
**ELECTRONIC ENGLISH EXCELLENCE:
FACILITATING EDUCATIONAL SUCCESS
FOR THE THAI LEARNER
IN AN INTERNATIONAL ENVIRONMENT**

Jan Van Maele and An Schollen

Group T, Leuven

Abstract

The objective of the Electronic English Excellence project (e-English Excellence) is increasing Asian students' English language skills before they start their studies at Group T, an engineering, educating, and enterprising institute of higher education, based in Leuven, Belgium. One part of the project revolves around the English Excellence website, a low-threshold, economical online learning environment, implemented in a collaborative effort between Group T and partner universities in Asia. The site takes students through four successive steps: self-assessment, assessment of actual proficiency through targeted language tests, feedback on self-assessment and test results, and finally, selective practice. This article describes the learner autonomy-based methodology and the criteria used to select testing and practice tools accessible via the site. It provides an illustration of the site in action, detailing the results of a first piloting project carried out at the Chulalongkorn University Language Institute.

**Purpose of the e-English Excellence project:
Creating an international environment**

Group T is an institute of higher education, associated with the University of Leuven, Flanders (Belgium). The institute offers bachelor and master programs, and it focuses on 3 E's: engineering, educating, enterprising. Group T enterprises education across frontiers, and it engages in a dialogue with a plurality of worldviews, through partnerships abroad, as well as by creating an international environment at home. The focus in this internationalization project is clearly on Asia, more in particular on China and on the Greater Mekong Subregion. In Thailand Group T has cooperation agreements with, among others, Chulalongkorn University, Thammasat University, Sukhothai Thammathirat Open University, and Rajabhat Institute Susan Dusit. The current strategy for creating an international environment at the Leuven campus is to attract full-program international students, who come to Group T and stay until graduation, mostly through twinning and dual degree programs in strategic alliances with partner universities. Students finish their freshman, sometimes sophomore year as well at the partner university, and then come to Group T.

'Virtual education' through tools like the e-English Excellence project is part and parcel of internationalization. Together with our partners, we want to prepare international students for their studies at Group T by increasing their 'e-literacy,' i.e. their ability to function academically and socially in the English language, making use of various, including electronic, media. We want to provide them with the means to attain English Excellence and e-learning is one of the approaches we selected to achieve this. The World Wide Web exemplifies internationalization. Providing resources on a site makes them available to every student with Internet access. The web in itself, with its abundance of information in English, offers valuable practice material. Language learning resources in particular allow for continuing self-directed learning. For the practice section of the English Excellence site, we tapped into the vast amount of freely available practice materials on the web, this way keeping the cost involved in using the site, as well as its development costs to

a minimum. An even more important factor is the evidence that the Internet motivates language students (Krajka, 2001). The medium provides text, but also video and audio. Computer aided language learning (CALL) and the use of the Internet have also been researched in a specifically Thai context. Prapphal (1998) describes the Internet as a means for enhancing students' language skills, cognitive and academic abilities, computer literacy and self-actualization needs. In a recent study, she indicated the value of Net tasks as a supplement to regular English courses (Prapphal, 2001).

English Excellence

At Group T, the language-learning goal we try to achieve is English Excellence, which we define as the ability to communicate effectively in multicultural encounters. The stress on effective communication is reflected in the English Excellence curriculum as well as in its methodology. Group T's approach to language learning is task-based and learner-driven. Students carry out meaningful communicative tasks, based on authentic situations and involving real-world material. English Excellence is also about the use of English as a tool in multicultural encounters. The dominant position of English as a world language in the fields of science and technology is well-attested. At Group T, next to a language for academic encounters, English is also the lingua franca for social interaction between students of various nationalities. As such, English language proficiency is an important factor both for social life and for achieving educational goals.

The English Excellence unit at Group T is responsible for setting the language standards and for undertaking actions that improve English language proficiency among students and staff. With the English Excellence website, Group T is broadening its radius to include anticipative English. Anticipative English unites the home and host universities in their shared concern of bringing students' English proficiency up to par in advance of their arrival at the host university. In addition, it is a concern shared by the various professional categories that are employed at a university:

lecturers, administrators, researchers; and not in the least, by the students themselves, both guests and hosts.

