

Developing Effective Strategies for Independent Learning: Handling Research Tasks in English for Academic Purposes

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A b s t r a c t

The majority of Hong Kong first year university students find it difficult to cope with tasks requiring an independent and creative approach. Students appear to be unable to analyse tasks, identify and locate potential sources of information, select and use the most suitable materials, and present the results in an original manner, and in an appropriate format, in English. We surveyed first year university students to ascertain the nature and extent to which they have received training in, and have the skills and confidence to perform, the various tasks involved in small-scale independent research. Based on the outcome of this survey we designed an innovative English for Academic Purposes (EAP) programme to provide materials and training in learning strategies for independent academic tasks. The programme aimed at helping students improve their performance and overcome difficulties they encounter in those areas. Responses to both the method and materials have been extremely encouraging. The majority of the participants involved in this training indicated that this approach prepared them better for their academic needs in English and developed their autonomy as learners. This study has also enabled us to learn more about the needs of the undergraduate students and has highlighted areas in which students seem most to require support from their EAP instructors.

Background to the Study

This study, and the preliminary studies associated with it, was born out of experiences gained over 7 years in teaching English for Academic Purposes (EAP) to first-year university students in Hong Kong. There was also a desire to develop more effective ways of helping those students acquire the skills needed for successful tertiary study in English.

For many first year undergraduates, the transition from secondary to tertiary study is a difficult one involving a dramatic change in the structure of learning tasks (Ramsden, Martin, & Bowden, 1987). Whilst this transition is not easy for anyone, Hong Kong students appear generally unprepared for the rigors of independent study and find it difficult to present their work or ideas in original or creative ways. In most local secondary schools, success is exam-based and bears little relationship to students' independence and creativity. They then have to move into university study which, based on the Western educational philosophy, requires them to be inquiring, self-motivated and self-directed (Kember, 1996). New learning tasks that they face require active participation, self-direction or critical evaluation.

Current literature and the researcher's own studies, suggest that at the beginning of their first year at university, most students lack both the skills and the confidence to conduct independent research at a university level (Bankowski, & Cotton, 1997) and that students' learning at

secondary level would have involved limited choice and a high degree of teacher guidance (Biggs, 1994). As a result, Hong Kong students are often confused and passive in the face of the new demands placed upon them and many are unable to achieve the maximum academic performance (Gow, & Kember, 1990; Watkins, & Biggs, 1996).

This study attempts to bridge the gap between Asian and Western methods of education, and between teacher-led and self-directed study. The context of the study was the subject English for Academic Purposes (EAP), the study aiming to trial a method by which students could acquire those skills that were essential for independent and inquisitive learning. There was recognition of students' prior learning, and the necessary support for them to adopt a new learning style was provided. It was hoped that these strategies would pave the way for them to take charge of the learning process itself.

Materials designed to train students to carry out small-scale research projects in English were relevant to students' main areas of study and made use of authentic and lively language. The novel approach, which will be referred to as the Research Training Programme, involved library training, classroom training and the use of specifically formulated Research Project Packages. Each Package was based on authentic audio-visual and reading materials that related to students' major fields of study and included exercises and written materials intended to extend the theme and language presented in the audio-visual material. Students were required to extend further the Package materials in the writing of individual research essays - the process of which was intended to help students develop those skills associated with researching, compiling and presenting information in English in a logical, creative and original fashion. The Research Training Programme was employed as part of an overall programme designed to train students in specific learning strategies associated with small scale, independent research tasks.

Design of the Study

Two main objectives guided this study. The first was to examine and analyse the nature and extent of experience and training which Hong Kong students have received throughout their secondary education in carrying out tasks requiring an independent approach, that is, research projects. The second was to study the effectiveness of a specially designed Training Programme for EAP research projects on the development of learning strategies for independent academic tasks. All instructional materials were designed to provide a step-by-step transition from familiar traditional methods of teaching to an unfamiliar self-directed approach.

To fulfil the first objective of this study 716 first year students from various faculties at Hong Kong Baptist University (HKBU) were surveyed. Of those, 86 students participated in the second stage as subjects of the Research Training Programme. Some of the results obtained in the first part of the study, dealing with students' secondary school experiences of independent tasks, have been described in Bankowski (1999).

