Online proficiency testing and intensive course improvement of English instruction at a technology university in Taiwan

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Abstract

Since 2010, Hungkuang technological university in Taiwan has undertaken an increasingly intensive program of twice yearly online English testing of freshman and sophomore students. This is done using both the Bridge and Full Tests of English for International Communication (TOEIC) in mock and real versions. A preliminary analysis of 15,613 individual test scores for reading, listening or both yielded a range of relevant findings including the following. (1) The overall mean proficiency on the real Full TOEIC was 111 for listening and 75 for reading. This was found to be well below the institutional target of minimum total score 350. Progress was also uncertain between freshman and sophomore years. This suggested some loss of motivation on the part of the students. (2) Differences between Departments revealed the impact of some departments doing extra work on English. The Physical Therapy Department Students, for example, scored better on reading than listening (Bridge TOEIC). This is possibly due to the English medical textbooks used and a students' self-help reading club. (3) The Bridge and Full TOEIC scores correlated with each other well however actual equivalences found among our lower proficiency students did not match published conversion tables. (4) The mock tests proved to be poor predictors of real test performance. This counts against their use to reduce costs of taking the real tests. Based on the above findings, an intensive English program (IEP) solution was proposed to improve upon the limited English progress that was found. Following the implementation of the IEP, the average improvement score was 123.5 and the highest score was 800.

Keywords: Freshman and Sophomore English course, TOEIC online testing, intensive English program
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1. Background

This paper presents a project undertaken over a number of years. It has the broad characteristics of a piece of action research [1]. A problem was first perceived by the teachers and administration in a particular educational context. It was identified that low marks were being obtained by students in the TOEIC test at HungKuang University. An extensive preliminary exploration was performed to identify the nature and extent of the problem. This was done through the analysis of large numbers of TOEIC test scores. These results, amid many valuable findings, led to the formulation of an action to try to remedy the problem. Since the literature review showed that TOEIC is constructed and delivered by the English Testing Service (ETS) who claim validity of the test primarily from the careful way in which it is constructed, and the fact that its scores moderately correlate with self-assessment

scores of test takers (Powers et al., 2009) [2], the action was to introduce a newly formulated intensive English program. The action was then executed and its effect assessed. Following the execution it was found that TOEIC scores were much improved. Research into test results in educational settings has a long history. It may be used to reveal more about learners' ability [3], but it is often also used, as in the present case, to inform teachers and administrators about the success of the teaching methods used by the educators [4]. Consequently, test scores are often used as part of the input to program evaluation [5] and the development of new courses [6]. This was the case in this research.

New courses that are developed in this way are often very focused on the test or examination which the students, for external reasons, are required to take. Thus they are, in effect, test preparation courses [6]. Their use may be combined with the implementation of mock tests as practice examinations [7], as in our context. This evidences what is often referred to as

the washback or backwash effect of testing on teaching [8].

2. The Context of the Study

Taiwan is an English as a foreign (rather than second) language country, where English plays little part in everyday communication. State sector education at school and University level education is typically conducted in Mandarin Chinese, although some private schools and universities function in English. Hungkuang University has a population of 13,000 students. All subjects except specific courses taught by foreign instructors in the Applied English and Restaurant Hospitality Departments are taught in Mandarin Chinese. General English Education is a mandatory course two hours per week for students in all subjects in the first two years of study. In Taiwan the first two years of study are known as the Freshman and Sophomore years. A standardized English course syllabus has been adopted for all students at three levels, C, B & A. The course is taught using books 1, 2 and 3 of a textbook from the same publisher. These are equivalent to the A1, A2, B1 CEFR levels [9]. This English program, together with regular English testing, has been the method used by the university to improve students' English up to the target TOEIC score level required of graduates.

