

Title Page

Title: The advantages and limitations of employing internet in distance education.

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The advantages and limitations of employing internet in distance education.

ABSTRACT

Internet is the latest trend in the search for a more useful teaching aid. It promises much potential. The most outstanding feature that distinguishes itself from the rest of the teaching-related technology is that it offers a possibility for real time interaction between the teacher and students.

However, every new technology also brings with it, at the beginning, a new hype about it. More often than not, the new hype depicts a brand new horizon so fascinating that a lot of resources are eagerly pumped into this trend. The past experiences have shown that after the initial hype is cooled down, teachers can start to develop and assess the real potential of the new technology. After the burst of the .com bubble in 2000, the talk about distance education via internet has been more realistic.

This teacher started an experiment in June of 2000 to explore the application of internet as an additional tool to help adult students learn English in Taiwan. Learning English as a foreign language is a challenging task for most Asian students. For adult students, the task is even daunting. This experiment took place in the National Open University in Taiwan. This university teaches students all around Taiwan by means of distance learning. The primary media for distance learning is TV and radio programs and a monthly instruction session at a designated cite.

In order to compensate the limitation of program scheduling and very scarce face-to-face instruction, the internet offers a different channel for additional learning at the time and place convenient for students. This experiment created a webcite specifically for helping NOU students learn English. The webcite is called: English Clinic.

The webcite consists of three primary functions: first, allows students to download the TV programs and watch them on their own computer; second, provides additional explanation about the content of the textbook; third, encourages students to post questions they either are afraid of asking in class or can not wait for the once-every-month instruction session.

From its humble beginning in June of 2000 to Aug. 21, 2002, more than seventy four thousand visitors have come to this webcite. At the beginning, the cite averages around fifty to sixty visitors per day during the semester. Now, in the middle of summer break, this cite still averages between 120 to 150 visitors per day.

The experiment has demonstrated the advantages as well as limitations of employing internet in distance education. Internet does offer students additional

learning channel at their convenience. The online Q&A section attracts many praises for its guaranteed privacy and immediacy. In addition, as more and more oral and written materials are added in the webcite, more and more general public come and visit this webcite.

Webcites like this one needs constant attention from dedicated professionals, specifically the content expert. This teacher has dedicated his full attention to this cite by constantly adding more materials and taking care of students' question as soon as possible, even in the dead of night.

Such a learning tool can easily attract a group of loyal followers. They are mostly people who are really interested in learning in the first place. They have access to computer and are not easily scared away by the technology.

On the other hand, this teacher also encounters many students who have heard of the webcite but have never visited it. In a few extreme cases, some students would rather pay a fee to attend a tutor class for the same course. Obviously, these students still prefer face-to-face instruction. They want a teacher to explain the text line by line.

In essence, the internet as a learning tool is only as good as the students' motivation to learn, the teacher's full dedication to it, and the availability of internet-related technologies. It takes three to make a meaningful learning possible.

The advantages and limitations of employing internet in distance education.

Introduction

Internet has become an integrated element of our modern life. While it is being used freely for disseminating information and communicating with people, the attempts to utilize internet for business and educational purposes have not established a proven path. The problem is not for the lack of visions and experiments, but for the lack of an understanding of the increasing population who has or will have access to the internet.

At the onset of this new technology, the business and the education communities are the first to envision the potentials of it. The education community almost always embraces eagerly new technologies that promise better presentation or dissemination of information. The education community hopes new technology can help educate more and better. The same mentality can be said about the business community.

What have we learned from the sudden coming and going of .com fever? We can find many theories for that, but we can be sure that the bursting of the .com bubble was not caused by either an immature technology or an insufficient vision. The core issue should have something to do with the general public whom the internet intends to trap but can't quite be sure about who they are and where they are.

This paper intends to understand, in its own microcosmic way, the who and where variables. The essence is to understand the "why" variable. Therefore, the guiding question for this paper is:

1. What types of people are more inclined to participate in a web-based educational program?
2. Why and how do they come?

The Study

The Background

The National Open University (NOU) was established in 1986 to help those adults who had missed the opportunity to have a university education. In addition, the NOU also aims to extend this opportunity to areas that don't have an access to a nearby university or a college. Naturally, the NOU student body consists primarily of adult students aged from mid-30s upward to 70s or even 80s. The majority of these students have left their previous education for quite a long time. Naturally, the ideas of teaching and learning have to be redefined in some cases.