Action research

Faced with the shared challenge of providing learners with a tool that gives them a sense of the required linguistic profile and that motivates them to autonomously prepare for their studies abroad, the English Excellence team tried to establish a *modus operandi* that should lead to tangible results within the time frame of one academic year. The collaborative character of the project, the distinctive focus on accommodating situational variation and the necessity to deliver an actual tool to solve a pertinent issue triggered a hands-on and research-based approach. The e-English Excellence project took shape as an 'action research project' (Bailey, 2001). Guided by Cohen and Manion's (1980) description of this type of research: 'small-scale intervention in the functioning of the real world and a close examination of the effects of such intervention,' the team set out to define the principal criteria for the design of what would become an autonomous electronic journey to English proficiency.

An autonomous journey

In order to facilitate educational success, the site needed to provide students with a sense of the required linguistic profile. Rather than listing linguistic requirements and describing future communicative encounters, the team aimed at providing some virtual experience that would help students discover the extent to which they meet the requirements and match the expected profile. In addition, the project team identified three other design criteria: accessibility, flexibility, and autonomy. The site had to be accessible inside and out of the classroom, so students could use the provided materials at their own pace. It also needed to be flexible, indicating that the site could continuously be extended and updated. And most importantly, navigating through the site had to be like undertaking an autonomous journey, with the learners being inquisitive explorers, eager to embrace all aids that could help them on their way. This view of the language learner

fits in with Dickinson's (1987) description of the self-directed learner, who 'accepts responsibility for all the decisions concerned with his learning but does not necessarily undertake the implementation of those decisions.'

Autonomy

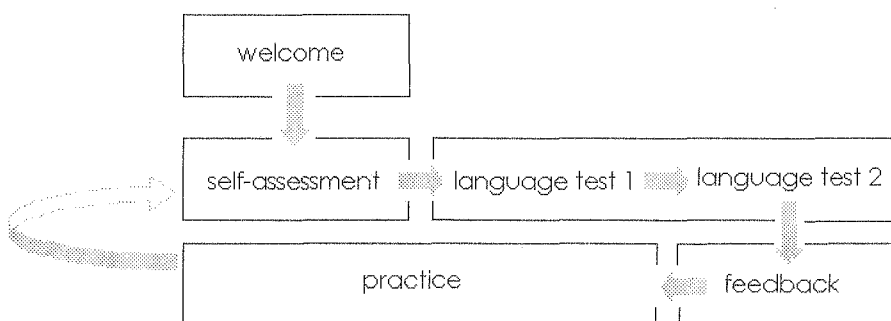
It has been widely recognized that learner autonomy, whether defined as the ability to take charge of one's own learning (Holec, 1981) or as a way of being that has to be discovered or rediscovered (Breen and Mann, 1997) is of major importance. In the past few years, the move away from teacher-centered practice, which may be daunting for students and lecturers alike, has gained ground both in Europe and in Asia, and has been embraced by researchers, policy makers, and teachers. In his article on self-assessment in traditional settings in Asia, Finch (2001) gathers research information indicating that the process of actively investigating one's own skills contributes to maximum learner motivation and constitutes a drive for taking ownership of one's own learning process. In Thailand, traditional forms of autonomous learning declined with the introduction of Western-style formal learning (Krissanapong, 1996). The National Education Act (1999), however, initiated the development of the 'Basic Education Curriculum' (authorized November 2000), in which learner autonomy is an explicit objective. Learner autonomy as well as alternative forms of assessment (self-assessment, use of portfolios, etc.) are topics of Thai educational research and gain importance in teaching practice, as demonstrated by the focus on learner autonomy at the Thai TESOL Convention of 2003¹. At CULI, too, learner autonomy has been given close attention². Likewise, in Flanders, the 2003 Structural Decree on Higher Education lists life-long learning skills as a specific educational goal for all academic bachelor programs. At Group T, the goal of

¹ I.C. Douglas describes the conference in: Douglas, I.C. (2003) The lifelong journey of learning, in *Bangkok Post*, online version, January 21-27, 2003, <http://www.bangkokpost.com/education/site2003/cvja2103.htm>, retrieved on January 28, 2004.

