The Original Impetus to Learn English Online: The ENFI Project at Gallaudet University
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#### **Abstract**

The English Language Institute at Gallaudet University participated in the Electronic Networks for Instruction (ENFI) Project in 1989. The purpose of this paper is to do a literature review of the ENFI Project within the scope of Gallaudet University and to contribute content that is specific to the English Language Institute. The research design is based on two interviews conducted in November 2011 with instructors at the English Language Institute. The discussion includes a comparison of the classes at Gallaudet University and the English Language Institute. Three recommendations on future ENFI research projects are presented.

#### Introduction

The Electronic Networks for Interaction (ENFI) Project, a networked real-time writing classroom, was first developed in 1985 at Gallaudet University, the only liberal arts university in the world geared for deaf and hard of hearing students (Peyton, 1989; O'Connor, Peyton, & Solis, 1989, p. 15). The ENFI Project was originally designed to provide a naturalistic, communicative, and social environment on the computer in which deaf students could interact in English, and through their interactions, develop the functions and forms of written English as a second language (Batson, 1988, p. 32, Peyton, 1989). This purpose of this paper is to explain the ENFI concept within the scope of Gallaudet University, review the literature on the ENFI Project, and recommend its use at the English Language Institute at Gallaudet University as part of new research study.

## **Definition of Terms**

American Sign Language – In this paper, American Sign Language refers to the sign language used to instruct students on class content at the English Language Institute and in undergraduate and graduate programs offered by Gallaudet University to its student body. There are various dialects of American Sign Language in the United States. The dialect used at Gallaudet University and the surrounding deaf community in Washington, DC, Northern Virginia and Southern Maryland is distinct from the rest of the continental United States.

English Language Institute students – Deaf, international, adult, college-preparatory students had attended and have been attending the English Language Institute at Gallaudet University typically for one to three years from its founding in 1986 to the present. The English Language Institute has opened its program to domestic students as of 2011.

Dialogue Journals - Dialogue journals are written by students and given to the instructor for review. The instructor reviews them, makes comments on them, and gives them back. The students read the instructor's comments on the content, not necessarily the grammar. Research has already shown that dialogue journals help students to develop their language, thought, reading, and writing abilities (Peyton, 1999, p. 18).

ENFI - The ENFI acronym initially stood for "English Natural Form Instruction" at Gallaudet University and then later evolved to Electronic Networks for Interaction (O'Connor, Peyton, & Solis, 1989, p. 15).

What Is the ENFI Concept According to the Literature Review?

To begin with, ENFI is not considered just a technological solution or software product (Bruce & Peyton, 1999). ENFI is also a pedagogical method of teaching writing that incorporates a social constructionist learning theory (Day & Batson, 1995; Susser, 1993). This theory is explained in this context as follows, "If knowledge is constructed uniquely within each individual through processes of social interaction, it follows that learning will be most effective when learners are fully involved in decisions about the content and processes of learning" (Benson, 2001, p. 36). For example, students write to inform, persuade, entertain, and develop congenial relationships with each other (Batson, 1988; Bruce, 1994).

Peer interaction within the context of ENFI can help trigger ideas among the group of students that they may not think of otherwise (Day & Batson, 1995). The instructor would need to set up the online discussion so that the students are free to interact with each other, not just with the teacher. Students can collaborate together in various aspects of writing by discussing ideas, brainstorming, taking notes, creating drafts, exchanging texts, providing feedback, and performing revisions based on the feedback of their peers (Bruce, 1994, p. 4). The teacher can participate in the discussions as needed, setting up preliminary prompts, and inserting written comments about the writing contributions made by the students on the designated topic.

This type of arrangement follows an intervention model where the teacher leads the students through the discussion. If the instructor arranged scenarios and problems for the students to work on together and only monitors the online conversations between the students, then it follows a non-intervention model. These models as conceived by Dr. Marshall Kremers indicate the differing roles the instructors may take within the technological structure and overall pedagogical context that the ENFI concept materializes in, for example, the ENFI Project at Gallaudet University (Peyton, 1999, p. 25; Kremers, 1990).

