# Hamline University DigitalCommons@Hamline

School of Education Student Capstone Theses and Dissertations

School of Education

Fall 12-13-2015

# Teacher and Student Perceptions of DynEd Multimedia Courseware: An Evaluation of CALL in an American Technical College

Gail Katherine Ellsworth *Hamline University*, gellsworth01@hamline.edu

Follow this and additional works at: https://digitalcommons.hamline.edu/hse\_all Part of the <u>Education Commons</u>

## **Recommended** Citation

Ellsworth, Gail Katherine, "Teacher and Student Perceptions of DynEd Multimedia Courseware: An Evaluation of CALL in an American Technical College" (2015). *School of Education Student Capstone Theses and Dissertations*. 270. https://digitalcommons.hamline.edu/hse\_all/270

This Thesis is brought to you for free and open access by the School of Education at DigitalCommons@Hamline. It has been accepted for inclusion in School of Education Student Capstone Theses and Dissertations by an authorized administrator of DigitalCommons@Hamline. For more information, please contact digitalcommons@hamline.edu, lterveer01@hamline.edu.

# TEACHER AND STUDENT PERCEPTIONS OF DYNED MULTIMEDIA COURSEWARE: AN EVALUATION OF CALL IN AN AMERICAN TECHNICAL COLLEGE

by

Gail Ellsworth

A capstone submitted in partial fulfillment of the requirements for the degree of Master of Arts in English as a Second Language.

Hamline University

Saint Paul, Minnesota

December 2015

Anne DeMuth, Primary Advisor Tammy Ginster, Secondary Advisor Gail Essex, Peer Reader

# ACKNOWLEDGMENTS

I would like to express my gratitude to Anne DeMuth, Tammy Ginster, and Gail Essex for their advice and support during this capstone project. I also thank my colleagues and students for their participation in the survey research and the focus group interviews, which were the highpoint of the project. Finally, I thank my family and friends for their encouragement during my four-year journey.

# TABLE OF CONTENTS

CHAPTER ONE: INTRODUCTION	9
Challenges Faced by the Researcher	9
Challenges Faced by the Students	11
Evidence of Student Engagement	13
Biases of the Researcher	14
Guiding Question	14
Summary	15
Chapter Overviews	16
CHAPTER TWO: LITERATURE REVIEW	17
Overview of Multimedia CALL	
The DynEd Multimedia Courseware	19
The Blended Learning Approach	20
DynEd EFL Studies	21
Challenges of Implementing DynEd	22
The Teacher as a Facilitator of CALL	23
The Need for Learner Training in CALL	
Training Learners to Use DynEd	27
Evaluation of CALL Software	

Criteria for CALL Task Appropriateness	31
Research Gap	34
Research Questions	35
Summary	36
CHAPTER THREE: METHODOLOGY	37
Chapter Overview	37
Mixed Methods Research Paradigm	38
Data Collection	40
Participants	40
Setting	44
Data Collection Technique 1: Questionnaires	45
Data Collection Technique 2: Focus Group Interviews	48
Data Collection Technique 3: The DynEd Records Manager	50
Procedure	51
Pilot Study	51
Materials	52
Data Analysis	55
Verification of Data	57
Ethics	58
Summary	59
CHAPTER FOUR: RESULTS	60
Practicality	61
Teachers' Perceptions of DynEd's Practicality	61

Students' Perceptions of DynEd's Practicality74
Language Learning Potential
Teachers' Perceptions of DynEd's Language Learning Potential76
Students' Perceptions of DynEd's Language Learning Potential81
Learner Fit
Teachers' Perceptions of DynEd's Learner Fit
Students' Perceptions of DynEd's Learner Fit
Meaning Focus
Teachers' Perceptions of DynEd's Meaning Focus
Students' Perceptions of DynEd's Meaning Focus
Authenticity
Teachers' Perceptions of DynEd's Authenticity
Students' Perceptions of DynEd's Authenticity92
Impact
Teachers' Perceptions of DynEd's Impact
Students' Perceptions of DynEd's Impact95
Summary
CHAPTER FIVE: CONCLUSION
Major Findings
Research Question 1
Research Question 2100
Research Question 3102
Limitations

Implications	107
Recommendations for Teacher Training 1	107
Recommendations for Learner Training 1	109
Further Research	110
Conclusion	111
LIST OF TABLES	7
TABLE OF FIGURES	8
APPENDICES	113
Appendix A: Teachers' Survey About DynEd 1	113
Appendix B: Students' Survey About DynEd	123
Appendix C: Teachers' Focus Group Questions About DynEd	130
Appendix D: Students' Focus Group Questions About DynEd	132
Appendix E: Students' Responses About DynEd	133
REFERENCES	134

# LIST OF TABLES

Table 1- Criteria for CALL Task Appropriateness.	32
Table 2- Demographics for Teachers and Educational Assistants	41
Table 3- Demographics for Students	43

# TABLE OF FIGURES

Figure 1 Sufficient Resources to Support DynEd	62
Figure 2 DynEd Training Resources	64
Figure 3 Teachers' Help Needed	66
Figure 4 Screen Shot of the DynEd Records Manager	68
Figure 5 Screen Shot of the DynEd Records Manager	71
Figure 6 Teachers' Help Needed	75
Figure 7 DynEd's Content and Exercises	77
Figure 8 Screen Shot of the DynEd Records Manager	79
Figure 9 Students' Growth in the English Language Skills	80
Figure 10 DynEd's Content and Exercises	81
Figure 11 Students' Growth in the English Language Skills	83
Figure 12 Appropriate Student Placement in DynEd	84
Figure 13 Good Learner Fit	85
Figure 14 Best Place to Learn English	88
Figure 15 DynEd's Level of Difficulty	89
Figure 16 Students' Usage of Learning Strategies	93
Figure 17 Positive Impact of DynEd	94
Figure 18 Students' Usage of Learning Strategies	95
Figure 19 Positive Impact of DynEd	