Students who arrive at Hungkuang will typically have gone through the state school system where English is taught as a subject from grade 3 for 80 minutes per week. Some however will have started earlier at a private English kindergarten, and most will have attended private 'cram' schools concurrent with state schools, where English in fact is given more attention in terms of hours per week. Nevertheless, students arrive at Hungkuang with very varied levels of English proficiency, and there is no minimum English proficiency entrance requirement at the university. Surprisingly this is even for the Applied English Dept. Students are tested on their orientation day and full-time students are allocated to different English class levels as a result. Adjustments are made later if the level they are assigned to appears too easy or difficult for them. Efforts are made to ensure that students do not purposely try to score poorly on the orientation test and so take a class of a lower level than their real ability for an easy ride. Part time students tend to be of a lower proficiency level than full time ones so are all taught at one level (book 1). At the time of writing there were plans to differentiate between them into two proficiency levels. The students' English education needs at university are not deemed to be primarily for academic English (although some departments expect some reading of English textbooks and some students go on to study abroad) but rather for the following reasons; (a) basic English as an international language (EIL) that will be useful for general communication with non-Chinese speakers of English whenever needed and (b), basic English for professional purposes (which falls within English for occupational purposes, EOP) that they may need in future work, or at least to meet the English demands of future employers. For these reasons the textbooks they study focus on teaching things like office communication, email correspondence, writing business letters, transmitting commercial information and other work related tasks. This is done in a general way (EGOP) and it not specialized to English for particular realms of future employment such as nursing or catering. Some departments, however, provide additional English courses of their own, which would typically be specialized for the needs of students of a particular major (ESOP).

The program of testing students at the university began in 2010 because it was felt that an internationally valid test was required to serve as a convincing indicator of the university's capacity to compete in the globalized world arena. TOEIC [10] was selected as it seemed better targeted to the type of English that the students needed. This matched the trend towards taking TOEIC in Taiwan in general where numbers of takers of the full TOEIC rose from around 68,000 in 2005 to nearly 344,000 in 2014. This was seen to be in line with an increasing world trend [11]. online testing was implemented at the university.

3. Objective and Questions of the Test Score Exploration

The present study was initially prompted by the widespread feeling among staff at the university that students were not achieving the levels of English that were expected. An analysis of student TOEIC scores was undertaken in order to properly understand, in a more objective way, the extent of this problem. Among the questions that were asked were:

3.1. Questions about freshman and sophomore Students' English performance

Is the proficiency of our students on target to achieve institutional targets / CEFR B1? Does students' proficiency improve over time as they follow the English courses and are tested twice in each academic year? Is there any difference in scores between Departments, and if so, why?

3.2. Questions about testing with TOEIC

Is the testing done too much or too little? How can we convert between Bridge TOEIC scores and Full TOEIC scores?

4. Method of the Test Score Exploration

The data used consisted of records of student scores on a variety of real and mock/practice versions of the TOEIC test of listening and reading. These tests were

undertaken by freshman and sophomore students in the normal course of their study at Hungkuang in the period 2010-2015. SPSS 19 and Excel were used for all data and statistical analysis

At Hungkuang, the Bridge TOEIC was often used instead of the Full TOEIC. The Bridge version takes one hour rather than two, so saves time. Furthermore, it tests only the lower ability levels rather than the full proficiency scale. It is hence not so demotivating for students at the lower end of the ability spectrum as they do not meet many questions way beyond their ability. Furthermore, for cost reasons, mock rather than real versions were often used. These were derived from test preparation materials and marked by teachers rather than the TOEIC organization, on a different scale.

5. Findings of the Test Score Exploration

Is the proficiency of our freshman and sophomore students on target to achieve institutional targets / CEFR B1?

The institutional target on the full TOEIC test is 550 for English major students and 350 for non-English majors. 550 equates with B1 in the CEFR, 350 is between A2 and B1 - in fact closer to A2 [10]. Table 1 shows that the mean real test scores are nowhere near the thresholds for B1, or the university's target scores. The only exception is the listening in the full TOEIC, which is A2 (official equivalence 110). Real test scores are all around A1. This means that the learners "can understand ... familiar everyday expressions and very basic phrases aimed at the satisfaction of needs of a concrete type." and "can interact in a simple way provided the other person talks slowly and clearly and is prepared to help." Scores on the mock tests look superficially more favorable if one simply rescales them to the scale of the full test. For instance, total 55.46 out of 100 on the mock Bridge, if rescaled to be out of 180 (the scale of the real Bridge) appears to correspond to 99.8 out of 180 on the real Bridge, clearly better than the mean of 82.78 for actual real Bridge. However, a discussion later shows that mock tests are not good predictors of real test scores at the university. On both real tests, but especially the full TOEIC, it is noticeable that students do a little better on listening than reading. Relative to our students' ability, clearly the level of listening task presented in the real tests presents less of a challenge than that of the reading tasks. Interestingly this pattern of higher scores for listening than reading is repeated across all countries for whom full TOEIC results are reported by the ETS [10]. The mock tests, however, showed no such substantial difference. At the same time, it must be pointed out that the standard deviations are quite high, particularly for the results from real full TOEIC. This signals a very wide range of ability in the student population. For the real full TOEIC only 94 test

results (=9% of all real full TOEICs taken) met the university's target of 350 target or better and only 22 (2%) met the English student's target of 550 or better (=B1).