Questionnaires

Two surveys were conducted, of which the first was created with a view to establishing the degree to which students were prepared to carry out academic tasks requiring an independent approach. The questions explored the students' prior exposure to project work in English, the nature and range of resources used to complete those assignments or projects, any training that students had received in research or library skills, and the level of confidence felt by students in completing research tasks in English. This questionnaire was administered at the beginning of the students' university education in late September. The second survey, conducted in May, aimed to evaluate the Programme. At the end of the academic year, upon the completion of all stages of the training, students were asked to provide feedback on the Programme by completing a

questionnaire which invited opinions about all its components: the Research Project Packages, the classroom training, and the library training.

The Training

The Research Training Programme was introduced as an integral part of the EAP course. While many of the skills relevant to small-scale research were already taught within the regular EAP curriculum, this Training Programme sought to expand the EAP instruction by paying particular attention to those skills essential to original and independent research work. The instruction and training provided to students under this programme took 30 hours and was conducted over two semesters of the first year of the EAP course. Three areas were included in its delivery: Research Project Package, Library Training, and Classroom Training (see Figure 1).

Figure 1: The Research Training Programme



Classroom Training:

As part of the Programme, students were taught how to identify suitable ideas for research, to formulate their own research questions for a topic, and to narrow topics appropriately. They were shown how to extract relevant information from references for use in writing and how to incorporate information from a number of sources in their own work. The strategies that the instructors presented were specifically relevant to the tasks that students had to perform. All related to tasks in their Research Project Packages, so that the results and usefulness could be seen immediately. In that way motivation could not only be sustained but possibly enhanced. At the same time the usefulness and transferability of the strategies to other content areas, such as tasks in their major subjects, was presented so that they could be seen as part of the learning process and necessary for academic success. An effort was made to make students aware of the link between what they already knew, either through prior schooling or life experiences, even if prior knowledge was acquired through Cantonese and in a different cultural setting, and what they were about to learn. This was especially important since it was believed that such a technique would provide students with the ability to make similar linkages in their future learning. The students needed training not only in English language structures and vocabulary, but in analytical and critical thinking skills that would encourage and eventually lead to the development of creativity.

Tutor Support:

Students were encouraged to approach the instructors at any time should they have queries or experience any difficulties. Class time was also set aside to address individual questions and problems, and particular care was given to preparing students for the research section of their work. Students were required to attend individual consultations with instructors to establish

appropriate topics for their research essays; topics which would provide scope for the development of original and individual arguments.

Library Training:

The Programme included specific instruction aimed at familiarising students with library resources. Students received three orientation sessions conducted in the library to locate information during class times. The tutors met with students in the library for three two-hour sessions during which they were shown available resources and the various skills related to the use of those resources were practised. During their first group session in the library, students visited those sections of the library directly related to their Research Project Package work. They were guided through the Media Services, where the audio-visuals related to their Research Project Packages were held and could be viewed, the Online Public Access Catalogue (OPAC) stations of the library where it was envisaged that they would begin their search for information. Time was given to conduct an initial search for information about chosen topics. In most cases students had little idea about how to limit or extend their searches in order to identify relevant information. They needed encouragement and help to carry out more appropriate forms of search, for example, using key words, narrower subject headings, bibliographical details, or other known materials to locate information. In the index section of the library, students were encouraged to look beyond the subject-specific books, to make use of professional journals and magazine articles related to their chosen topics. In contrast to the OPAC section, students were clearly unfamiliar with this section of the library, with the indexes themselves and, more often than not, with the periodicals to which they referred. The advantages of using these types of materials were discussed, and students were shown how to use the OPAC system title search to determine whether or not the periodical they had identified was available within HKBU library and if it was, which issues were held and where. Students were shown how to use reference books, encyclopaedias, bibliographies and cross-references in publications to identify other useful sources, and to make use of chapter headings and sub-headings to determine possible ways of narrowing or directing their research. They were given time to photocopy any articles of interest that they found in the encyclopaedias during this part of the session. Assistance was provided when any student became 'stuck' at some stage of the process. Many students were successful in finding suitable articles on their topics, while others actually changed or narrowed the topic for their essays as a result of seeing other headings and sub-headings that held their interest or provided a number of suitable references. The library sessions also covered such skills as how to access indexes on CD-ROM and how to find and evaluate relevant information through the use of the Internet.