# CHAPTER ONE: INTRODUCTION

This case study examines teacher and student perceptions of DynEd Multimedia Courseware (DynEd), a computer-assisted language learning (CALL) software program. In 2013, teachers and students at a technical college located in an urban area in the upper Midwest transitioned from using a textbook-based program to using DynEd as the primary mode of instruction in adult English as a second language (ESL) workshops. Switching to a CALL program created challenges for both teachers and students. As workshop teachers, we needed to redefine our roles as we implemented a new type of language learning technology. A major challenge for our students was shifting from the linear structure of a textbook to the recursive learning system used in DynEd. For some teachers and students, using technology was a new challenge as well. The initial adjustment was not easy, and DynEd received mixed reviews from teachers and students alike. We are now in our third year of using DynEd, and the administrators in the School of Pre-college will need to decide whether to continue funding the program. I propose that all stakeholders— administrators, teachers, and students—be part of this discussion.

# Challenges Faced by the Researcher

After eighteen years of teaching adult ESL, why did I suddenly feel apprehensive when I walked into the ESL workshop? For eighteen years my students and I had worked "side by side" in an English language-learning program by that very name. I felt confident about my ability to guide students through the four-book *Side by Side* series, which integrates conversation practice, reading, writing, and listening (Molinsky & Bliss, 2001). I knew the content of the books forward and backward, including which grammar structures were the most challenging for my students. I was able to listen for specific errors when the students practiced orally. At a glance, I could see which questions the students missed on the chapter tests, and I could easily assess their progress. Listening to students share their *Side by Side* journal entries added a personal element to our program and provided insight into the students' struggles and achievements. Each time a student completed one of the books, we celebrated. The goal of most students was to complete *Side Book 4* before they left our ESL program, and many of them succeeded. From my perspective, the program was successful, and my role as a workshop instructor was validated.

What changed? In 2013 we bade farewell to Stanley and our other *Side by Side* friends and welcomed Max, Kathy, and Pierre from New Dynamic English, one of the core programs in DynEd (DynEd International, 2014). Books and CDs were replaced with multimedia software and teachers became facilitators of the software rather than instructors. My role in the workshop changed and my confidence waned. I am a "digital immigrant," a term coined by Prensky (2001) to identify those of us who were not born into a digital world, and learning to use technology has been a challenge for me. However, it was not only the challenge of using technology that affected my self-esteem; it was my new role as a CALL facilitator. I was not really sure what my new role entailed, which was also the experience of other teachers who facilitated DynEd, as I will detail in my literature review.

What I did know was that I was no longer an expert on the content of the program because the software was less transparent than the *Side by Side* textbooks. While teachers can easily peruse the content of a textbook, they cannot as easily access the content of software. Students were no longer asking me for help on challenging grammar points because the software did not focus on explicit grammar instruction. I no longer corrected the students' Mastery Tests because the software program had taken over this task. Moreover, with this program I was not able to see the actual test questions or the students' errors, so I could not help with error correction. Initially, attending to technical issues with headsets and microphones and teaching students how to navigate through DynEd took up most of the class. This left little time for face-to-face communicative practice. It seemed that the tasks I did well in the old workshop setting were no longer valid. In short, I felt like a technician, not a teacher, and I missed the "side by side" interaction with my students.

#### Challenges Faced by the Students

Although most of our students were excited about using a CALL program, the initial transition from a textbook to a software program was challenging for them as well. Many of our students had no previous experience with computers, and the initial learning curve for them was steep. Even students with basic computer skills needed training to use the features of the software correctly. To those in the field of CALL, this is probably not surprising. Hubbard (2004) warns that while there are numerous computer applications to support language learning, students may not possess the skills and strategies needed to use these applications effectively.

This inexperience with technology or with the DynEd tasks themselves may have affected our students' initial placement in DynEd. Student placement in the courseware is determined by DynEd's General Placement Test, a computer-adaptive test that assesses the students' vocabulary, grammar, listening comprehension, sentence construction, and sentence ordering skills. For some of our high intermediate and advanced students, the results of DynEd's General Placement Test did not seem consistent with the results of the TABE CLAS-E Speaking Test (Test of Adult Basic Education, n.d.) that we had used for placement in our ESL program. The DynEd test placed many of our upper level students in the beginning modules of New Dynamic English, the same modules in which it had placed most of our beginning and low intermediate students. Some of our upper level students felt that the tasks in the modules were too easy and the content was boring. Consequently, they were not motivated to use DynEd.

Another challenge for our students was learning how to use the features of the courseware. One important duty of CALL professionals is teaching learners the value and use of online help options (Chapelle, 2005). This was evident when our students began using New Dynamic English. To use DynEd effectively, students need to use the repeat, voice record, and playback options to compare their voices to those of the models. DynEd provides short videos that explain these options, but we found that the videos produced in English were difficult for our multilingual group to understand. Because the online modules do not provide written instructions or verbal prompts directing the students to use these options, our students needed constant reminders to use the "repeat, record, listen, and repeat" sequence during their practice.

Making use of the interactional options in DynEd was not the only challenge for our students. Navigating through the recursive design of DynEd is quite different than progressing through the linear structure of a textbook. Unlike the typical textbook sequence where students complete one chapter before moving to the next, DynEd's recursive syllabus is designed so that students work for short periods of time in multiple lessons and modules. To guide and motivate students, the DynEd Records Manager enables teachers and students to track student progress, assess their performance, and view unfinished tasks in the modules. My colleagues and I observed that many of our students were having difficulty using the Records Manager; consequently, they were not using the program effectively. This slowed down their progress, which led to complaints that it was taking them too long to complete a module. Students often commented that reviewing the same lesson multiple times was tedious. Eventually, some students complained that they were bored and cited DynEd as the reason that they stopped attending the workshop. Liou (2002) has raised the question of how long multimedia can engage learners once the novelty has worn off. For some of our students, the novelty lasted less than a month.