Does students' proficiency improve over time as they follow the English courses and are tested twice in each academic year?

The above results are means across students in a variety of different semesters and years of study. Naturally we also wish to know whether, even though the overall scores seem quite low, we can detect progress being made by students measured at different levels of study.

One way of doing this is to compare freshman year scores with those of sophomores. These should show an improvement following their English studies in the freshman year. Table 2 shows a surprising result. It shows that on three of the tests, especially the real full TOEIC, freshmen in fact do better than sophomores. Neither year however approach equivalence with B1 in the CEFR. Once again, the full TOEIC scores for listening are the best, with A2 equivalence in the CEFR. Only on the mock Bridge TOEIC is there any improvement between freshmen and sophomore students as groups. It could be argued that the reduction in results could be due to removal of the pressure students are placed under prior to university entry. Once they make it into university they see English as less of a source of worry and devote more attention to their major subject. This is despite the fact that they will later have to achieve the institutional pass mark on the real TOEIC in order to graduate. For the university, this creates a problem. To impress the MOE and the outside world more generally, they need students to be achieving their targets of full TOEIC 350 (non-English majors) or 550 (English majors) as soon as possible and well before graduation.

An alternative, more refined, way of assessing student progress is on a repeated measures basis. This considers score change only in specific students who took the same type of test (both parts) more than once in the freshman/sophomore years, however far apart, provided it was not in the same semester. This proved difficult as it emerged that 69% of all tests taken in full were in fact 'one off' tests, meaning instances where the same person only took that kind of test once. Only 31% of the tests taken were made up of instances where the same person took the same type of test more than once. The vast majority of multiple instances were of tests taken twice. 217 people took the same type of test 3 times and 39 took the same test 4 times.

When this much more limited data was looked at it was found that the real full TOEIC was taken twice in both parts in different semesters by just 98 people (and none took it more than twice). Of those only 49, i.e. exactly 50%, showed any score improvement between the two tests.

The other tests however present a more favorable

Table 1. Overall mean scores on each test.

	Test Types							
	Real full TOEIC		Real Bridge TOEIC		Mock full TOEIC		Mock Bridge TOEIC	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Listening	111.36	80.04	43.74	16.25	29.76	12.00	29.18	9.72
Reading	75.21	68.08	39.04	15.67	29.07	11.92	26.67	9.75
Total	186.06	136.58	82.78	29.55	58.83	21.82	55.46	16.72

Table 2. Mean scores of Freshmen and Sophomores on each test.

		Test Types							
		Real full TOEIC		Real Bridge TOEIC		Mock full TOEIC		Mock Bridge TOEIC	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Freshman	Listening	136.31	70.36	44.19	16.78	30.88	13.47	28.08	9.58
	Reading	81.92	71.41	41.58	14.26	30.51	12.83	23.40	10.04
	Total	219.63	129.84	85.79	27.91	61.36	24.46	50.41	16.24
Sophomore	Listening	99.89	82.77	43.04	15.65	27.75	9.21	29.52	9.64
	Reading	73.69	69.43	36.99	16.01	26.71	9.75	28.19	9.10
	Total	172.10	140.92	80.00	29.79	54.48	16.20	57.65	16.58

picture. Of the 1367 people who took the real Bridge test multiple times, 94.2% showed an improvement between the first and last time they took it. Of the 279 who took the mock full TOEIC multiple times, 80.3% improved, and of the 190 who took the mock Bridge multiple times, 77.4% improved.

This could be an indication that students taking the same test multiple times, especially the real Bridge TOEIC, tend to register an increase in scores due to factors that are not present when they take different tests on different occasions. It could be speculated that this could be due to students becoming more familiar with the test format.

Is there any difference in scores between Departments, and if so, why?