² Autonomy and self-directed learning were topics during CULI's Fifth International Conference, Bangkok, December 15-17, 2003.

the 'educating engineer' emphasizes that engineers, too, need to display the qualities of the autonomous learner and coach (De Graeve, 2002). Just like in the English Excellence classroom encounters, users of the site, guided by the navigational aids, find their way through the site in order to autonomously extend their linguistic proficiency.

Figure 1: Route through the site



Welcome page and student testimonials

The welcome page introduces the English Excellence program in general and e-English Excellence in particular. The page can be accessed via the direct link <http://www.group-t.be/eEE>. To create rapport, the team recorded interviews with the best sources of information: the international students at Group T. The resulting testimonials narrate about life in Belgium, adjusting to the educational system, requirements (specifically linguistic requirements), lectures, relationships with fellow students and professors, leisure, etc. These vignettes give the prospective students an accurate view on what to expect. They are provided as sound files accompanied by transcripts that can either be used to monitor and facilitate the listening, or as a back-up in case of technical issues.

Test loop

The site then guides learners through four successive steps: self-assessment, assessment of actual proficiency through targeted language tests, evaluation of self-assessment and test results, and finally, selective practice. Using the site should be an iterative process as students, after practice, can return to the self-assessment stage and assess their progress. Both for the self-assessment stage and the two independent language tests, the team opted for tests developed in a research environment, by renowned linguists, yet freely available on the Internet, easy to administer, and requiring little time to complete (about ten minutes each).

Self assessment

Electronic English Excellence is a learning environment that approaches the visitor as a 'self-directed' learner. Self-assessment was chosen as a starting point as it enhances autonomy (Nunan, 1996). Moreover, it has been described as 'one of the key skills which the self-directed learner needs to master in all stages of the language learning process: in planning, in monitoring, and in reviewing' (Thomson, 1996). As Oscarson (1989) has pointed out, self-assessment trains learners to evaluate the effectiveness of their communication, raises their awareness of the learning process, stimulates them to consider course content and assessment critically, and enhances their knowledge of the variety of possible goals in language learning. In summary, for language learners, self-assessment results in a better position to exercise control over their own learning.

The self-assessment tool used in the site is a web-based presentation of the can-do statements of the Common European Framework of Reference for Languages, outlined by the Council of Europe. In this framework, self-assessment is described as an important factor in the language learning process, contributing to motivation and thus to educational success (Council of Europe, 2001). The tool consists of lists of can-do statements relating to actual communicative acts, gathered in three linguistic proficiency levels: elementary, intermediate, and advanced. The visual

presentation of the tool reveals a self-assessment funnel. Students are first given a global view of their proficiency, characterized by just few brief and general descriptors, and are later given a detailed profile, using lists of very specific can-do statements, grouped per skill. Going through the lists allows students to develop a clear view of the required communicative abilities in English and on the extent to which they meet the requirements.

Using such clear and detailed descriptors is a prerequisite, as accuracy in self-assessment has been shown to improve if clear descriptors that refer to a specific experience are used (Council of Europe, 2001, p. 191). However, some may argue that self-assessment provides a biased view of a learner's linguistic ability. On site, self-assessment is complemented with external assessment, using two independent proficiency tests. The scores of self-assessment and external assessment are then compared. Finally, the feedback on this comparison allows the learner to fine-tune his/her view on his/her own linguistic proficiency.

Two independent language tests

For the second part of the test loop, the assessment of actual proficiency, the team was looking for tests that have been shown to measure aspects of language proficiency in general. They also wanted to present various tests, relying on distinctive test methods, tapping the stronger and the weaker points of the Asian learners of English³. On top of that, the team needed tests that would require minimal time and effort from the learner but which were, research-based and trialled so that they, could provide reliable data on the learner's proficiency. The tests that were chosen meet all these requirements. The first one is the Vocabulary Levels Test, developed by Nation and Laufer (1995)⁴

³ It is our experience, that Asian learners have a relatively larger vocabulary and relatively weaker listening skills than Flemish learners with a similar overall proficiency level. Similar experiences have been reported by lecturers in other institutes. See Scott, G. (2002) Teaching Asian Tigers. SATEFL Newsletter, 21 (3) <http://www.satefl.org.uk/newsletters/spring0402/feature.doc>, retrieved on January 28, 2004.