#### Evidence of Student Engagement

In contrast, many of our students remained enthusiastic about DynEd for the entire semester. Many of them downloaded DynEd on their home computers, laptops, tablets, and smart phones so that they could use the program outside of class. They registered for subsequent workshops in order to continue using the DynEd courseware in the workshop and at home. The DynEd Records Manager confirmed that some students practiced upwards of 100 hours, each making hundreds or even thousands of voice recordings over the course of one semester. Clearly these students found DynEd engaging. Nevertheless, I could not ignore the many students who were not learning or progressing through the new courseware.

# Biases of the Researcher

When DynEd was first implemented in our workshops in 2013, it received mixed reviews from teachers and students. This situation still exists. As a teacher-researcher, my goal is to gain insight into the perceptions of teachers who are facilitating DynEd and the students who are using DynEd in workshops at our institution. As a teacher-researcher, I bring certain biases to this study, including my partiality toward *Side by Side*, which was replaced by DynEd. Furthermore, I support the use of explicit grammar instruction with adult language learners, which is in direct contrast with the learning theory behind DynEd. As I conducted the focus group discussion with my colleagues, I sometimes found it difficult to maintain a neutral role. I am also aware that my biases could affect my interpretation of the data.

In order to increase the objectivity of this study, I asked two colleagues who facilitate DynEd in their respective workshops to be part of my research team. These colleagues reviewed the questionnaires that I developed for my survey research. My peer reader also acted as a second observer when she assisted me during the focus group interviews with students and teachers. Finally, both colleagues reviewed the data, the results, and my conclusions to further triangulate the data.

## **Guiding Question**

The purpose of this case study is to examine the teachers' and students' perceptions of the DynEd Multimedia Courseware being used in our adult ESL

workshops in order to inform decisions about its continued use. The need for this type of study is supported by the view that CALL technology needs to be evaluated not only by second language acquisition (SLA) scholars but also by the teachers who use the technology in their classrooms (Chapelle, 2001; Hegelheimer & Tower, 2004; Hubbard, 2008; Liou, 2002; Oliver, 2000; Sagarra & Zapata, 2008). Because the learners are primary stakeholders, they should also play an integral role in the evaluation process (Jamieson, Chapelle, & Preiss, 2005).

Chapelle (2001) argues that evaluations of CALL software need to include context-specific arguments based on current theory and research in instructed SLA. CALL evaluations should look for evidence of effective language learning and learner engagement. In any evaluation, the concept of learner fit is essential (Jamieson et al., 2005; Hubbard, 1988). To address these issues, Jamieson et al. (2005) propose the following question for research: "How appropriate are CALL materials for a group of learners in a particular context?" (p. 95). Following their lead, this case study about DynEd focused on the following question: How appropriate is the DynEd Multimedia Courseware for a group of adult English language learners in our American technical college setting? The results of this study will be shared with the ESL workshop facilitators, Instructional Chair, and Assistant Dean at our campus in order to inform our decision about extending the DynEd contract.

## Summary

After eighteen years as an ESL instructor in a workshop using a textbook-based curriculum, I found myself in a new situation. Computers and CALL programs were becoming more prevalent in language-learning classrooms, and our workshop had been equipped to use them. Although I was not opposed to facilitating a CALL program, I was apprehensive about my changing role in the workshop. More importantly, I was concerned about meeting the needs and expectations of my students. Many of my colleagues shared my concerns. Determining if DynEd is an appropriate program for our students became the impetus for conducting my study.

# **Chapter Overviews**

In Chapter One I introduced some of the challenges faced by teachers and students when we initially implemented DynEd in our ESL workshops. I discussed my background including my own reservations about facilitating a CALL program. I established the purpose and need for this study, which is to inform our decision about extending our DynEd contract. In Chapter Two I present an overview of multimedia CALL and of the DynEd Multimedia Courseware. I review literature regarding the role of the teacher as a facilitator in CALL and the need for learner training in CALL. I present Chapelle's (2001) Criteria for CALL Task Appropriateness, which served as the framework for my questionnaire research. In Chapter Three I describe the research design and methodology that guides this study, and in Chapter Four I present the results. In Chapter Five I reflect on the data collected, and I discuss the limitations of this study and its implications for classroom practice and further research.

#### CHAPTER TWO: LITERATURE REVIEW

The DynEd Multimedia Courseware adds a new component to our ESL program, so its place in our curriculum warrants serious consideration. As the administrators in our institution consider whether to extend the DynEd contract, the benefits and shortcomings of the courseware and its appropriateness for our students should be discussed. Since teachers and students are among the primary stakeholders, it is important for both groups to participate in this discussion. To that end, the purpose of this study is to examine teacher and student perceptions of the DynEd Multimedia Courseware in order to answer my primary research question: How appropriate is the DynEd Multimedia Courseware for a group of adult English language learners in our American technical college setting?

As CALL becomes more prevalent in language learning classrooms, the benefits of using the computer to support language learning have been documented. Through a review of literature, I present an overview of multimedia CALL and of the DynEd Multimedia Courseware including the rationale for using DynEd in a blended learning environment. I then review studies that discuss the benefits and the challenges of implementing DynEd with adult learners. Several of these DynEd studies report the need for both teacher and student training; therefore, I review literature concerning the teacher as a facilitator in CALL and the need for learner training in CALL. To provide a framework for my data collection, I conclude by presenting criteria that other researchers have used to evaluate CALL software.

#### Overview of Multimedia CALL

Computer assisted language learning, or CALL, became a distinct field in the early 1980s following the growing popularity of the personal computer. At that time many researchers and practitioners in the field of applied linguistics turned their attention to the potential benefits of using technology to assist language learning. Hubbard (2009) describes CALL as complex and dynamic, adding a new dimension to "the already multifaceted domain of second language learning" (p. 1).