There are some clear differences between departments, however, they are not consistent across all of the test types. Applied English, for example, does better than other departments, as one might expect, on real Bridge and mock full TOEIC tests but not on real full TOEIC tests where eight other departments do better (Figure 1). On the other hand, Physical Therapy does reasonably well across all of the tests. This could be explained, for their reading results in particular, from the fact that their textbooks are in difficult medical English and the students have formed a mutual-help reading club to support their reading. Other differences could be due to additional English teaching which students receive in some departments. Nutrition and Restaurant Hospitality have their own strong ESP courses as well as a program that provides students with experience of working overseas where English would often be required. The latter department also employs foreign exchange teachers to teach English and some subject courses. Nevertheless, it must be noted that no department has a mean score on the
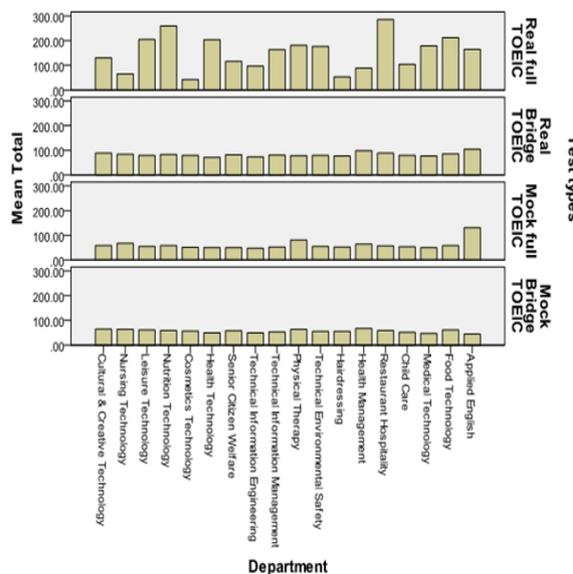

Figure 1: Mean total scores by department

real full TOEIC that even achieves the lower of the university's target score of 350.

Is testing done too much or too little?

If the aim of testing is, as it is in this context, to measure student progression, then every student needs to take the same test at least twice or robust conversions must be possible between scores on different tests taken at the different times. Ideally tests would be undertaken three times; on or soon after arrival, at the end of the Freshman year and at the end of the Sophomore year. This will enable the student's improvement to be measured each year.

The total number of different students who completed both reading and listening parts of a test was

Table 3. Numbers of different students taking each test type in full

Test types		Students	Tests	Mean number of tests per student
Real full TOEIC	N	747	1043	1.40
Real Bridge TOEIC	N	3752	6415	1.71
Mock full TOEIC	N	3417	3872	1.13
Mock Bridge TOEIC	N	1736	2049	1.18

3,311. The total number of such test protocols of all types taken was 13,379. On average each student undertook just over 4 tests. This does not mean that they took the same test four times, as we saw earlier. There were four different types of test and many students took a range of different types of test at different times. The exception to this is part time evening students took no mock tests as they did not have sufficient time in their schedules.

Table 3 shows a fuller picture, recording for each test type how many different students took it in full (both the listening and reading parts), and on average how many times they took that test. As reflected in Figure 1, we can see that the real Bridge TOEIC was taken by the most students, and the most times by those students, though some clearly took it only once. The real full TOEIC was taken by the least number of students, but with the second highest rate of multiple tests taken by the same person. None of the figures even reach an average of twice per student, however, so there is little evidence that the same test was being taken systematically at different successive times by many of the students. It could be argued that there was too much testing with different tests and not enough with the same test repeatedly. This was particularly the case for the full time 'day' students.

How can we convert between Bridge TOEIC scores and Full TOEIC scores?

From our data we obtained through following formulae through linear regression:

Real full TOEIC total score =
      (2.56 × Real Bridge TOEIC total score) - 14
Real Bridge TOEIC total score =
      (0.134 × real full TOEIC total score) + 53

Our main interest is to be able to predict real full TOEIC scores from real Bridge scores, rather than the reverse, so we focus on the first of the above. A slightly better fit is obtained for that with the power formula below which returns an R squared of .451 in place of .343 from the linear formula.

Real full TOEIC total score = .563 × (Real Bridge TOEIC total score to the power of 1.295)

If the main aim is to predict real full TOEIC scores from real Bridge scores, the formula is significantly different to standard tables. For example, a real Bridge TOEIC of 170 (corresponding to B1 level) predicts a full TOEIC score of only 435 on our power formula, not 550 (the correspondence given in standard tables

[10]). To predict a full TOEIC total of 550 on our formula, a real Bridge total of 204 would be required. In other words, based on a real Bridge score alone our students may appear to be at B1 level, while their likely full TOEIC score would not be up to that level. By contrast, at A1 equivalence, a real Bridge score of 92 in our data predicts a real full TOEIC score of 197 rather than 120 as per the standard tables [10]. In short, real Bridge TOEIC scores make our students look a little more proficient than the same students' real full TOEIC scores do at the upper end of the score scale and a little less proficient at the lower end.