Research Project Packages:

A major part of this project involved the preparation of the Research Project Packages. The Packages served as a set of tasks and exercises, a practice for skills that students acquired in the classroom and through the library training. A total of 25 video tapes and laser discs were selected from the range available within the university's library, selection being primarily based on the relevance of subject matter (i.e. history, geography, and politics and religion related topics), and the clarity and level of language content. The tapes and discs chosen were all authentic films and documentaries produced for English-speaking audiences. Supplementary materials were then prepared to accompany each Package. These materials included background information and relevant magazine and newspaper articles intended to clarify and extend the information/subject matter of the audio-visuals, and a series of activities designed to encourage listening, comprehension, note-taking and research skills.

Each of the Packages followed the same format and contained the following sections:

- Instructions – outlining the purpose of the project, introducing the package and explaining its

use;

- Background information (2-3 pages) – written information intended to help students better understand the general nature of the topic by providing a background and context for viewing the tape and for further research;
- Vocabulary worksheets – required students to identify the meaning of words used in the audio-visual and in the supplementary reading;
- Audio-visual comprehension sheet – questions which encouraged active viewing;
- Reading material – a selection of authentic newspaper and/or periodical articles related to the topic of the audio-visual, to provide an opportunity for students to experience authentic written English in other than text-book form;
- Reading comprehension sheet – analytical questions to ensure students' reading and understanding of the articles;
- Research assignment – intended to extend further the subject of the Package and to help students develop skills associated with researching, compiling and presenting information in English in a logical, creative and original fashion.

The aims of the Research Project Packages were to:

- raise students' motivation to learn English through demonstration of useful and relevant applications of the language;
- enhance and enrich subject-specific vocabulary in English;
- reinforce grammatical structures appropriate for use in varied language situations (e.g. making commentaries, arguments, or descriptions within a context of study field);
- provide practice for analytical skills;
- promote independence in learning;
- enhance confidence in conducting small-scale research;
- improve students' listening skills.

The purpose and procedure for use of the Research Project Packages was explained to students in class workshops and opportunity was given to students to examine sample Packages. Students were then required to submit their work to their instructors on prescribed dates and in set stages. The project work constituted part of the students' on-going assessment for the EAP course. A research task assigned to each student was unique as students chose their topics and narrowed them down individually. Students were required to research a chosen topic using a variety of resources, and to present their findings in the form of a research essay and a brief oral presentation. After the initial classroom and library training had taken place, students were required to carry out and submit their Package work in three stages: comprehension and vocabulary exercises, oral presentation, and a research essay.

It was expected that most students would be unfamiliar with the learning format of this Programme and that, this being their first such experience, they would require particular guidance and support from their instructors. Further, it was believed that in order to provide this level of assistance to students, any instructors involved in trialing the Programme should be familiar with the objectives of self-access type learning and should have the skills required to facilitate it. Therefore a training session was held for the Instructors involved in this study. The session was intended to familiarise tutors with those services and resources available in the library which their students would be required to use when completing the research assignment component of EAP course work.

Findings

Survey of Students Research Experience

Previous Research Experience

Results indicate (Figure 2) that at the outset of university study, only a minority of students had ever conducted research in English or received training in how to engage in research activity. Of those students who had completed a research project in English, only a quarter indicated that they had relied on self-selected materials as their main source of project information.

Figure 2: Previous research experience

Previous research experience	Yes % of students	No % of students
Did you ever prepare a project in English at secondary school?	29.7	70.3
Have you ever received any training in how to research a topic ?	23.8	76.2
Was there an assignment in English in your secondary school in which you were required to use materials other than course books and teacher supplied handouts?	45.1	54.9
Were you required to use more than one source of information for one assignment? (e.g. magazine articles, handouts, videos)	46.6	53.4
Was there an assignment in English in your secondary school in which you were required to find the information by yourself without a teacher's guidance?	36.8	63.2

Results suggested that, in most cases, students' secondary schooling provided little opportunity for students to develop those skills necessary for independent enquiry or research. Only a third of students had ever been assigned a project where they were required to find their own information without the guidance of a teacher (Figure 2).