With the development of the multimedia CD-ROM in the 1980s-1990s, a variety of media including text, sound, graphics, animation, and video were incorporated into CALL. Multimedia and other forms of interactive CALL generally support language learning by providing focused input and interaction, adapting to the learner's level, providing evaluation of the learner's responses, and offering assessments that provide feedback to the learner (Chapelle, 2008; Reinders & Hubbard, 2013; Warschauer & Healy, 1998). Multimedia allows learners to manipulate language data using their own organizing schemes; consequently, learners become active participants rather than passive recipients in the learning process (Warschauer & Healey, 1998).

Research exploring the benefits of multimedia in language learning has found that multimedia supports vocabulary acquisition (Al-Seghayer, 2001; Jones & Plass, 2002; Nikolova, 2002), promotes listening skills (Brett, 1997; Jones & Plass, 2002), advances reading skills (Gulcan, 2003; Hagood, 2003), and increases target language pronunciation (Gambari, Kutigi, & Fagbemi, 2014; Stenson, Downing, Smith, & Smith, 1992). Furthermore, the use of multimedia can accommodate the different learning styles and modal preferences of the diverse learners in a classroom (Sankey, Birch, & Gardiner, 2010; Warschauer & Healey, 1998).

# The DynEd Multimedia Courseware

The DynEd Multimedia Courseware was designed to increase the learners' fluency in English as efficiently as possible (DynEd International, Inc., 2014). The term "courseware" is used to describe the subset of CALL software that is used as curricula-based material (O'Connor & Gatton, 2004). Curricula-based multimedia courseware, including DynEd, generally provides the learner with the following features: (1) a language learning curriculum, (2) realistic, native speaker models of the language, (3) a needs assessment, (4) pathways to the next step, and (5) records of what the learner has done (Warschauer & Healey, 1998).

The DynEd Multimedia Courseware includes multiple courses designed for a range of ages and proficiency levels. The students' level of performance on DynEd's General Placement Test determines which courses are available to them. These courses include the core programs First English, New Dynamic English, and English for Success; and several supplementary programs including Reading for Success, The Lost Secret, Clear Speech Works, English by the Numbers, Dynamic Business English, Functioning in Business, and Advanced Listening (DynEd International, Inc., 2014).

Although the terms "multimedia" and "multimodal" are often used interchangeably, multimodal refers more specifically to the multiple modes that can be used to make meaning, such as words, sounds, still and moving images, animation, and color (Lauer, 2009). Knowles (2008), the founder of DynEd International, Inc., describes multimodal input as "the coordinated, synchronized activation of visual, auditory, conceptual, and other systems within the brain" (p. 3), a process that multimedia exercises can provide but written textbooks cannot. In other words, multimedia computers and software create opportunities for learners to engage in multimodal learning. Recursive Hierarchical Recognition (RHR), the learning theory behind DynEd, predicts that the use of multiple modes facilitates comprehension, long-term learning, and the automaticity of language (Knowles, 2008).

## The Blended Learning Approach

One of CALL's advantages over the traditional classroom is the increased number of opportunities for students to interact with the material (Knowles, 2008; O'Connor & Gatton, 2004; Reinders & Hubbard, 2013). DynEd provides learners with unlimited hours of online practice in and outside of the classroom. While these hours of online practice may help the user develop automaticity (Knowles, 2008), they cannot replace the dynamics of face-to-face interaction. Recognizing this, Knowles emphasizes that DynEd should be used in a blended learning (BL) environment where the courseware provides the input and practice needed to optimize acquisition, and the classroom provides the opportunity to use the language models in a social context. This type of BL model is in accord with Neumeier's (2005) model of integration, which proposes that CALL and face-to-face activities be sequenced in a purposeful order. While the CALL mode is limited to the design of the computer program, the face-to-face mode offers teachers the flexibility of using a variety of methods to meet the needs of their learners (Neumeier, 2005). The face-to-face instruction may include communicative practice or a written review of the content practiced in the software. The request for printed materials was reported in studies of BL foreign language courses (Murday, Ushida, & Chenoweth,

2008; Stracke, 2007), indicating that some adult learners have a preference for using printed text to review online material. DynEd provides printed worksheets to fulfill this role.

Making the connection between the CALL mode and the face-to-face mode is important. Warschauer (1996) found that student motivation is increased when students perceive that the CALL mode is an integral part of the course. In their study at a Japanese university, Brown, Campbell, and Weatherford (2008) attributed an increase in student satisfaction with the CALL program, including New Dynamic English, to better integration between face-to-face and CALL classes.

#### DynEd EFL Studies

Although the DynEd International, Inc. website (2014) briefly describes some case studies where DynEd has been used successfully in American schools, I have been unable to find any published studies set in the context of an American college. DynEd was originally developed as a tool for teaching English as a foreign language (EFL), so EFL studies appear in the literature. Several of these studies have found New Dynamic English, one of DynEd's core courses, to be an effective program for improving the English language skills of adult students. One study reported less positive results when DynEd was used for self-study rather than as part of a BL course.

Bingham and Larson (2006) found that New Dynamic English was a useful program for improving the overall English abilities of Japanese university students. In a survey by Brown, et al. (2008), Japanese university students reported a significant improvement in their listening skills and a lesser improvement in their pronunciation skills as a result of using New Dynamic English. During the sequence of four intensive DynEd courses at a Japanese university, O'Connor and Gatton (2004) found increased success in their students' use of DynEd's speech recognition feature, suggesting an improvement in the ability and confidence levels of the students. Quantitative data in Chartrand's (2008) study of Japanese high school students using New Dynamic English showed only a slight improvement in grammar and vocabulary; however, the majority of students reported that learning with a computer was easier and more fun than learning in a traditional classroom.