This discrepancy can be explained in part by the following. If one wishes to statistically predict a score on one test from a score on another, it is best to use unidirectional conversion formulae. These formulae can accommodate the fact that correlations are not perfect and hence that the best predictions of corresponding scores differ depending on the direction in which the prediction is being made. The standard conversion tables [10] give conversions that are neutral as to direction so typically represent a compromise between two directional estimations.

6. Conclusions from the Exploration of Scores and Plan for Action with an IEP

There appears to be a lack of a clear advantage to full time students when compared to those who study part time. Full time students get more time to study, and are tested more often but fail to achieve significantly better results. This suggests that the methods of teaching and testing used at the university in themselves may be insufficient to promote progress. A factor that needs further investigation in relation to the part time students is their use of English in their day jobs. This could be having a positive effect on motivation, learning or both which is not available to most day students.

The differences between departments attest to the impact of additional English exposure and use which some provide. This takes a variety of forms in different departments. These forms include; extra English teaching, English medium subject teaching, learner self-help English learning groups, and work experience involving English. All of these forms share the feature that they involve the specialist English of the discipline or the occupation associated with the subject. Thus, they involve English for specific academic or occupational (professional) purposes, ESAP

or ESOP but not the English for general occupational/professional purposes, EGOP, which the General English Education course provides. This may support not only the need for extra English exposure more widely amongst the student populations but also the proposal that such provision needs to be specifically relevant to the learner's major subject and future profession.

There is a clear need for a more rational regime of test administration. The same type of tests should be done repeatedly at key times to ensure that effort, time and money is not wasted on rather haphazard testing using different tests on different occasions.

It was found that mock tests are generally very poor in predicting real test results and hence not demonstrably useful preparation for them. This may prompt reconsideration of the quality of the mock tests used and the procedures for administering them, or a decision to use only real tests. The higher cost of real tests would require them to be use in a more sparing and well managed way, at key times only, including on the student's initial orientation day.

Of the tests used, the real Bridge TOEIC seems to be the best choice for freshmen and sophomores, since it is shorter and quicker to take, less demotivating, and cheaper than the full TOEIC. It covers the proficiency span up to level B2, which is the institutional target, and its scores can be reasonably confidently equated with full TOEIC scores. It is also telling that we found the best progression in students who took the real Bridge multiple times.

The above findings confirmed our impression that students' English was not progressing as it should at the university. As a result of this we proposed a new intensive English summer program (IEP) specifically targeting TOEIC skills to upgrade our university students' general English proficiency and hence their TOEIC scores. In this way we hoped to promote their capacity for global competitiveness.

7. Objective of the IEP Action

As with action research in general, the aim was to test the proposed action by trying it out and seeing if it was successful. In this case success would show itself as a greater increase in TOEIC scores than had previously been recorded.

8. Method of the IEP Action

The Intensive English Program, launched on campus of Hungkuang University since July 2013, has now been running annually for five years, additional to the normal English teaching already described in this paper. In the summer of 2018 it took the following form. 49 undergraduate students from thirteen different departments were recruited. The IEP was implemented from Monday, July 2, 2018 to Friday, July 27, 2018, thus spanning four weeks. It ran from Monday morning through Friday evening from 8:30am to 6:00pm and was structured in 80-minute lessons. The aim was to improve the students' English proficiency from mean 349.8 to 518.3 points (full TOEIC).

Participants were asked to take a TOEIC pretest two weeks before they started the course. During the IEP participants were required to take a new TOEIC mock test provided by AMC [12] and ETS [10] every week. Three TOEIC mock test were administrated on the first, second and third Wednesdays. The posttest was held on the 4th Wednesday.

Each class of students was divided into 3 smaller groups and each group competed with the other groups. The students were motivated and accompanied by peers, TAs, and mentors. Classes were staffed by 1 foreign teacher, 1 local English teacher, 3 teaching assistants and 2 administrative assistants.

Three textbooks were used on this occasion: 30 Days to TOEIC Success, Business Benchmark-Pre-intermediate to Intermediate and BULATS (2nd. Edition). These were intended to enhance participants' listening, speaking, reading, writing, pronunciation, vocabulary and grammar skills, with a TOEIC emphasis. Syllabus details follow.

Reading and Writing (EIC)

Students learned to improve their reading comprehension and reading speed while practicing such skills as predicting content, skimming, scanning, drawing inferences and conclusions, and guessing meanings of vocabulary from context. Students then responded to the reading material through group discussions and writing in English.