#### Historical Background

The ENFI Project was pioneered by Dr. Trenton W. Batson, an English professor at Gallaudet University (Batson, 1993). He became the project director of the ENFI Project and established the ENFI Demonstration Project, a large-scale consortium of five universities and colleges using local area computer networks to research the teaching of writing in an online, real-time format from 1987 to 1990 (Peyton, 1989; Bruce, 1994; Bruce, Peyton, & Batson, 1993). The consortium consisted of Carnegie Mellon University, Gallaudet University,

University of Minnesota, New York Institute of Technology, and Northern Virginia Community College. This project was funded primarily by the Annenberg/Corporation for Public Broadcasting Project (Bruce & Peyton, 1992; Bruce, Peyton, & Batson, 1993). An alternative name for this consortium was Electronic Networks for Interaction Consortium (Peyton, 1999, p. 22). Each of the universities and colleges had their own software platform for their version of the ENFI concept. The ENFI Project at Gallaudet University was the first of its kind and used Realtime Writer as its software platform.

### Realtime Writer

The Realtime Writer text conferencing program was created by a Washington, DC based company, Real Time Learning Systems. Tagged text scrolls down on the screen as it is received from others in a synchronic mode via the network. There are some additional controls within the software that allows the instructor to control the screens and the discussion channels (Susser, 1993). Up to forty separate discussion channels are available. On the screen, it includes a composition window below, a window to read the discussion channel above, and an extra window for the instructor to post notices to any or all channels (Strickland, 1992). Realtime Writer appears to be a predecessor to modern day instant chat programs that feature chat rooms. Even though Realtime Writer is obsolete, instant messaging software programs are available that could perform just as well or better.

# Undergraduate Participation in the ENFI Project

A classroom application of the ENFI Project was when a Gallaudet University class of basic writing students was paired with a class of elementary students for weekly conversations. The students took notes of their online discussion, printed out the discussion, and wrote academic reports about their child, the child's progress, and the modeling work in English that they did with the child online (Peyton, 1988). Their English professor then graded their reports, which had notably more academic language than the writing that they had done previously. A transcript of a real-time discussion in an electronic chat program can reveal details of the thought processes of the writer that are not normally evident in other types of academic writing. Viewing the writing process as demonstrated online in an interactive format may indeed be valuable for deaf students, English as a second language students, beginning writers, or "any student who has experienced difficulty in traditional classrooms" (Bruce, 1994). English teachers and undergraduate students in many English 50 classes, which were the basic English skills course required of freshmen who needed to pass the English Placement Test at Gallaudet University in order to progress to credit-bearing, college level English classes, participated in the ENFI Project (ComputersAndWriting.Org, 1990).

# Different Realizations of the ENFI Concept

Dr. Joy Kreeft Peyton, currently the vice president of the Center for Applied Linguistics, served as a consultant and as the Director of Evaluation of the ENFI Demonstration Project (Batson, 1993; Peyton, 1989). Dr. Peyton and Dr. Bertram C. Bruce of the University of Illinois conducted situated evaluations of the ENFI consortium project, in which researchers "examines the various realizations of an innovation in different settings" (Bruce & Rubin,

1993). A realization in this case is defined as a qualitatively different way a network based writing class is set up (Bruce, 1994). Typically, the concept of ENFI was implemented in networked classes in widely varying ways at different universities. It became necessary to look at these implementations in the context of their specific teaching situations in order to effectively and adequately evaluate them (Bruce & Peyton, 1992). For example, Dr. John Douglas Miller, an English professor at Gallaudet University, kept key features of the original ENFI concept, but "redefined the institutional setting in which ENFI occurred" by using online interactive script writing in a theatrical context for his Introduction to Drama class, instead of his freshman composition class (Bruce & Peyton, 1992, pp. 18-21; Bruce & Peyton, 1999). He and his students took on various characters from classical plays and acted out their roles online. Not only were situated evaluations conducted at Gallaudet University and elsewhere within the ENFI Consortium, but also research studies were conducted.

# ENFI Project Research Studies at Gallaudet University

Three research studies were completed on the effects of the ENFI Project on student scores on the English Placement Test at Gallaudet University, particularly on the English Language Sample, which is a writing subtest consisting of writing an opinion essay in response to a writing prompt. For the first study, Dr. Peyton (1986) found that undergraduate students in ENFI-based classes "did considerably better on the English Language Sample [...] than those in non-ENFI classes – they had a significantly higher pass rate and made impressive greater score gains." The second and third studies were able to reproduce similar results; some results were even statistically significant (O'Connor, Peyton, & Solis, 1989, p. 16-17). The groups of students that benefitted the most were also identified. These groups consisted of students who were new to Gallaudet University or scored relatively high (50 or better) on the English Language Sample, but still did not qualify for college-level English classes (O'Connor, Peyton, & Solis, 1989; O'Conner, Peyton, & Traxler, 1990, p. 14). The third study mentioned that research on the effects of ENFI-based classes on students with beginning or low intermediate proficiency in reading and writing skills needed to be done (O'Conner, Peyton, & Traxler, 1990, p. 17).