In Kim, Cho, and Lee's (2014) study of Korean university students using New Dynamic English for self-directed speaking practice, only 17 out of 43 learners (39.54%) moved up to a higher level of English speaking ability. Survey data indicated that learners had positive perceptions of the program but a low participation level. The findings in this study are consistent with recent collections of research that have found high attrition levels among learners using technology in self-study contexts (Reinders & Hubbard, 2013).

#### Challenges of Implementing DynEd

The challenges of implementing DynEd and the need for teacher support have been documented in a published review of New Dynamic English (Rowland, 2001) and in various studies (Baş, 2010; Brown et al., 2008; O'Connor & Gatton, 2004; Şengel, Öncü, & Baltaci Goktalay, 2011) where the courseware has been used to teach EFL. In his review of New Dynamic English, Rowland (2001) reported that the program's complexity and depth not only make it a powerful teaching tool but also make it a challenge for teachers to manage effectively. In particular, the complexity of the Records Manager makes it difficult to manage, especially for teachers lacking confidence with technology (O'Connor & Gatton, 2004; Rowland, 2001; Şengel et al., 2011).

Several researchers emphasize the need for teacher training and support when implementing a complex program such as DynEd. Brown et al. (2008) propose that a CALL coordinator or committee be set up to test the software, develop training materials, and develop strategies to integrate the CALL program into the curriculum. Baş (2010) recommends that seminars and in-service workshops be organized to train teachers to use CALL and DynEd methods effectively. Rowland (2001) suggests that selected teachers work extensively with DynEd and then lead training sessions for students and for other teachers. O'Connor and Gatton (2004) recommend that at least one teacher take responsibility for the program and serve as the liaison with technical staff and with DynEd support personnel. Each of these recommendations recognizes that teachers need to be adequately trained to implement DynEd so that they, in turn, can train their students to use the software successfully and independently.

## The Teacher as a Facilitator of CALL

The role of the teacher as a facilitator in a CALL environment is multifaceted and requires new pedagogical, technical, and management skills (Bañados, 2006; Chapelle, 2008; Hubbard, 2004; Stepp-Greany, 2002). Using technology to enhance language learning places new demands on the teacher and on teacher education programs (Chapelle, 2008). In addition to traditional language learning methodology, teachers need training that is focused on technology for language learning (Chapelle, 2008; Hubbard, 2008; Jones, 2001; Warschauer & Healey, 1998). Hubbard (2008) argues that the future of CALL depends largely on the future of language teacher education because future teachers will eventually determine which CALL applications, if any, they use to support their teaching. Although the field of CALL has been around since the 1980s, studies made 25 years later indicated that language teachers were receiving little, if any, formal training in CALL. In Kessler's 2006 survey of 240 graduates of ESL/EFL master's programs in the US and Canada, over 75% of the graduates felt that their programs had not prepared them to teach with technology (as cited in Hubbard, 2008).

Teachers need to understand the capabilities and limitations of technology if they are to successfully incorporate it into the curriculum (Chapelle, 2008). To prepare teachers to effectively integrate technology, Mishra and Koehler (2006) proposed the TPCK (later changed to TPACK) framework, which emphasizes the interplay of technological knowledge (TK), pedagogical knowledge (PK), and content knowledge (CK). Tai (2015) reported that teachers using this framework in a hands-on CALL teacher education workshop learned to successfully integrate technology into their teaching. This workshop followed Chapelle's recommendation to integrate CALL through first-hand experience in an authentic teaching context (as cited in Tai, 2015). Teachers in the study learned the main premise of CALL: learning tasks need to be developed around sound pedagogical decisions that use technology to deliver meaningful language learning content (Chapelle, 2008; Hubbard, 2008; Tai, 2015).

Proponents of CALL emphasize that although the computer is a valuable resource, it does not replace the human teacher (Jones, 2001). Warschauer and Healy (1998) contend that the CALL classroom requires even more teacher flexibility than the traditional classroom because of the variety of CALL materials available and the high degree of individualization in the CALL environment. Likewise, Jones (2001) maintains that the teacher's role in a CALL classroom is "far from minimal" (p. 362). The teacher's tasks include relating the units of the CALL program to the syllabus, identifying each learner's special needs, identifying the right level for the learner, helping the learner select the appropriate tasks, and monitoring learner progress (Jones, 2001). Added to these tasks is the responsibility of providing learner training.

The Need for Learner Training in CALL

Although CALL software programs are designed to help learners move toward learner autonomy, most learners need training and guidance to help them reach this goal (Chapelle, 2008; Hubbard, 2004; Reinders & Hubbard, 2013). Hubbard (2013) defines learner training as a process:

For our purposes, it is enough to think of learner training as a process aimed at the construction of a knowledge and skill base that enables language learners to use technology more efficiently and effectively in support of language learning objectives than they would in the absence of such training. (p. 164)

To assist with this process, Hubbard (2004) proposes five learner training principles for teachers: (1) experience CALL yourself, (2) give learners teacher training, (3) use a cyclic approach, (4) use collaborative debriefings, and (5) teach general exploitation strategies.

Principle one, experience CALL yourself, enables teachers to see CALL materials and activities from the learners' perspective. The second principle, give learners teacher training, proposes that learners need to understand basic language learning principles so that they can connect the CALL activity to a learning objective. The third principle, use a cyclic approach, recommends that learners be presented with one new skill at a time to prevent overload. Learners should be given time to explore the new program so that they can better understand and apply the new skill. New skills and strategies should then be repeated in a spiral cycle to aid retention. Principle four, use collaborative debriefings, encourages students to reflect on and share their language learning strategies so that they can learn from each other. Principle five, teach general exploitation strategies, encourages teachers to train learners to use CALL materials in new ways, including making the materials easier or more challenging to use.