Their disadvantages in learning notwithstanding, the NOU adult students are of vastly different backgrounds. While some are handicapped by the lack of a formal education, some are able to compensate this shortfall by their extensive experiences, and some, on the other hand, are hammered severely by the lack of both a formal education and experiences. In essence, the NOU faces students with unimaginable individual differences.

Learning English as a foreign language (EFL) has long been a difficult subject for most Taiwanese students. For the adult students of NOU, this task is even more challenging. NOU students need a lot more help, but, unfortunately, the NOU only allows four two-hour instructional sessions for each semester. Although the NOU produces textbooks as well as video teaching materials for students, these, plus the instructional sessions, are far from adequate for most NOU students.

This researcher started a personal experiment in June of 2000 to explore the application of internet as a supplementary tool to help NOU students learn English. The internet offers a different channel for additional learning at the time and place convenient for students. This experiment created a website specifically for this

purpose. The website is called: The English Clinic .

Since this is only a personal experiment, this website is open to the general public. It does not require any procedure of registration or a fee.

The website consists of four primary functions:

1. To allow students to download the sound of the audio teaching programs and listen to it on their own computer;
2. To provide additional instruction on the content of the textbook;
3. To encourage students to raise questions they either are afraid of asking in class or can not wait for the once-every-month instruction session;
4. To provide extra learning materials for improving English.

These four functions are implemented through five primary web-pages (Currently there are 8 pages in this website):

1. Virtual Dissecting Table—providing extra instruction for each of the three English courses being offered by the NOU. Basically, each course contains a link to audio instructional programs. One course provides the audio part of the TV teaching program. Two courses also provide the script for the TV video teaching programs. The audio instructional programs are the key-feature for each page.
2. Virtual Clinic—offering an open space for Q & A. Students come and post their questions or opinions and this researcher, in many cases other visitors, responds.
3. Health-Care Session—containing audio programs recorded from this teacher's weekly radio broadcasting program. This page aims at general public who wishes to improve his/ her English. The radio program focuses mostly on explaining the concepts, ways, and examples of learning English.

4. Sharing Session—posting articles from students who have passed NOU English courses. These articles talk about each writer’s experiences of learning English and preparing for the exam.
5. Bulletin-Board—announcing the addition of new teaching materials.

From its humble beginning in June of 2000 to Oct. 25, 2002, more than eighty-nine thousand numbers of visitations have been recorded. At the beginning, the site averages around 30 to 40 visitors per day during the semester. Now, starting from the summer break of 2002, this site averages around 260 to 300 visitors per weekday and around 160 to 200 visitors per day during the weekend.

Study Design

This study employs a twenty-six item survey (Appendix I) to learn of the ways some of the users use this website. The survey was posted on the title page, along with the links to other web pages, for a two-week period, from Sept. 27 to Oct. 10 of 2002. There was no incentive, nor encouragement for visitors to click the link to this survey. Therefore, this survey was responded on a purely voluntary basis.

For various unknown reasons, quite a few respondents aborted their responding, so their incomplete or fragmented answers had to be deleted. Seventy-eight complete answers are left, of which three couples of tandem responses are identical. Considering the remote likelihood of two persons giving complete identical answers, this researcher decided that these must have been the result of the same respondent answering the survey twice. Therefore, deleting 3 more, seventy-five valid responses are left.

The 26 questions center around three basic issues:

- (1) Respondent’s background information;
- (2) Respondent’s habits of visiting this website;

(3) Respondent's views and opinions about the usefulness of this website.

Findings

Respondent's Background

1. Gender

Of the seventy-five respondents, only fifteen are male (20%), fifty-eight are female (77%), and two did not declare their gender. This ratio corresponds roughly to the ratio of NOU student body (29% vs. 71%). Six respondents (8%) are not NOU students and sixty-nine respondents are NOU students. Among these six non-NOU respondents, five are female and only one is male. Clearly, female makes the great majority of visitors to this website, in addition to making the great majority of NOU student body. Are these indicators that female in Taiwan are more susceptible to enrich themselves via distance education?