⁴ Nation, P. & Laufer, B. Levels tests online. <http://www.er.uqam.ca/nobel/r21270/levels>, retrieved on January 28, 2004.

and subsequently adapted for the Internet by Cobb. The second one is M_Lex, an audio-input based memory test in English, developed by Meara et al. (2001)⁵. By selecting these tests, we opted for a variety of input (written as well as spoken) and a variety of required responses.

In the Vocabulary Levels Test, test-takers fill in parts of missing words in unrelated sentences. For each gap, the first letter of the missing word is given. There is no tolerance for spelling errors. Selection of words included in the Vocabulary Levels Test is based on frequency information (Nation, 2001).

M_Lex is a test of short-term memory in the English language. Taking the test involves listening to sets of unconnected words, then highlighting these words in a list presented on screen, which also contains words that were not included in the auditory input. The test is based on the assumption that more proficient non-native speakers will be able to remember more words and will be less distracted by the additional words than less proficient non-native speakers. The English version of M_Lex uses words from Nation's Level 1 list—a list of 1000 highly frequent words in English, which makes the test suitable for both beginning students and more advanced ones.

In determining cut-off scores on these tests, the team was guided by the practical question of which meaningful test score would be most representative of the admission criterion for academic work at Group T, with 'meaningful' referring here to both the perspective of the original test developers, and to Group T's expectations towards the applicant ('higher intermediate'). With regard to Nation and Laufer, we aimed for a pass on the 2000 levels test. We selected this level as the frequency list underlying the test covers about 80% of academic text and newspapers, and over 90% of the running words in informal conversation (West, 1953). For M_Lex, we placed the cut-off point

⁵ Meara, P., Milton, J., Lorenzo-Dus, N. (2001) *LEX: The Manual*. Centre for Applied Language Studies, University of Wales Swansea
Text and tests: <http://www.swan.ac.uk/cais/caisres/free/lexman.htm>, retrieved on January 28, 2004.

at a score of 72%. According to the test-designers, this score is comparable to 550 on TOEFL or to 5 on IELTS.

Scoring and feedback

Once students have completed the self-assessment stage, and have taken the two language tests, they receive feedback. This feedback is represented as a comparison between their self-assessment and their (reported) scores on both language tests. The result is a tentative indication of whether they might be ready to take up studies in English at Group T. More importantly, it functions as a pointer toward practice sites that might be useful given the results they scored on both tests. As we are using two unrelated language tests and do not yet have conclusive information on correlation between the scores on both tests, nor on their alignment with the levels described in the Common European Framework used in the self-assessment tool, we remain cautious with regards to the implications of test scores. Today the underlying algorithm remains very rudimentary: we only handle one cut-off, namely that between elementary level and higher than elementary.

Practice portal

The Internet provides an extensive range of practice opportunities for learners wanting to improve their language skills. However, it can be daunting for learners to find exactly the exercise or task that can really help them improve their English skills. Moreover, not all information provided on the Net is in line with the high standards we set for our learning experiences. That is why the English Excellence site aims to be a portal site, opening the way to a range of useful, efficient, and tested practice pages on the web. The feedback that users receive after completing self-assessment and the two tests directs the learner to targeted practice sites on the Internet. All these resources are available free of charge. This way, the site offers learners a guided, efficient, and economical way of improving their English language skills.

Based on the test scores the users obtained, and on their personal indications of preferred fields of practice, a list of practice sites is generated. Today, the practice sites focus on some of the

more traditional aspects that readily present themselves for computer-assisted learning (vocabulary, listening comprehension, grammar, spelling, and reading exercises). This initial selection of practice sites has been screened by students in teacher training and by lecturers of English at Group T. The database is continually updated with new practice sites. The sites in the database are labeled with a target level and grouped according to the provided skills and fields of practice.