Centered on Hubbard's (2004) model, the Institute for Intensive English at Union County College in New Jersey engaged in a five-year project to develop effective learner training strategies for using instructional software for listening, grammar, and vocabulary. During the course of the project, teachers came to realize the importance of identifying specific language learning goals before training students (Kolaitis, Mahoney, Pomann. & Hubbard, 2006). The teachers' role was no longer to explain course content; their new role was to help students develop effective CALL strategies. As part of the training process, their students used reflection journals to identify their learning goals, created strategies to meet their goals, and shared their reflections in small groups and class discussions. After implementing this learner-training regimen, Kolaitis et al. (2006) observed positive changes in the student use of computers and software including more learner engagement.

An important part of learner training is teaching learners the value and use of online help options (Cárdenas-Claros & Gruba, 2009; Chapelle, 2005). Because CALL multimedia software plays a role in input, output, and interaction, Chapelle (2009) proposes the metaphor of the computer as a participant in L2 tasks. Results from research show that the learner's interaction with the software through the use of help options has positive effects on the learner's comprehension and production (Chapelle, 2009). During learner-computer interaction, CALL materials help the learner with comprehension of aural input by providing L1 and L2 glosses, images, and restatements. Receiving feedback from the computer during speaking or writing production tasks helps the learner notice gaps in his knowledge and provides the opportunity for error correction.

Similarly, Cárdenas-Claros and Gruba (2009) argue that help options assist learners by reducing the frustration of technology use, correcting misapprehensions, drawing attention to linguistic features, and reducing the demands of second language processing. In their systematic review of help options in CALL, they determined that despite these potential benefits, some learners tend to neglect or completely ignore help options. This situation was reported in several DynEd studies which follow.

#### Training Learners to Use DynEd

Brown et al.'s (2008) study of 362 low-level English learners in a Japanese university reported that the repeat, record, and playback options of New Dynamic English were not immediately intuitive, and their students required training and consistent support from teachers to use these options effectively. The importance of these options was demonstrated in Hegelheimer and Tower's (2004) study of 94 university students in the United Arab Emirates, which found a large variation in the learners' use of interactional options to support language learning in New Dynamic English. Their analyses indicated that use of the repeat and record buttons showed positive relationships with performance while use of the ABC button, which displays written text, showed a negative relationship. After comparing the performance of the 30 highest and 30 lowest performing students, they concluded that learner use of options was a more accurate predictor for successful performance than time spent using the program.

In addition to the repeat, record, and playback options, students in some studies needed continued training and support to use the speech recognition feature effectively. Rowland (2001) found that university students in the United Arab Emirates could successfully sequence the words in the speech recognition tasks, but they were unable to make clear recordings that were accepted by the speech recognition feature. Likewise, O'Connor and Gatton (2004) reported poor results for students using speech recognition in the first intensive 21 hour course implemented at a Japanese university. In courses two and three, the students' speech recognition attempts had started to improve, and by the fourth course students showed improved ability and confidence. These results support Bingham and Larson's (2006) conclusion that consistency and repetition are essential for success; therefore, a CALL program needs to be continued from one year to the next to provide consistency for the learners.

Some studies also found that students needed better strategies for navigating through DynEd. Rowland (2001) reported that students had difficulty navigating through the New Dynamic English program and completing some of the exercises. To address these issues, teachers began using suggestions from the DynEd Instructor's Guide to provide a more thorough introduction to the program. In Bingham and Larson's (2006) study of 150 Japanese students using New Dynamic English as the major program for a university English class, they observed that it takes time for students to learn how to use CALL effectively. Consequently, they propose that facilitators spend a substantial amount of time explaining the DynEd courseware to students, which they suggest will save time in the long run and result in higher learner achievement.

In addition to teaching effective strategies for CALL, facilitators need to address learner motivation. Not all students maintain a high level of engagement and motivation in a CALL environment. O'Connor and Gatton (2004) reported that one month into the DynEd program students avoided their coursework by surfing the Internet and chatting online during class time. Brown et al. (2008) found it challenging to maintain student interest in the CALL classroom, especially for those learners who had little interest in learning English. Both researchers reported an improvement in student performance after setting up learning goals that included the number of DynEd modules and Mastery Tests that needed to be completed for a passing grade (Brown et al., 2008; O'Connor & Gatton, 2004). To keep students focused, Brown et al. (2008) found that it was also important for teachers to maintain a physical presence by walking around the room and offering help and encouragement to students.

Bingham and Larson (2006) also recommend setting realistic goals for learners and promoting additional use of the software outside of the classroom. They set two main objectives for a twelve-week session: the completion of four modules in New Dynamic English and 36 hours of online study time. In their study they reported positive results: the average time using DynEd was 44 hours 12 minutes; the average of the Mastery Test scores was 85.16%; and the average of modules passed was 3.7 modules. In addition, 66.67% of their students reported that they felt they had done well in the class. The researchers suggest that the students' positive perception may be attributed to their working hard to achieve set goals. In summary, the literature on DynEd shows that adult students in several EFL settings have experienced positive gains in their overall English abilities as a result of using New Dynamic English. Several studies have documented the challenges of implementing DynEd for both teachers and learners. Numerous researchers in CALL argue for specific learner training that enables language learners to use programs such as DynEd more efficiently and effectively. Researchers in the field also argue for an evaluation of CALL to determine if specific software is appropriate for a given group of learners. A discussion of CALL evaluation follows.

#### Evaluation of CALL Software

Hubbard (2006) categorizes the three stages of software evaluation as selection, implementation, and assessment. Each stage presents its own set of challenges. During the selection stage, the evaluator tries to determine whether the CALL software is appropriate for a particular language learning setting. In this type of judgmental evaluation, the evaluator logically analyzes the CALL materials to determine their potential value (Hubbard, 2006; Jamieson, Chapelle, & Preiss, 2004). Evaluating computer software is more challenging than evaluating textbooks because software is less transparent (Hubbard, 2006). Teachers do not always have complete access or sufficient time to evaluate the content of a software program. This unfamiliarity with the software may lead to pedagogical challenges during the implementation stage.