Use of Libraries and Resources:

The range of resources to which students had been exposed appeared to be extremely limited. Only half of the students had ever been required to use more than one source of information for a project, and less than half had ever been required to locate their own resources for an assignment. The most commonly used sources were books and handouts supplied by teachers (Figure 3) while resources such as television, video, Internet, CD ROM's, journals and encyclopaedias were rarely used.

Figure 3: Frequency of use of materials for assignments or projects in English at secondary school

Use of various materials for assignments	Never/Seldom % of students	Occasionally % of students	Often/Always/Most of the time % of students
Own notes from lessons	24.4	24.6	51.0
Textbook or teacher handouts	9.9	17.8	72.3
Optional reading	36.0	40.8	23.2
Magazines and newspapers	41.5	35.6	22.9
Professional journals	80.0	14.7	5.3
Encyclopaedia	92.9	5.4	1.7
TV programmes or videos	70.6	21.8	7.6
CD ROMs or Internet	82.8	10.0	7.2
Library material found by self	49.0	31.3	19.7

Although at the start of the academic year the majority of students surveyed claimed that they knew how to access information through OPAC using key word and subject catalogues, most indicated that they had had no practical training in, and lacked confidence in, using library resources (Figure 4). Perhaps as a result of this, very limited use was being made of the wide range of materials available within the library. Students indicated that the resources they commonly used at the library were general books, reference books, and newspapers. In common with the pattern of resource use at secondary school, they used magazines, videos, tapes, professional journals and encyclopaedias far less frequently (Figure 3).

Figure 4: Library use

Library use	Yes % of students	No % of students
Have you ever received any practical training on how to use library resources? If yes, please specify?	17.9	82.1
Do you feel confident in using library resources?	33.0	67.0
Do you know how to access information using key words and subject catalogue on OPAC?	82.0	18.0

Confidence and Learning Preferences:

Not surprisingly, students felt more confident searching for information suggested by teachers than they did in finding information without assistance or guidelines (Figure 5). Over half the students surveyed said that they would seldom or never feel confident carrying out such searches alone. Far more students felt confident in completing essays in Chinese than in English.

Figure 5: Student confidence and learning preferences

Confidence and learning preferences	Never/Seldom % of students	Occasionally % of students	Often/Most of the time % of students
Would you feel confident finding information on a topic with no guidance or assistance from your teacher?	56.1	34.1	9.8
Do you enjoy trying new ways of studying and learning?	20.2	37.6	42.2
Do you prefer to use the study methods that have worked for you in the past?	19.5	42.9	37.6
Do you prefer to have as many sources of information as possible – the more data to think over the better?	13.3	41.9	44.8
Do you learn best from teachers who work carefully from prepared notes and outline major points neatly on the blackboard?	8.8		60.6
Do you learn best from teachers who encourage you to find your own information and reach your own conclusions?	21.1	49.6	29.3
Do you find it difficult to produce new ideas?	11.6	43.6	44.8
Would you feel confident writing an essay in English based on information in a textbook?	27.3	47.8	24.9

Responses to questions about learning preferences suggest that first year students felt more comfortable in learning situations in which teachers presented information and outlined major points - as opposed to those in which they were encouraged to find their own information and arrive at their own conclusions. Few indicated a need or desire to use more than the set course materials or to look at the suggested reading that might accompany courses. A considerable number of students indicated that they found it difficult to produce new ideas and confusing to have too much information about a subject. Encouragingly, however, whilst appearing to rely on teachers' guidance, and on materials supplied to them, students also expressed an openness to other approaches to learning, and a willingness to consider a variety of sources in their study. The majority of students indicated that although they might, for the most part, prefer to use those learning methods that have worked for them in the past, they did, under some circumstances, enjoy trying new ways of studying and learning, and acknowledged that sometimes they learned best when given the encouragement to work independently and to reach their own conclusions.

In accordance with these findings, the Research Training Programme developed under this project was designed so as to gradually introduce students to basic research techniques and skills; building on their interests and providing tasks which, though challenging, were well supported by teaching staff, and achievable.

Student Evaluation of the Training

Three parts of the questionnaire sought students' perceptions of the usefulness of skills taught in the three components of the Research Training Programme for their other academic work and assignments. The scales that the students used to answer the questions are described below.

