency of practice should be observed to avoid unnecessary confusion. In all cases, relevance to student assessments in the context of content subject knowledge and the use of authentic student samples are key to motivation of learning. To further elaborate our findings, we will discuss the similarities, differences, challenges and coping strategies in greater detail in the following sections.

SIMILARITIES

Although the EAC team's "no-fixed model" approach led to considerable diversity in the types of interventions undertaken, some commonalities can be observed, illustrating aspect of the interventions which seem to be useful across contexts. The most important of these was that the key to a successful collaboration was the "sustained mutual relationships" with content professors, with consensus on appropriate "actions and products" (Wenger, 1998, p. 125) throughout the process. To that end, once potential CoP collaborators were identified, initial meetings were aimed not at "solving problems," but at cultivating mutual understanding of the joint venture to make it a shared enterprise. Establishing a shared vision early in the process almost invariably laid the groundwork for the success of the interventions.

For each of these projects, the mutual trust and respect that were fostered with partner departments allowed the EAC team to benefit from the rich resources these content teachers were able to provide: relevant course documents such as course outlines and schedules; assessment tasks, including guidelines and rubrics; and samples of past student work, when available. These documents formed the basis for conducting needs analyses and preparing the interventions,

which again relied on honest discussion and mutual agreement with the CoP collaborators. As trust continued to develop, collaborators were often willing to build language marks into their assessment rubrics, helping to bridge students' perceived gap between language acquisition and content knowledge building.

As relationships with CoP partners deepened, so did levels of collaboration. For example, after three years of interaction, the EAC team for Statistics was invited to comment on the program's examination and assignment prompts. Similarly, after two years of collaboration, the IE team was asked to assist in writing a new student assignment sheet and has broadened their focus beyond student writing to preparing students for oral poster presentations as well. The Music team was unexpectedly asked to expand their collaboration from examination question writing to reflective writing. Finally, although the Psychology intervention was a one-off collaboration, initial feedback implies that content professors would be quite interested in future collaboration as well. In all cases, taking the time to establish a shared vision was found to be extremely worthwhile not only because it can help ensure a smooth implementation of a particular CoP but also because it is necessary for sustainability.

Another common feature found analogous in all contexts is the use of student samples as learning materials. As reported in all CoPs, student samples were used not only for analyzing learning needs; they were used as learning materials during the interventions to engage students and motivate learning. This practice was greatly appreciated by students from different CoPs, as reflected in the post-intervention surveys.

A final commonality among these projects was that all included evaluative measures to determine the possible impact of interventions on student learning and to improve practice in future attempts. These included post-intervention student surveys, feedback interviews with content professors and TAs, and tracking of student learning over time. Assessment rubrics or frameworks, developed by the EAC team with input from content teachers, have proved useful for tracking student learning objectively.

DIFFERENCES

Major differences between these collaborative projects seemed largely the result of the diversity in language abilities and attitudes among students, as well as the diverse requirements and expectations of partnering departments. These differences naturally led to very different types of requests, which were very specific and had compelling reasons behind them. For example, although IE and Statistics students have similarly weak language proficiency, the IE department wanted help with a technical report written for an audience of engineers, while

the Statistics department preferred a focus on workplace communication skills, especially in conveying statistical concepts to a nontechnical audience. Thus, even with similarities between students, EAC practitioners need to consider language and disciplinary needs alongside each other rather than either set of needs alone when implementing an intervention.

Psychology students, on the other hand, tend to have much higher language proficiency, and the professor viewed improved conciseness and language precision as ways to enhance student content knowledge. This required training in advanced linguistic skills and criticality. For the Music department, where both English and Chinese are official languages of instruction, it is crucial that students continue to master their written and spoken communication in English. Being able to produce written and spoken products effectively in assessments conducted in English becomes particularly important in subjects where professors teach in English and do not know Chinese.

In addressing students' diverse needs, the EAC team has had to handle a wide range of cognitive and linguistic tasks, from higher-order concerns, such as macro organizational skills to lower-order concerns, such as mechanical language issues. The successful implementation of these tailored interventions within disciplinary settings confirms not only the necessity of a flexible CoP model in implementing EAC, but also, and more importantly, the positive impact of having applied linguists/TESOL teachers to support WAC/EAC initiatives. It is believed that our experience lends strong support to what Zawacki and Cox (2011) underscored in their "Introduction to WAC and Second Language Writing": the importance of establishing a seamless relationship between WAC administrators and ESL program directors whose disciplinary boundaries rarely cross in North America.

CHALLENGES

Although these projects met with success, there were a number of challenges that were faced by the teams, some surmountable, and some less so. One of the key constraints was time. Almost all the interventions involved contact with students, meaning that the content professor needed to give up some portion of their scheduled contact hours, or that workshops outside of class had to be made compulsory. Given the difficulties of both of these options, various EAC subteams were generally forced to design and deliver a very condensed workshop, with the hope that it would be memorable enough to have a sustained impact on student learning. This challenge was obviously much greater in interventions involving large classes.