During the implementation stage, the evaluator identifies how to use the software effectively in a given setting. One challenge of implementing CALL is that the teachers cannot easily assess the learning that is taking place while students are using technology. Chapelle (2008) asserts that the use of technology distances the teacher from the learning

process; consequently, the teacher does not have direct knowledge of the learners' strategies and working styles. This disconnect supports Hubbard's (2004) argument for extensive learner training including collaborative debriefings.

During the third stage, the evaluator assesses the software's degree of success and the possibilities for its continued use. During this retroactive or empirical evaluation, the evaluator analyzes quantitative or qualitative data elicited from an individual or from a group of people to determine the actual value or success of the materials (Hubbard, 2006; Jamieson et al., 2004). During this final assessment, the question of appropriateness is revisited.

## Criteria for CALL Task Appropriateness

Based on interactionist theory and current approaches in instructed SLA that focus on both meaning and form, Chapelle (2001) developed a set of criteria for evaluating CALL task appropriateness. These criteria are outlined in Table 1.

# Table 1

# Criteria for CALL Task Appropriateness

Language learning potential	The degree of opportunity present for beneficial focus on form.
Learner fit	The amount of opportunity for engagement with language under appropriate conditions given learner characteristics.
Meaning focus	The extent to which learners' attention is directed toward the meaning of the language.
Authenticity	The degree of correspondence between the learning activity and target language activities of interest to learners out of the classroom.
Positive impact	The positive effects of the CALL activity on those who participate in it.
Practicality	The adequacy of resources to support the use of the CALL activity.

Adapted from Chapelle (2001), p. 55.

Chapelle (2001) proposes that these criteria will help in the evaluation of CALL software and CALL task development by focusing on the materials and the ways in which learners interact with them. In their evaluation of the CALL program Longman English Online, Jamieson, Chapelle, and Preiss (2005) proposed questions to operationalize Chapelle's (2001) criteria in order to obtain opinions of the software from developers, teachers, and students. These criteria and the operationalized questions are discussed next.

Language learning potential. Chapelle (2001) evaluates the language learning potential of a CALL activity by the extent to which it provides sufficient opportunity for the learners to focus on form. Although all six criteria should be considered in an

evaluation of CALL tasks, Chapelle (2001) argues that language learning potential should be the primary focus. Theory and research on SLA suggest that learners need to notice and attend to linguistic form for acquisition to occur (Robinson, 1995; Schmidt, 1990; Sharwood Smith, 1993). Jamieson et al. (2004) propose that CALL materials increase language learning potential when they direct the learner's attention to form by making linguistic input salient, offering modifications, and providing input elaboration. An evaluation of CALL materials should consider the quantity and quality of the CALL exercises, evidence of student learning in grammar, vocabulary, and pronunciation, and student test scores (Jamieson et al., 2005).

Learner fit. To achieve learner fit, the teacher needs to choose appropriate CALL tasks that address the language learning objectives of the course while meeting the needs of the learners (Chapelle, 2001). Learner fit takes into account learner variables such as age, native language, proficiency, learner needs, learner interests, and preferred learning styles (Hubbard, 2006). CALL evaluators should consider whether the material is at the appropriate difficulty level for learners to benefit and if the material is appropriate for the characteristics of the learners (Jamieson et al., 2005).

<u>Meaning focus</u>. Instructed SLA advocates tasks in which language is used for a realistic purpose. During the accomplishment of a task, the leaners' attention is primarily focused on the meaning of the language. If communication breaks down, the focus may shift to linguistic form. An evaluation of CALL should consider whether the students understand and remember the content of the materials (Jamieson et al., 2005).

<u>Authenticity</u>. The criterion of authenticity refers to how the language used in the CALL task corresponds to the language that the learner encounters outside the classroom

(Chapelle, 2001). Since learners are usually more engaged in tasks that are relevant to their daily lives, evaluators should determine if the language in the CALL task is needed for outside of class (Jamieson et al., 2005).

<u>Positive impact</u>. The positive impact of CALL refers to positive growth in areas other than language learning potential (Chapelle, 2001). Positive impact may contribute to interest in the target culture and a willingness to communicate in the L2. CALL language tasks should help the learners develop learning strategies that they can use in the classroom and beyond. Evaluators should consider whether the use of the software has created a positive learning experience (Jamieson et al., 2005).

<u>Practicality</u>. The practicality of CALL is dependent on having sufficient hardware, sufficiently trained personnel, sufficient time, and sufficient money to support the use of the program (Chapelle, 2001). Evaluators must consider if the interface is easy to use without help, if the students will get frustrated, if students have sufficient time to use the program, and if the teachers have sufficient time to manage the program (Jamieson et al., 2005).

#### Research Gap

Chapelle (2001) argues that CALL evaluation is a context-specific argument that must indicate "in what ways a particular CALL task is appropriate for particular learners at a given time" (p. 53). Studies cited in this thesis have evaluated the benefits and challenges of implementing DynEd Multimedia Courseware in the context of EFL settings in Japan (Bingham & Larson, 2006; Brown et al., 2008; Chartrand, 2008; O'Connor and Gatton, 2004), Korea (Kim et al., 2014), Turkey (Baş, 2010; Şengel et al., 2011), and the United Arab Emirates (Hegelheimer & Tower, 2004; Rowland, 2001). To date, I have been unable to find any published DynEd studies set in the context of an American college. Even if such studies exist, they may not reflect the perceptions of the particular teachers and learners at our institution. Therefore, the purpose of this case study is to examine teacher and student perceptions of DynEd to determine if the courseware is appropriate for the adult learners in the context of the ESL workshops in our technical college. Because the teacher plays an essential role in the CALL environment, it is equally important for teachers and students to evaluate the teachers' role in the context of our ESL workshops.