Figures 6-8 summarise the results for each question on the evaluation form, including both the average score along a five-point scale and the corresponding standard deviation (SD).

Usefulness of skills taught/practised for academic work	Score
Very useful	5
Useful	4
Moderately useful	3
Not very useful	2
Not at all useful	1

In the fourth part of the questionnaire students were asked to elaborate on the usefulness of the Programme by stating which part of the Project work they felt was the most useful and why.

Usefulness of Classroom Training in Skills and Strategies:

Throughout the year, students engage in a variety of courses and activities which also contribute to their skill development. This section of the evaluation attempted to establish the unique role that the Programme played in their overall development of research skills. Scores clearly show that the students recognised the benefits and the special purpose of this Research Project Training. These perceptions of benefit corresponded to the improvements evident in the work that students submitted under the programme.

Figure 6: Classroom training in skills and strategies: usefulness in academic studies

Skills and Strategies	MEAN	SD
Identifying ideas for suitable research topics	3.74	.82
Formulating research questions for a topic	3.72	.75
Narrowing topics	3.81	.90
Selecting relevant references	4.01	.70
Evaluating the suitability of resources	3.84	.74
Reading for a specific purpose	3.55	.83
Extracting useful information from references for use in writing	3.77	.71
Preparing outlines	3.72	.80
Formulating a thesis statement	3.71	.82
Using information from various sources to write about a topic	3.80	.88
Presenting ideas in a logical order	3.93	.88
Supporting oral and written statements	3.84	.74
Paraphrasing	3.64	.87
Summarising	3.65	.78
Using an appropriate format for writing academic papers	3.97	.75
Presenting ideas creatively	3.49	.93
Drawing conclusions from data or factual information	3.71	.81
Referencing and citing sources within a text	3.81	.83
Compiling bibliographies	3.83	.86
Rehearsing for oral presentations	3.72	.86
Preparing oral presentations	3.97	.82
Average	3.77	.50

The questions in this section (Figure 6) addressed the value of the classroom training and its applicability to other academic pursuits beyond the EAP projects. It appears that the students highly endorsed the classroom training component of the programme, especially skills such as 'selecting relevant references', preparing oral presentations, using an appropriate format for writing academic papers, and presenting ideas in logical order.

Usefulness of Library Skills in Academic Studies:

By all accounts, the libraries to which students have access at secondary school level are small and rather unsophisticated. Consequently, those students who were not required to use public libraries arrive at university with very limited library skills and struggle when they need resources for project work. This Research Training Programme attempted to fill this void with a component which trained the students in library skills so that they were able to undertake meaningful, comprehensive, and reliable research.

The responses to the next series of questions in the evaluation (Figure 7) illustrate how valuable the students' perceived the library skills that were taught in the EAP programme to be, in their academic studies in general. The overall score of 3.81 (on a five point scale) clearly suggests that students believed the skills to be useful in their academic studies. Apparently, the library skills that were most readily understood were perceived as the most useful of the skills, while those that were least understood were viewed as the least useful. Those skills judged least useful also proved to be least used.

Figure 7: Library skills training: usefulness of skills in academic studies

Skills and Strategies	MEAN	SD
Using key words in OPAC	4.20	.85
Using OPAC to locate relevant information	4.16	.80
Locating books on shelves	4.16	.70
Using encyclopaedias	3.45	.95
Using indexes to gain ideas for a topic	3.52	.92
Finding articles in periodicals through indexes	3.77	1.00
Checking availability of periodicals in HKBU library collection	3.64	1.03
Locating periodicals on shelves	3.67	.98
Finding information through the Internet	4.35	.84
Using sources that you have already found, to look for other possible sources	3.65	.95
Using CD-ROMS	3.36	1.14
Average level of usefulness	3.81	.58

Usefulness of the Research Project Packages:

The Packages were carefully constructed to guide students, step by step, through a small-scale research project, by presenting elements of the research process in a logical progression. Students were asked in the evaluation questionnaire how useful they felt each activity to be in completing their projects (Figure 8). Positive feedback was given for all aspects of the project. Students identified preparation of an outline as one of the most useful tasks in the Package, while the reading comprehension questions, and vocabulary worksheets were considered to be less useful than the other components. Overall their response to the packages was very positive, conveying a significant degree of interest and enthusiasm.