2. Age

On the age factor, 12 (16%) are between the age of 21 to 30, 32 (43%) between 31 to 40, 21 (28%) between 41 to 50, 9 (12%) between 51 to 60 and 1 (1%) is older than 61. Here, again, we see a similar correspondence between the respondents and the NOU student body: age 21 to 30 (16% vs. 18%), 31 to 40 (43% vs. 42%), age 41 to 50 (28% vs. 31%), age 51 to 60 (12% vs. 7%), and age 61 and older (1% vs. 1%). One trend is clear: people of the age between 30 and 50 compose the great majority of the population striving to enrich themselves (71% of the respondents and 73% of NOU student body).

3. Academic Background

The academic experience for these seventy-five respondents are: 1 of junior high degree (1%), 25 with a high school degree (33%), 34 with a junior college degree

(45%), 12 with a university degree (16%), 3 with a graduate school degree (4%). These figures differ from the academic background of the NOU student body: 3 % of junior high degree, 56% of high school degree, 37% of junior college degree, 3% of university level, and 0.4% of graduate school level.

Academic background appears to wedge a difference between these respondents and NOU students. The difference starts from junior college level and widens as the education experience goes higher. The difference peaks at the graduate school level: 4% vs. 0.4%, a ten-fold difference. Therefore, the trend is clear, people with a higher education background tends to visit this website more.

4. Geographic Distribution

The geographic distribution of these seventy-five respondents shows a marked tendency to concentrate on the economically more developed areas. We can see three types of this concentration:

1. The biggest concentration is on the northern Taiwan, specifically around the capital city of Taipei. Thirty-eight respondents are from this area, composing slightly over half of the respondents (51%). Coincidentally, the portion of NOU students coming from this area is also 51%.
2. The entire eastern half of Taiwan contributes only four respondents to this survey, a mere 5%. Again, we see a similar pattern: the portion of NOU students coming from this same area is 6%.
3. No one respondent comes from the two off-shore islands. In terms of NOU student population, these two islands compose of 1.7% of the NOU student body. This zero responding may be partially attributed to the economic backwardness as well as geographic remoteness of these two islands.

A pattern is not difficult to detect: the willingness to participate in a continued learning, be it the enrollment of the NOU courses or the visitation of an educational website, corresponds to the economic level of the region. Just look at the six districts that have no one person responding to this survey, at least five of them is at the bottom half of economic development among the 23 administrative districts in Taiwan. The only one puzzling exception is the port city of Kee-Lung, just some 30 kilometers north of the capital city Taipei.

Respondent's Habits of Visiting

1. Purpose of Visiting

39 respondents (52%) came for searching for materials to assist the English course they are taking. 28 respondents (37%) said they come for materials to assist their learning of English. 5 respondents (6.7%) came just for browsing. 3 respondents (4%) came to express their opinion.

The trend is very clear: 89% of respondents come to this website for an educational purpose.

2. How did they find this website?

1. 43 respondents (57%) said they just bumped into this site.
2. 19 respondents (25%) said they first hear it from this researcher.
3. 13 respondents (17%) said they came on the recommendation of their classmates.

3. Frequency of Visitation

1. For those 39 respondents coming for supplementary course materials, 21 (54%) come at least 4 times a week, 12 (31%) come for between 2 and 3 times a week, 4 (10%) come visit once every week, 1 (3%) comes

2 to 3 times every month, and one just occasionally.

2. For the 28 respondents visiting for improving English, 11 (39%) come at least 4 times a week, 11 (39%) for between 2 and 3 times a week, 2 (7%) come at least once every week, and 4 respondents (14%) come occasionally.
3. Of the 5 respondents come for the purpose of browsing, only 1 (20%) come and visit at least 4 times a week.

4. Duration of Visitation

1. Of the 39 respondents coming for supplementary course materials, 15 (38%) have come for more than a year, 3 (8%) for 6 months, 9 (23%) for 3 months, 11 (28%) come for just one month.
2. Of the 28 respondents coming for improving English, 14 (50%) have come for more than a year, 6 (21%) for 6 months, 5 (18%) for 3 months, 3 (11%) for just 1 month.

This study was conducted at the beginning of Oct., 2002, just about one month after the beginning of fall semester. Therefore, those respondents who have come for just one month are very likely students just enrolled in NOU English courses for the first time.