Piloting e-English Excellence at CULI

Purpose of the pilot project

The main objective of the first pilot of the site was to determine whether the site could be used as a tool for preparing Thai students for academic studies in English. In line with the action research approach selected at the onset, the pilot was a collaborative effort involving teachers, administrators, and students. Ultimately, the results of the pilot were intended to lead to improvements of the site and to a renegotiation of the entire project's directions and approach. In order to measure the extent to which the site could help Thai students to prepare for their studies abroad, we investigated the site's motivational gain, the usability, and the construct validity of the tests we presented. As the pilot was concurrently carried out at Group T we could draw comparisons across learner backgrounds.

Motivational gain

The site will not be successful unless it creates a positive attitude in learners to practice English. We appreciate that 'motivation' is a complex construct (Dörnyei, 1998), which has not been fully mapped in the limited boundaries of our research project. However, we do assume that motivation will certainly involve a 'perception of usefulness' (the once notorious 'face validity') and positive feelings of involvement

(‘enjoyability’)⁶. Motivational gain was accordingly translated into perceived usefulness and reported enjoyability of the site.

Usability

Designed as a lever for language practice, it was a major concern that the navigation, language, and overall interface of the site were inviting and encouraging rather than a hindrance to the user. We selected ‘readability,’ ‘navigational ease,’ and ‘technical facility’ as parameters for usability.

Construct validity

Construct validity refers to the extent to which a test score can be seen as a true indicator of the ability that is measured in the test (Bachman and Palmer, 1996, p.21). In this pilot study our prime interest was in finding out whether, despite the different testing methods, both tests can be said to measure the same construct, general language proficiency. As Bachman and Palmer (1996) explain, differences in testing method can be defined by detailing a series of test task characteristics, including several characteristics of settings, rubrics, input, expected response, and relationship between input and response. Such extensive listing was beyond the scope of the pilot. Apparent differences between the tests are the fact that Nation and Laufer measure vocabulary size through a gap-fill exercise, while Meara measures ease of recognition of auditory input, compared to native speaker scores. If both tests measure the same construct, we would expect that the respondents’ scores co-vary. During the pilot sessions, we gathered empirical data in order to verify the validity of our assumption.

⁶ Eccles and Wigfield (1995) identify intrinsic and extrinsic value as determining factors for the learner’s appreciation of success in a specific task. Intrinsic value refers to the enjoyment, extrinsic value to the usefulness of the task. We assume that learners will be more motivated to accomplish the tests successfully if they perceive the tests as useful and enjoyable tasks.

Methodology

In November 2003, 139 students tested the site. Sixty-seven Thai students accessed and used the site from the CULI institute in Bangkok, while 33 Flemish home students and 39 Chinese international students were involved in the pilot sessions at Group T in Leuven. All respondents in this pilot were university students, but they differed in more respects than first language. Thai and Flemish learners were home students; Chinese learners were already studying abroad. Chinese and Flemish learners were engineering students; Thai learners had various majors. The students' overall language proficiency varied; we did not possess a single common measure to take as an independent variable. The variety in educational and situational backgrounds for the students within the various nationality groups was an additional motivation for us to refrain from jumping to conclusions on 'cultural' grounds.

Students participated in groups, in a class-type set-up, with a lecturer giving standardized instructions on how to use the site. They were given approximately one hour to go through the site, use the self-assessment tool, take the two tests, have a brief look at the practice pages, and fill out the feedback forms. These online feedback forms contained fields for the outcome of the self-assessment procedure and for the scores on the two language tests. They also contained a series of yes/no questions, with space for optional comments (why-questions)⁷. The answers entered via these forms were automatically collected in a database.

⁷ These forms are available via the site: <http://www.group-t.be/eEE>, link 'feedback forms'.