Figure. 8. The Research Project Packages: Usefulness of tasks completed for academic studies

Skills practised in the following Component	MEAN	SD
Background information	2.94	.95
Vocabulary worksheets	2.71	1.02
Related reading	3.00	.91
Reading comprehension questions	2.68	.81
Audio-visual tapes	3.13	.87
Audio-visual comprehension questions	2.87	.89
How to choose a topic - guidelines	3.20	.85
Research topic proposal form	3.30	.69
Suggested areas for research	3.33	.92
Research question and statement of purpose	3.16	.82
Research topic outline	3.62	.89
Average level of usefulness	3.09	.48

Discussion

Students' Perceptions

It was apparent that most students gained a real sense of achievement and satisfaction from the work in which they were engaged during this study, and it is encouraging to note, that on being given the choice of using the Project Packages or carrying out regular course work in the next semester, an overwhelming proportion of students (85%) elected to work on a second Project Package. This indicates that they believed this approach better prepared them for their academic needs in English. The result is particularly pleasing since at the outset of the work, most students seemed to be quite apprehensive, and in a few instances, were openly negative about the tasks they were to undertake. Perhaps even more heartening, are the students' opinions about this mode of learning and the reasons they have given in support of those opinions. They were asked in the questionnaire:

Which approach prepares you better for your academic needs in English?
(please give reasons why)

- Traditional classroom instruction
- Research Project Programme?

Eighty-five percent of students thought that the work on the Package was more effective for their academic needs and supported their choices by giving specific reasons. The responses fell into three categories:

1. Skills are useful.
2. Tasks stimulate independence.
3. Activities are interesting.

The most common reason given was that skills acquired in project work were applicable and transferable to students' other subjects. The second most common reason given for preferring Project Package work was that it helped students learn to study independently. Thirdly, students indicated that they enjoyed this style of EAP learning; that they found it interesting and appreciated the opportunity it gave for creative thought and work. Among those students who favoured the traditional approach in EAP course, the most common reasons stated to support

their choices were that the Project was difficult, time consuming, and that classroom instruction is easier to handle.

Instructors' Observations

As was mentioned previously, most students needed individual help from instructors to select their research topics, to work through the process of narrowing their field appropriately and to choose materials. Many also needed guidance and encouragement to follow a novel line of enquiry, to present their work in a creative and original fashion, to acknowledge their sources and to avoid plagiarism. The research essays submitted by students in the EAP course showed a marked increase in students' abilities to use research related skills in their essay writing. For the majority of skills measured over the course of the Programme, a greater number of students were able to use those skills successfully in their final essays, with a correspondingly smaller number failing to exhibit the skills or using them incorrectly in their work. Overall, the essays showed a marked increase in students' abilities to present material in a cohesive way, in their use of reference material to support their main points, and an increased ability to develop a logical and convincing argument. They also demonstrated a greater use of materials other than books, and suggested that students were willing and able to incorporate a greater number of sources into their later essays. Final essays indicated too, a greater willingness on the part of students to acknowledge their sources, and an increased ability to present those in an appropriate way through citations and bibliographies. In many cases, essay writing contained evidence of partial use of those skills taught in the Programme - sometimes skills were used inconsistently or with a fair degree of, but not complete, success. This partial use is to be expected since the great majority of students had had no prior experience of conducting research, or of research writing when they entered university. Whilst it could be expected that the training provided through the Programme would help them to acquire related skills, mastery of those skills would only be gained with considerably more time, practice and instruction.

Conclusions and Recommendations

The over-riding objective of this project was to provide better learning opportunities for Hong Kong students and to bridge the gap between secondary schooling and tertiary education. It was hoped that EAP training could serve not only to equip students with the language skills required for tertiary study, but to fit them better for the more independent, enquiring style of learning characteristic of university study. We endeavoured to develop teaching methods and materials that ensured that the content of lessons was interesting and relevant; provided goals which were both challenging and attainable; and encouraged students to take charge of their own learning - thereby giving them the opportunity to make their own way and to engage in creative and independent study when formal training ends or is not available.