Another challenge is the bilingual language policy at CUHK, which is a double-edged sword. While the policy has important cultural and linguistic advan-

tages, it nevertheless complicates second language learning by resulting in a student body with extremely diverse English language proficiencies. It also results in a de-emphasis of language features in the standardized assessment guidelines and rubrics, which often ignore language components altogether. Some students exhibit a general lack of motivation for English study, and poor competence as a result. Unfortunately, those who need the most help are often the least likely to desire it. The EAC team has no effective solution for dealing with this issue systematically. The approach thus far has been to reach out to all departments, and to simply give priority to those who respond first.

A final challenge that these projects faced is this: How can these projects be sustained?

STRATEGIES FOR SUSTAINABILITY

The issue of sustainability has been part of the EAC project's thinking from its inception. As noted earlier, having strong mutual engagement with content teacher partners is key. Sustainability has been enhanced in concrete ways with the assistance/collaboration of content teachers in training content TAs, writing assessment guides and rubrics, incorporating language marks, and sharing teaching materials. Holding purposeful and focused post-intervention review meetings has also proved useful for sustaining and extending collaborative projects.

To pass resources on for future use, share them with content teachers, and make them available to students for independent study, an EAC repository of learning and teaching resources has been set up within the university's Blackboard LMS, providing access to the EAC team, collaborators and students. Potential EAC teachers can make use of the lesson plans, PowerPoint files, activity sheets, student samples, assessment guides and rubrics to run or re-run workshops in the future. Additionally, students and TAs can gain access to all relevant materials for independent learning, including discipline-specific handouts, annotated student samples, assessment rubrics, videos, and micro-modules for independent learning.

Although the impact of these cases has been encouraging, the EAC initiative is still in its infancy. It is hoped that these related initiatives can serve as impetus for a greater integration between language learning and acquisition of content knowledge (McLeod & Miraglia, 2001).

CONCLUSION

Through close collaboration with disciplinary specialists, the project team has explored the academic literacies of multiple fields and helped to develop among

both content teachers and students a heightened awareness of language use within their discipline using a genre-based approach underpinned by a sound linguistic theory. The EAC project at CUHK should be seen as a demonstration of a practical implementation of the “mutually transformative model of ESL/WAC collaboration,” (Matsuda & Jablonski, 2000), where EAC is being applied not only in an L2 context but also in diverse situations that include both L1 and L2 instruction.

The EAC project at CUHK differs from many similar initiatives in several ways. First, it is being implemented in English L2 settings, within departments that use English as a medium of instruction, as well as in departments that use Chinese as a medium of instruction. Second, although the cases mentioned above all involve written output, the EAC project has also extended the WAC model to include oral output. Third, the CoP model being used includes applied linguists/TESOL specialists interacting directly with students, rather than behind-the-scenes collaborations between writing and content instructors which may involve students only indirectly. Finally, the EAC project has been careful to avoid following a fixed model of implementation, opting instead to afford CoPs flexibility to enact the most appropriate type of intervention for their specific context.

The team has concluded that proactively reaching out to share vision and spending time with collaborators on trust-building is an indispensable first step to launch any CoP project. Engaging in dialogue with content teachers throughout the collaboration process invariably adds value and strength to the joint venture. By far, the “flexible CoP model” approach to implementing EAC within the bilingual setting has been one of the keys to success, as it has allowed genre-specific/domain-specific needs to be met and has also encouraged content teachers to assume stronger ownership of fostering language education.

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APPENDIX A: STRUCTURAL AND LANGUAGE FEATURES OF AN EVALUATIVE REPORT (STATISTICS)

Title: Noun Phrase (*Evaluation of...*)

	Structure	Language
Introduction	Motivation/aim	To-Infinitive (<i>to evaluate</i>)
	Background	Past tense (<i>were</i>)
	Claim	Present tense (<i>is</i>)
Approach	The adopted approach	Past tense, passive voice (<i>was used / adopted</i>)
	Justification for the approach	Present tense (<i>requires</i>)
	Purposes of procedures	Parallel structure (<i>to determine... to estimate... to calculate...</i>)
Results and Discussions	Reference to the appendix	Present tense, passive voice (<i>is shown</i>)
	Statistical results	Past tense (<i>was found</i>)
	Interpretation of results	Interpretive verbs in present tense (<i>shows/means ...</i>)
Conclusion	Summary of statistical results	Present tense (<i>is</i>)
	Claim	Present tense (<i>is</i>)
Appendix	Statistical calculation	

APPENDIX B: STUDENT WORKSHOP STRUCTURE (INFORMATION ENGINEERING)

Seven Questions the Final-Year Project Report should answer:

1. What problem am I trying to solve?
2. How have other researchers tried to solve this problem?
3. What did I do/make/build/design to solve this problem?
4. How did I try to test what I did/made/built/designed?
5. What did I find when I tested what I did/made/built/designed?
6. What does this mean? (Is there an application of what I found?)
7. What should be studied next?