5. First Visited Page

1. 33 respondents (44%) go to Virtual Clinic directly when they come to this website.
2. 10 respondents (13%) go to Bulletin Board directly.
3. 10 respondents (13%) go to the link to Dept. of General Studies directly.
4. 10 respondents (13%) go to Health-Care Session directly.
5. 8 respondents (11%) go to Virtual Dissecting Table directly.

6. 3 respondents (4%) go to The Introduction directly.
7. 1 respondent (1%) goes to Sharing Session directly.

6. Most Visited Page

Respondents can vote for more than one item for this question.

1. Virtual Clinic is the most often visited page—60 respondents.
2. Virtual Dissecting Table comes second—47 respondents.
3. Health-Care Session is tied at second—47 respondents.
4. Bulletin Board is third—20 respondents.
5. Sharing Session is ranked fourth—17 respondents.
6. The link to Dept. of General Studies is ranked fifth—10 respondents.
7. The Introduction is at the bottom—4 respondents.

Respondent's Views

1. Purpose of Visiting Virtual Clinic

1. 38 respondents (51%) said they come to see the latest topic of discussion.
2. 26 respondents (35%) said they come to look for useful learning material.
3. 4 respondents (5%) said they come to express their views.
4. 3 respondents (4%) said they come specifically for asking a question.

2. Views about Virtual Clinic

1. 37 respondents (49%) said this is a good place for exchanging ideas.
2. 18 respondents (24%) said their problems were solved.
3. 11 respondents (15%) said their views were expressed.
4. 3 respondents (4%) said it doesn't matter.
5. 2 respondents (3%) said this place has no real value.

3. Promises of Coming Back

1. For the 39 respondents who claims to come to this website for searching supplementary course materials, 18 (46%) said they would definitely come back after finishing the course, 16 (41%) said they would come back, 3 (8%) said too early to tell, and 2 (5%) did not respondent.
2. For the entire 75 respondents, 38 (51%) said they would definitely come back, 30 (40%) said they would come back, 3 (4%) said it was too early to tell, 1 (1%) said no.

4. Willingness to Recommend

Among these 75 respondents, 45 (60%) said they would definitely recommend this website to others, 22 (29%) said they would recommend it, 4 (5%) said no, 2 (3%) said it was too early to tell, and 2 (3%) did not respond.

Discussion and Conclusion

Discussion

Though only a descriptive data, these figures show clear trends:

1. Female dominates the population who seeks out ways to improve themselves.

In terms of the percentage of either the NOU student body and the respondents to this survey, female population takes up to more than 70%. Even among the six non-NOU respondents, only one is a male. We can not possibly imagine that female composes the majority of web-surfing population, but we can certainly claim that in Taiwan female are more eager to seek out learning opportunity on the internet.

2. People between the ages of 30 and 50 takes up more than 70% of the population who strives to improve themselves.

If we count the population between the ages of 20 and 30, the percentage easily nears 90%. This trend is easily understandable: modern society compels people to improve themselves so that they can adapt can cope.

3. People of higher educational background tend to be more likely to visit an educational website.

As the educational level ascends, the difference between the NOU student body and the respondents to this survey becomes sharper. In terms of the population, people with a high school or junior college degree takes up 93% of the NOU student body, whereas they only compose 78% of the respondents. People with a university or even graduate school degree are more eager to look for learning opportunity on the internet. In a word, an educational website may not reach people who need it the most.

4. The geographic distribution clearly shows a disproportionate concentration on the economically more developed areas.

In theory, internet can reach the farthest corner, but, in reality, resources or

economic development still dictates the way people use it.

5. While we may feel impressive with the enthusiasm of learning, we should also bear in mind that there are people who surf the internet and look for things of interest.

89% of the respondents come for learning English, fulfilling the goal of this website. In addition, 57% of the respondents came to this website by coincidence—they bumped in. There is another 17% who came on the recommendation by their classmates. This shows the existence of potential visitors on the internet who are constantly on the lookout for things of interest.

6. The majority of people who come to learn English (89%) come to this website very often and for a sustained period.

21 out of 39 respondents (54%) coming for supplementary course materials come to this website at least 4 times a week. Another 12 respondents (31%) come for between 2 and 3 times a week. 18 of them (46%) have visited this website for more than 6 months, although the semester has started for only about one month.