Analysis***Motivational gain******Table 1: Motivation***

		n	Self-Assessment	Nation & Laufer	Meara
Useful	Thai	67	60	54	55
	Chinese	39	30	30	27
	Flemish	33	28	26	22
	Total	139	118	110	104
Enjoyable	Thai	67	49	54	49
	Chinese	39	30	22	28
	Flemish	33	25	25	25
	Total	139	124	101	102

This pilot revealed that Thai students find the site more useful than enjoyable, and that the group of Thai students finding the site useful was larger than the groups of other nationalities. An overwhelming nine out of ten Thai students found the self-assessment step useful. They described the tool as a good way to 'study on your own,' 'an effective way of knowing your level', an indicator of which courses to take. However, as mention above they found the tool clearly more useful than enjoyable. Many students found the self-assessment tool 'boring,' as there was 'too much text.'

As presented today, M_Lex clearly raises a concern with regard to perceived usefulness, and hence, the motivational power of the site. The most encountered comment was that students saw M_Lex as a memory test, not an English test. One of the measures that might lessen their skepticism is providing information on the nature of the test and the underlying research.

Usability

One out of five Thai students reported they could not understand the information on the site because the language was too difficult. Almost as many Thai students reported they could not understand the instructions for taking the tests. An equal

group reported they could not find the information they needed. Nearly one out of eight Thai students reported technical problems (e.g. unable to download the files).

Construct validity

Table 2: Central tendency and dispersion

	n	Nation & Laufer			Meara		
		mean	standard deviation	min - max	mean	standard deviation	min - max
Thai	67	60	19	16-100	71	14	20-91
Chinese	39	59	21	16-94	79	9	41-91
Flemish	33	79	13	44-94	82	6	65-88
Total	139	64	20	16-100	76	12	20-91

Looking at the descriptive statistics, M_Lex presents some issues that merit closer inspection. There is a restricted dispersion for the Thai subgroup (and even more so for the Chinese and the Flemish learners). In addition, the results are somewhat negatively skewed, although there remains room for two standard deviations. The result is that the test provides a more limited discriminating power than the Vocabulary Levels Test.

Looking at regression, Pearson r of 0.22 is higher than the critical value at the 0.05 level, so we can still speak of a statistically significant correlation. This gives some credibility to our assumption that both tests use different methods to measure the same construct. However, the pilot has been set up embedded in teaching practice, so not all the usual safeguards have been taken (students may have co-operated in some instances). In addition, a statistically significant correlation, especially given the high number of respondents, is not necessarily a meaningful one (Brown 1988). We plan to try out other on-line tests in the coming months.

Discussion

Though this initial pilot has shown that the current site has the potential to motivate students to autonomously undertake

linguistic practice using the web, long-term effects still have to be investigated. The rather limited correlation between the scores on the two external language tests has to be investigated further. Research into the nature of the tests, the implications of cultural bias and of technical aspects of administering the test will be carried out in the next few months. The main technical issue to be tackled is the integration of all test materials within the site, which will obviate the need for extensive written instructions. The statements in the self-assessment tool, which have proven to be hard to understand for learners at the elementary level, will in a next release be provided in the learners' native tongue.

Conclusions

We had not expected that awareness of how useful self-assessment is in language learning would be so high among students at CULI, compared to both Flemish and Chinese students at Group T. The follow-up can now focus on finding more attractive, enjoyable, and interactive ways of presenting self-assessment on the computer.

In order to leverage the motivational potential created by this first version of the site, the project will be extended with a new initiative, called Exclusive English. Exclusive English will involve the construction of an electronic self-access center, and the development of e-mail tandem learning facilities through the site, introducing the educator-role to students already studying at Group T. This way, the autonomous learners who have completed their preparatory route and are now studying at Group T can, in their turn, guide new learners through their journey towards proficiency.

Acknowledgement

We would like to express our gratitude to Johan De Graeve, President of Group T, and Associate Professor Boonsiri Anantasate, Director of Chulalongkorn University Language Institute, for supporting this initiative from the start. We would also like to thank our liaison at CULI, Ajarn Chulaporn Kongkeo, and the entire English Excellence team at Group T for their great help in carrying out this on-going endeavor.