The results of the investigations throughout this project supported previous informal observations, and highlighted the 'educational dichotomy' faced by first year undergraduate students in Hong Kong that has been noted by other researchers and was outlined in the Education Commission's report on Higher Education in 1996. These findings then, suggest that the majority of students entering university are generally unprepared for the challenges of independent, research-related work at university level.

Previous Experience

It would appear that, as the Education Commission pointed out, the modes of learning and expectations of confidence in place at university are indeed different from those at school; that

there is a real need for teachers to develop ways to help their students make the transition from one form of learning to another. Results of the broad survey of first year undergraduates at HKBU and of interviews with selected students confirm that students enter university with little experience of, and confidence for, independent, research-based study. What experience they did have appeared to be elementary, based on information from few and simple sources presented in an uncritical way. The range of resources that students had employed in their previous work was also limited. Materials used were generally supplied by teachers – either in book form (e.g. texts) or as handouts. Students use of libraries too, would seem to be extremely limited.

As students progressed through their secondary schooling, the opportunities for project work - in which they could search for their own materials or follow up topics that were of interest to them - decreased rather than increased, with their work being increasingly focused on acquiring information needed to pass set examinations. Secondary schooling has generally provided students with little opportunity for independent study or thought. They have relied heavily on teachers for information and there has been little incentive for them to search for their own information, use multiple sources or present their work in an original manner. Students obviously struggled and lacked confidence in their ability to complete tasks in English. Many experienced considerable difficulty in organising their material in a cohesive way, introducing their research topics, establishing and supporting major points, and reaching relevant conclusions. A significant number too, had obvious difficulty in presenting work in their own words and in developing their own lines of argument.

Research Training Programme

This Training Programme appeared to provide a means by which students, with little or no prior experience, can acquire both the skills and confidence required for independent, research related study. With support and guidance, students were able to tackle relatively difficult and demanding tasks. As a result of their training, they were better able to utilise library systems and resources, to choose and investigate topics, to compare, collate and analyse information from different sources, and to present findings in cohesive and original ways.

Work submitted by students after completion of the Programme showed a marked increase in the successful use of research-related skills and a corresponding decrease in instances in which skills were used incorrectly or were not applied at all. In presentations, students appeared to have a better grasp of their subject matter, to be more at ease and more willing or able to use their own words. They also showed a greater ability to use the formats and structures appropriate to research writing – introducing their research questions and topics, outlining and supporting the main points of their argument, and drawing conclusions based on the material presented.

Importantly, students involved in the programme recognised the gains they had made, and credited the Programme with helping them develop those skills. Results of the Student Evaluation Questionnaire showed that students had noted the specific skills involved in the course, were aware of the relative changes in their abilities, and had considered the degree to which they were pertinent to their other university work. Overall, students determined that the programme was challenging, interesting, useful and relevant to their wider studies.

Recommendations

The changes evident in the work and confidence of those students involved in the programme, suggest that this programme does indeed provide a means by which students can be successfully encouraged to pursue independent study and a method of overcoming the difficulties outlined by Gow, Kember, and Sivan (1992). This appears to hold true for a broad range of students, regardless of gender, ability level, or the major in which they are enrolled. Further, it would appear that students can be motivated in this investigative and independent work even when

they perceive it to be difficult. In fact, the aspects of work that students considered most challenging were often the ones they found most enjoyable or worthwhile. They commonly expressed a preference for this approach over the more familiar, traditional methods of EAP teaching and learning.

The approach utilised by the study can be used to provide students with an interesting and productive method of language learning - one that enables them to complete work which, in other situations, they might not be able, or confident enough, to tackle. That students should feel positive about work that obviously presented a challenge to them, is heartening and would suggest that the present approach has much to offer in allowing students to extend their learning in areas where they are uncertain and might not otherwise be prepared to take risks.

It is the researcher's hope then, that this study and Research Training Programme will provide encouragement and assistance to teachers as they endeavour to help current students make the demanding transition to tertiary level study and from one style of learning to another. It is also hoped that this project will be of use to those who set the future direction of education in Hong Kong: that it will serve to guide the development of new programmes and systems, and will thereby encourage in future students the curiosity, independence of thought, and skills needed for life-long learning.

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