## Methodology

Two interviews were conducted for purposes of this paper. The first interview was conducted face to face with Mr. Timothy Anderson on November 21, 2011. Mr. Timothy Anderson is one of the senior English instructors at the English Language Institute at Gallaudet University. Mr. Anderson formerly worked at Gallaudet University as an English instructor for undergraduate students from 2005 to 2010. He worked at the English Language Institute from 1998 to 2005 and came back to the English Language Institute again in 2010. The second interview on November 25, 2011 was also conducted face to face with Mr. Alexander Quaynor, an English instructor with the most seniority at the English Language Institute. He has worked at the English Language Institute since 1988. He was also the Senior Lead Instructor and the Coordinator of the English Language Institute from August, 1998 to September, 2010.

## Participation of the English Language Institute in the ENFI Project

In the Spring and Fall 1989 semesters, the English Language Institute (ELI), then located on the northwest campus of Gallaudet University in Silver Spring, MD, participated in the ENFI Project, according to Mr. Quaynor and Mr. Anderson. Mr. Quaynor taught the beginning level one class. Another instructor (see 4 in the Notes below) taught the low intermediate level two class. For the ENFI lab, the two classes were combined. The other teacher led the lab while Mr. Quaynor followed her lead. He responded to her online inquiries if the students did not type a response within a reasonable amount of time. Dialogue One below is a simplification of what actually occurred during the lab, but serves to illustrate what usually happened online (Quaynor, 2011).

## Dialogue One:

- 1. The teacher said, "How are you?"
- 2. There were no responses.
- 3. Mr. Quaynor said, "I'm fine. How are you?"
- 4. Some beginning students noticed his typing and imitated him in their responses to the teacher.
- 5. The teacher said in response, "I am fine, too."
- 6. The students noticed the additional word appended to the end of the sentence.
- 7. Other students scrambled to use this word in their responses as well.

This example shows how the text can be extended to include new vocabulary words for the students to learn.

## **Grammar Explanations**

Sometimes, the teacher explained a grammar rule when a student asked with gestures or in American Sign Language for an explanation of what he or she saw on the computer screen. Dialogue Two below again is a simplification designed to show what kind of online interactions were typed and displayed (Quaynor, 2011).

## Dialogue Two:

- 1. The teacher said, "How was your weekend?"
- 2. A particular student responded, "not fine."
- 3. The instructor noticed that that he does not know how to respond appropriately. To model an appropriate response, the teacher said, "I had a good weekend."
- 4. On his own initiative, the student changed the verb in the sentence he saw from the teacher and said, "I don't have a good weekend."
- 5. In order to model the correct past tense verb for the student, the teacher said, "Do you mean to say that you did not have a good weekend?"
- 6. The student asked the teacher why she used the word "did" and not "do."
- 7. The instructor explained that the weekend consists of Friday, Saturday, and Sunday and these days have already passed.

## 8. The student indicated his understanding and thanked the teacher.

In this case, the student learned from the teacher's explanation of a grammar rule within the context of the conversation. The instructor did not normally make a habit out of explaining grammar rules. If the situation called for it, for example, a direct request from one of the students for a specific grammar explanation, then the teacher went ahead and explained it via the online medium.

According to Mr. Anderson, ELI students produced authentic dialogues during their efforts to communicate online, similar to dialogue journals but in an instantaneous manner (Anderson, 2011). The instructor of the ENFI lab introduced various academic words into the discussion as a way to remove English barriers for the ELI students. Mr. Anderson agrees that increasing peer interaction in a written form helped bridge the gap between Basic Interactive Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP) for the ELI students (Cummins, 1984; Batson, 1993; Anderson, 2011). The instructor usually did not correct any usage or grammatical mistakes that occurred during the online discussion. Instead, the teacher modelled the correct English use and grammatical forms in the hope that the ELI students would naturally catch on. The ENFI lab provided the means to scaffold online the writing skills of students by the instructor and other more skilled students as well. Scaffolding consisted of extending and building upon the text that the students contributed to the online discussion (Peyton, 1999, p. 19). It seems clear that ENFI concept as a teaching method can be categorized under the Communicative Language Teaching approach. The ENFI concept also incorporates some elements of the Natural Approach as envisioned by Krashen and Terrell, where Krashen's input hypothesis figures prominently in (Richards & Rodgers, 2001, pp. 181-183). The online discussions in the ENFI lab were also regulated in order to provide a positive experience for the ELI students when they communicated with each other and with the instructor. Rules were established against flaming other ELI students and using profanity during the online discussions. One observation noted was that ELI students did not use as much American Sign Language even though they were in the same computer lab. They were more focused on reading the online discussion and typing their contributions (Anderson, 2001).