The Authors

Jan Van Maele and An Schollen are educators and researchers of Group T, an engineering, educating, and enterprising institute of higher education based in Leuven, Belgium.

References

- Bachman, L. & Palmer, A. (1996). *Language testing in practice*. Oxford: Oxford University Press.
- Bailey, K. M. (2001). Action research, teacher research, and classroom research in language teaching. In M. Celce-Murcia (Ed.) *Teaching English as a second or foreign language* (pp. 489-498). Boston: Heinle & Heinle.
- Breen, M. P. & Mann, S. J. (1997). Shooting arrows at the sun: perspectives on a pedagogy for autonomy. In P. Benson. & P. Voller (Eds.) *Autonomy & independence in language learning*. Harlow: Longman.
- Brown, J. D. (1988). *Understanding research in second language learning*. (pp. 141-146). Cambridge: Cambridge University Press.
- Cohen, L. & Manion, L. (1980). *Research Methods in Education*. London: Croom Helm.
- Council of Europe (2001). *Common European framework of reference for languages: learning, teaching, assessment*. Cambridge: Cambridge University Press.
- De Graeve, J. (2002). *Paradox-based strategy for innovative engineering education*. Unpublished Ph.D. dissertation, Beijing Normal University.
- Dickinson, L. (1987). *Self-Instruction in Language Learning*. Cambridge: Cambridge University Press.
- Dörnyei, Z. (1998). Motivation in second and foreign language learning. *Language Teaching*, 31, 117-135.
- Eccles, S. & Wigfield, A. (1995). In the mind of the actor: the structure of adolescents achievement task values and expectancy-related beliefs. *Personality and Social Psychology Bulletin*, 21, 215-25.
- Finch, A. (2001) *Self-assessment in traditional settings: An Asian perspective*.
<http://www.finchpark.com/courses/assess/assessors.htm>,
retrieved on January 28, 2004.

- Holec, H. (1981). *Autonomy in Foreign Language Learning*. Oxford: Pergamon.
- Krajka, J. (2001). Online lessons - Using the Internet to help the coursebook. In K. Cameron (Ed.), *C.A.L.L.- The challenge of change: Research and practice*. (pp. 151-159). Exeter: Elm Bank Publications.
- Krissanapong, K. (1996). *Autonomy rediscovered*. Paper presented at Autonomy 2000: The development of learning independence in language learning, Bangkok, November 20-22, 1996.
- Meara, P., Milton, J., Lorenzo-Dus, N. (2001) *LEX: The manual*. Center for Applied Language Studies, University of Wales Swansea. <http://www.swan.ac.uk/cals/calsres/free/lexman.htm>, retrieved on January 28, 2004.
- Nation, P. & Laufer, B. *Levels tests online*. <http://www.er.uqam.ca/nobel/r21270/levels>, retrieved on January 28, 2004.
- Nation, P. (2001). How Good is Your Vocabulary Program? *ESL Magazine, May/June, 22-24*.
- Nunan, D. (1996). Towards autonomous learning: some theoretical, empirical and practical issues. In R. Pemberton et al. *Taking control: Autonomy in language learning* (pp. 14-15). Hong Kong: Hong Kong University Press.
- Oscarson, M. (1989). Self-assessment of language proficiency: rationale and applications. *Language Testing, 6*, 1-13.
- Prapphal, K. (1998). Self-directed learning through the Internet and Intranet pedagogy: A choice for language teachers. *PASAA, 28*, 62-71.
- Prapphal, K. (2001) Self-evaluation of language skills and non-linguistic factors through WWW and e-mail tasks. *PASAA, 32*, 36-51.
- Scott, G. (2002) Teaching Asian Tigers. *SATEFL Newsletter, 21 (3)*, <http://www.satefl.org.uk/newsletters/spring0402/feature.doc>, retrieved on January 28, 2004.
- Thomson, C.K. (1996). Self-assessment in self-directed learning: issues of learner diversity. In R. Pemberton et al. (Eds.), *Taking control: Autonomy in language learning*. Hong Kong: Hong Kong University Press.
- West, M. (1953). *A general service list of English words*. London: Longman.