22 out of 28 respondents (79%) visiting for improving English come at least 2 to 3 times a week 20 of them (71%) have visited this website for at least 6 months.

In a word, the majority of respondents are loyal visitors to this website.

7. Virtual Clinic is the most attractive page of this website.

33 respondents (44%) go to this page directly whenever they come to this website. 60 respondents chose this page as one of the pages most often visited. Either way, Virtual Clinic is the most favored page.

(1) 38 respondents (51%) said they come to see the latest topic of discussion and 37 respondents (49%) said this page is a good place for exchanging ideas. (2) 26 respondents (35%) said they come to look for useful learning material and 3 respondents (4%) said they come specifically for asking a question, but only 18

respondents (24%) said their problems were solved.

These two groups of figures show that, though this page was originally conceived specifically for Q&A, it has taken on an unexpected role for exchanging ideas. As a matter of fact, Q&A has since become the secondary role of this page. Exchanging ideas or taking a look at what the latest discussion is about has become the primary role of this page.

Considering the conservative nature of Taiwanese students, this reluctance to utilize the Q&A opportunity fully is still somewhat surprising. Without the stares of both the teacher and classmates, we would like to assume that students on the other end of a terminal would feel free to ask questions on-line. Unfortunately, only 3 respondents (4%) said they come specifically for asking a question. This shows there is still room to think of ways to encourage visitors to post their own questions.

8. The Virtual Dissecting Table as well as the Health-Care Session is the second most frequented pages.

Each grasps 47 votes, next to the 60 votes for Virtual Clinic, but far ahead of the third place of 20 votes. This shows that this website has fulfilled its primary function: helping people learn English, either for understanding the course material or for personal improvement. This also corresponds with the visitors' stated purpose of visiting this website.

9. The great majority of respondents show a loyalty to this website.

38 (51%) said they would definitely come back and 30 (40%) said they would come back. In addition, 45 (60%) said they would definitely recommend this website to others, 22 (29%) said they would recommend it. This loyalty may truly show visitors' feeling toward this website; it may also be the result of only those loyal visitors would respond to this survey.

Conclusion

No doubt, internet provides an alternative tool for learning. It broadens the reach beyond the time and geographic restrictions of traditional classrooms. An educational website can provide a tremendous amount of supplementary materials for students and non-students as well. The on-line Q&A mechanism allows students a free environment to raise a question or post a comment. This study has shown that multiple sources of learning materials as well as a Q&A mechanism can attract loyal visitors.

This study has found a few interesting phenomenon worth mentioning:

1. People of various backgrounds, from every possible corner, with a variety of motive may visit, by various means. The most important factor is that more than 70% of the visitors are female.
2. These people each has unique needs, so multiple sources of learning materials is the only coping strategy.
3. The majority of visitors love the Q&A mechanism, but most of them are more interested in reading the latest discussion than raising a question.
4. It takes a long time to establish the credibility of an educational website. It takes some time for people to appreciate the value of the website. It also takes a while for the words to get out.

Therefore, from the point of the manager of such a website, an educational website must create an information rich environment and maintain a credibility of quick response. In a word, maintaining an educational website requires a persistent commitment on the creator (manger).

On the other hand, however, the strongest link of an educational website is also its weakest link. While loyal visitors make this researcher feel gratified, we should also not lose sight of the fact that there are still blind spots even internet can still fail

to reach. Generally speaking, the blind spots are:

1. Most male are still not interested.
2. People in remote areas or economically less developed areas are still strangers to internet.
3. People with a relatively lower academic degree tend to shy away from the internet, which was created primarily to help them.
4. Most visitors are still not used to feeling free to raise a question.

Implications

Creating and maintaining an educational website requires a lot of resources and persistent commitment. Its value still can not be measured in terms of the number of students enrolled and fees students paid in a short term. It does contribute to the teaching of school courses; it also contributes to the educating of the general public. The hard question, however, is: Who is going to pay for this?

Till this moment, we have seen many papers on the potentials or the feasibility of web-based instruction or web-based supplementary learning. How to implement the ideas to make them a regular element of a learning institution does require some thinking outside the box. After all, only the institution with a collective creative mind can sponsor such ideas.