TOEIC Vocabulary

The topics covered transportation, technology, office communication, shopping, travel plans, hotels, recruitment, dining out, events and purchasing. Each topic introduced 15 words and phrases commonly used in the workplace. These were followed by sentences both in Chinese and English. Following the introduction to the new vocabulary, students were put in pairs to practice and ask each other what the meaning of each of the new words was. The students then did exercises, first matching the corresponding words, then filling in the blanks with words provided in the box. Each lesson provided dialogue related to the topic for students to fill in the blanks. In addition, students had a chance to test their listening and reading abilities. After class, students took a mini test on vocabulary from Monday through to Friday.

Speaking and Listening (SL)

The textbooks of both EIC and SL, Benchmark, were taught by foreign teachers. One foreign teacher taught Speaking and Writing on a weekly basis to promote students' speaking and writing abilities.

Sentence Patterns (SP)

This was dealt with through handouts given to students in pairs to guide them in how to read and respond

Table 4. Descriptive statistics results of IEP participants' improved scores

	above 200 points	150-199 points	100-149 points	50-99 points	1-49 points	No progress
Percentage	6.1%	15.8%	15.0%	19.1%	10.9%	0%
Numbers	3	15	12	13	6	0

to email, advertising, announcements and to other documents. It combined grammar and tense.

E-learning Language Technology (LTC)

In 2017, I Got software was adopted by the university. Students were asked to do a 30-item mini mock test in the language lab on Tuesdays. The mock test was divided into 3 levels based on the student's level of ability. They were also able to do extra mock tests at home.

Movies

On Wednesday afternoons, comedy-drama films related to the workplace were screened. These were: The Terminal (about a man stuck in an airport), In Good Company (about a middle-aged executive with a boss half his age), Up in the Air (about a corporate downsizing expert in crisis) and The Devil Wears Prada (about a powerful fashion magazine editor and her assistant). Afterwards test questions were given related to the films. Students could also gain some understanding about business in a fun way through the YoFun software, which provided both native language and target language at the same time.

9. Result of the IEP Action

Not only did students improve their language proficiency, but they were also observed to improve their communication skills and interpersonal skills through the program.

Each year the average English proficiency improvement score target was set to be 120 points. This was achieved in 4 summers out of 5 of the summers when the IEP was run. The students in the summer which did not achieve the expected goal still achieved an average improvement of 95 points. In 2018 the participants improved their proficiency by 123.5 points on average. Table 4 shows that all the participants made significant progress. 27 participants (55%) achieved overall scores of above 500 points. In the listening section, the participants made average progress of 129.4 points and, in the reading section, the participants made average progress of 117.5 points.

In addition, two students who had participated in the previous IEP signed up for this program the following year. A 2018 graduate majoring in Applied Cosmetology achieved 800 points, the highest score in the 2018 IEP. When she joined the program as a freshman, her score advanced from 350 to 395 points. As a sophomore, she took classes in the Department of Applied English, joined an exchange program in the United States and continuously improved her English

competency. She aimed to work in foreign companies, so she decided to retake the 2018 IEP as a senior. She encouraged juniors to set learning goals, take interdisciplinary courses, and take advantage of school resources.

However, it was a sophomore majoring in Applied Cosmetology who made the most progress. She said that her English teacher inspired her to join the IEP. Her pretest score was so bad (250 points) that she studied 3 hours on a daily basis in addition to the IEP hours and made progress of 275 points. A third student, majoring in Cultural and Creative Industries, advanced to 630 points showing an improvement of 230 points.

10. conclusion

The overall conclusion is that the action of running the IEP was a success. It was shown that intensive instruction over a relatively short time which is targeted on the skills required in the test which has to be taken can lead to dramatic improvements. It should be noted, however, that the IEP was only offered to small numbers of volunteers in each year, who may have been especially motivated. Furthermore, it was quite labour and time intensive with a high staff-student ratio so it may not be a practical solution for the whole student population.

Nevertheless, one action usually leads to another in the cycle of action research [13]. Hence it is now the aim of the researchers that the IEP program can be delivered on an annual basis and extended to students more widely. It is hoped that this will improve English proficiency across the campus and the institutional English proficiency targets can be met and exceeded. In this way our research will have made a contribution towards our graduates achieving global competitiveness.

our research for a better solution to promote our students' English proficiency. For the current IEP project, we would like to acknowledge the administrative support from the Language Centre of Hungkuang University, Dr. Yuwei Chu and Ms. Crystal Chiayu Lin. We are truly grateful for all the kind support received!

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