## Discussion/Recommendations

EFNI research studies could be done at the English Language Institute at Gallaudet University for all five levels of classes ranging from emergent to advanced English as a Second Language. It is possible to revive a small-scale ENFI project in a fashion that implements certain interactional and second language acquisition principles in order to give deaf students opportunities to develop high levels of proficiency in written English.

First, as indicated in literature review in this paper, the lower levels of the English Language Institute already participated in the ENFI Project in 1989. Currently, level one is for students within an emergent to basic range of English proficiency and within an emergent to basic range of American Sign Language proficiency. Level one is a bilingual level where students learn English and American Sign Language at the same time. It may be possible that level one may derive more benefit from an ENFI lab if the online, interactive text is supplemented with images. Sending images via the chat windows is possible with today's

instant messaging programs. This type of modification to the former ENFI Project is worth investigating.

At the English Language Institute, level two and above have American Sign Language as their language of instruction. If new students are placed into classes at a higher level and do not know American Sign Language, they are placed into separate American Sign Language classes. In the upper levels, students are expected to understand their instructors when they express familiar concepts in American Sign Language. Students learn individual signs and their meanings during class as the instructor covers unfamiliar topics.

Second, it seems logical to test a new hypothesis stating that level two and level three of the English Language Institute would benefit from an ENFI lab. Level two is for students within a basic to low intermediate range of English proficiency. Level three is for students within a low intermediate to intermediate range of English proficiency. The results created from such a study would be informative because there is no data either within the literature review or in the interviews conducted for this paper that indicates that students with low intermediate English proficiency would benefit from an ENFI lab or have even experienced an ENFI lab as part of their intensive English training.

Third, the English Language Institute should do an ENFI research study similar to the three studies that Dr. Joy Kreeft Peyton and her colleagues did at Gallaudet University. The goal would be to find out if similar statistically significant results can be replicated for level four and level five. Level four is for students within an intermediate to high intermediate range of English proficiency. Level five is for students within a high intermediate to advanced range of English proficiency. Level four and level five of the English Language Institute are similar to English non-credit classes currently offered at Gallaudet University. These classes are listed below.

- 1. ENG 50 English Language Study,
- 2. ENG 60 Intensive English Language Study I,
- 3. ENG 65 Intensive English Language Study II,
- 4. ENG 70 English Language Study: Reading and Writing Skills, and
- 5. ENG 80 English Language Study: Writing Emphasis

These classes are for students who need to improve their English skills in order to pass the Degrees of Reading Power (DRP) test and the Gallaudet Writing Exam (GWE). Students are required to pass the DRP and the GWE tests in order to take credit-bearing English classes at Gallaudet University.

In conclusion, it would be to the advantage of the English Language Institute at Gallaudet University to follow the recommendations set forth in this paper. A contemporary realization of the ENFI Project is a real possibility worth pursuing.

#### Notes:

- 1. Diane Langston was a consultant to the ENFI Project (Peyton, 1989).
- 2. Diane Thompson was a composition and literature teacher at Northern Virginia Community College who participated in the ENFI Consortium project.
- 3. Nancy Creighton, a former tutor and network manager of the ENFI Project, indicates on her website that ENFI "stands for both English Natural Form Instruction and Electronic Networks for Interaction."
- 4. Elizabeth Nowell gave a presentation on the ENFI Project at the 1991 TESOL convention. According to Mr. Timothy Anderson, she was the instructor for level two class at the English Language Institute at Gallaudet University in 1989.
- 5. Rebecca Rose Orton, author of this paper, worked at the English Language Institute at Gallaudet University in 2001, 2004-2005, and 2008-2011 in various roles.

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