APPENDIX C: RUBRIC FOR ASSIGNING LANGUAGE SCORES FOR ENGINEERING FINAL-YEAR PROJECT REPORTS

Use of Language in Achieving Content Goals

Introduction & Background

<u><5 points</u>	<u>5-6 points</u>	<u>7-8 points</u>	<u>9-10 points</u>
No engineering problem/gap in existing processes is evident to the reader; no attempt made to present past work	Engineering problem/gap in existing processes is not stated and must be inferred by reader; past work on the problem was mentioned in only a precursory way	Engineering problem/gap in existing processes is identified but explanation is not thorough; past work on the problem was identified and explained but source quality may be questionable	Engineering problem/gap in existing processes is clearly identified and explained; past work on the problem was identified and explained well, with references including high-quality, scholarly sources

Methodology

<u><5 points</u>	<u>5-6 points</u>	<u>7-8 points</u>	<u>9-10 points</u>
Prototype/design is not explained in any systematic way, and cannot be understood by the reader	Prototype/design is explained but is missing critical information, thus leaving the reader confused	Prototype/design is explained but leaves the reader with questions	Prototype/design is explained clearly and thoroughly

Testing & Results

<u><5 points</u>	<u>5-6 points</u>	<u>7-8 points</u>	<u>9-10 points</u>
Testing procedures and benchmarks are not explained in any systematic way; results cannot be understood by the reader	Testing procedures and benchmarks are explained but are missing critical information, leaving the reader confused; results are thus confusing at points and/or poorly presented	Testing procedures and benchmarks are explained but leave the reader with questions; results are shown adequately but could be presented better	Testing procedures and benchmarks are clearly explained; results are clearly shown with appropriate presentation

Conclusion & Future Direction

<u><5 points</u>	<u>5-6 points</u>	<u>7-8 points</u>	<u>9-10 points</u>
Implications are unclear to the reader; future research possibilities are not mentioned	Implications are not stated and must be inferred by the reader; future research possibilities are mentioned only precursory	Implications are noted but not well explained; future research possibilities are mentioned but may be disconnected from the project	Implications are clearly identified and explained; future research possibilities are thoughtful

Referencing

<5 points	5-6 points	7-8 points	9-10 points
Citations and references are completely non-functional and of no use to the reader in connecting information to its source	An attempt has been made at referencing but is inadequate for the reader to locate some of the information	Citation and references are generally functional but may contain errors or provide some incomplete information	Citations and references appear to conform well to a commonly used system and are complete

Language Usage and Accuracy

Overall Organization

<5 points	5-6 points	7-8 points	9-10 points
Organizational strategy is unclear, making it difficult or impossible for the reader to follow the flow of ideas	Organizational strategy is not well implemented, with relationships between sections and paragraphs often unclear	Good organization overall, but flow of ideas in not always smooth, and information may be out of place	Clear organization with smooth flow of ideas and relevant information placed appropriately

Grammar

<5 points	5-6 points	7-8 points	9-10 points
Grammar errors can be seen regularly throughout the essay, including some that are severe enough to obscure meaning	Grammar errors can be seen regularly throughout the essay but generally do not interfere with meaning	Simple grammar structures are generally error-free, but complex structures are not always correct	Complex grammar structures are used skillfully and appropriately with errors observed only rarely

Paragraph Organization and Cohesion

<5 points	5-6 points	7-8 points	9-10 points
Paragraphs appear to be randomly constructed with no logical connections between sentences	Paragraphs do not always contain obvious topics and cohesive devices are regularly omitted or used poorly	Paragraphs are generally on topic but may contain unrelated information; ideas within paragraphs are not always well-connected	Paragraphs contain clear topics and are constructed logically with adept use of cohesive devices

Language and vocabulary choices

<5 points	5-6 points	7-8 points	9-10 points
Vocabulary and language choices are largely inappropriate leading to confusion on the part of the reader	Vocabulary and language choices are poor and may obscure meaning at points	Vocabulary and language is adequate to convey meaning but contains marked expressions; language may contain informal elements	Sophisticated vocabulary is used appropriately, and language is well-chosen and appropriately formal

Spelling and punctuation

<5 points	5-6 points	7-8 points	9-10 points
Spelling and punctuation errors are obvious and distracting to the reader, evidencing a lack of proofreading	Minor spelling and punctuation errors are common within the text	Minor spelling and punctuation errors are rare within the text	Spelling and punctuation are error-free

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