#### **Research Questions**

In creating a conceptual framework for my case study, I drew from Chapelle's (2001) Criteria for CALL Task Appropriateness and the questions used by Jamieson et al. (2005) to operationalize these criteria. I developed the questions for my surveys and focus group discussions by adapting these operationalized questions to the specifics of my research questions and context. My study is designed to elicit answers to the following research questions:

What are the teachers' perceptions of their training and their readiness to facilitate the DynEd Multimedia Courseware in the ESL workshops at our institution?

What do teachers and students at our institution perceive to be the role of the facilitator in supporting our adult learners who are using the DynEd Multimedia Courseware?

Given Chapelle's Criteria for CALL Task Appropriateness, how do teachers and students at our institution perceive DynEd's appropriateness for the adult learners in our American technical college setting?

## Summary

In Chapter Two I provided an overview of multimedia CALL and of the DynEd Multimedia Courseware. The research indicates that multimedia CALL supports language learning, and, through the use of multiple modes, accommodates the learning styles of diverse learners. The majority of DynEd studies reviewed in Chapter Two report that New Dynamic English is a useful program for improving the English abilities of adult EFL students when students receive adequate training and support. These studies documented the important role of the teacher as a CALL facilitator, the need for teacher training and support, and the need for leaner training and support. I concluded the literature review by presenting Chapelle's Criteria for CALL Task Appropriateness, which served as the framework for developing my research tools. In Chapter Three I describe the methodology used in the data collection and analysis for this study.

## CHAPTER THREE: METHODOLOGY

This study was designed to examine teacher and student perceptions of the DynEd Multimedia Courseware (DynEd) currently being used with adult English language learners in an American technical college setting. A case study approach was used to focus on a group of teachers and students who used DynEd during the Spring 2015 semester. Data were collected from questionnaires, focus group interviews, and the DynEd Records Manager to answer the following research questions: What are the teachers' perceptions of their training and their readiness to facilitate the DynEd Multimedia Courseware in the ESL workshops at our institution? What do teachers and students at our institution perceive to be the role of the facilitator in supporting our adult learners who are using the DynEd Multimedia Courseware? Given Chapelle's Criteria for CALL Task Appropriateness, how do teachers and students at our institution perceive DynEd's appropriateness for the adult learners in our American technical college setting?

## Chapter Overview

Chapter Three describes the mixed methods research paradigm used in this study, including the rationale of the research design and the data collection protocols. It continues with the procedures used to collect, analyze, and verify the data. It concludes with the ethical considerations that were observed throughout this study.

#### Mixed Methods Research Paradigm

The mixed methods research paradigm employed in this case study included both quantitative and qualitative techniques—questionnaires with closed-ended and openended questions, focus group interviews, and computer-based data from the DynEd Records Manager. The use of methodological triangulation increases the credibility, transferability, confirmability, and dependability of the case findings (Eisenhardt, 2002; Mackey & Gass, 2005). Eisenhardt (2002) describes the relationship between quantitative and qualitative data as "highly synergistic" (p. 538). When the quantitative data validate the findings of the qualitative data, the dependability of the study is increased. Qualitative data, on the other hand, may provide insights that are not evident from the quantitative data alone (Dörnyei, 2003; Eisenhardt, 2002; Mackey & Gass, 2005).

Two advantages of using questionnaires are their versatility and their efficient use of time (Dörnyei, 2003). After a questionnaire is created and tested, it can be used to collect a large amount of data in a short period of time (Dörnyei, 2003; Mackey & Gass, 2005). The closed-ended questions supply quantitative data while the open-ended questions supply qualitative data. However, questionnaires have limitations. Because the questions need to be simple enough for L2 learners to understand and the time spent on answering the questions is generally short, questionnaires alone are not suitable for indepth investigations (Dörnyei, 2003); therefore, they are often used in conjunction with other methods. Dörnyei (2003) contends that using questionnaires as part of a qualitativequantitative mixed-methodology design enhances both approaches and neutralizes the limitations and biases in each. In this case study about DynEd, questionnaire research was used in conjunction with focus group interviews and production data from the DynEd Records Manager to increase the depth and dependability of the study. The use of multiple investigators also adds greater insights to a study and increases confidence in the findings (Eisenhardt, 2002). Two members of my capstone team facilitated the DynEd courseware in their respective workshops, so their insights brought greater focus to the design of the study and the interpretation of the data.

The case study approach is used to provide holistic descriptions of specific learners or classes within their unique setting (Eisenhardt, 2002; Mackey & Gass, 2005). In CALL, the case study approach can be used to gain a greater understanding of technology use by individuals, groups, and programs (Grgurovic, 2011). In my study, I wanted to gain a greater understanding of how two groups perceived the DynEd software being used as the core program in adult ESL workshops at our technical college. The participants in this case were the teachers who facilitated DynEd and a sample group of adult students who used DynEd during the Spring 2015 semester. Yin (2003) categorizes this type of case study as a multiple-case design because it involved two units of analysis—teachers and students. The materials being examined were the DynEd Multimedia Courseware, DynEd extension activities, and DynEd worksheets. The boundaries of the case were the beginning and end of the two-week period in which the data were collected although the actual use of the courseware took place the previous semester.

## Data Collection

## Participants

This case study involved two groups of participants—ten ESL teachers and two educational assistants who facilitated DynEd in our ESL workshops and seventeen students who used DynEd during the Spring 2015 semester.

<u>Teachers and educational assistants</u>. On July 13, 2015, I invited twelve teachers to take part in the study by using Google docs to share the Informed Consent to Participate in Research—Teachers' Form. Most of the teachers were aware of this project because I had polled them during the previous semester to ask if they would be willing to participate in a study about DynEd. Ten teachers signed the letter of consent and completed the online Teachers' Survey. Five of them were also able to participate in the teachers' focus group discussion the following week.

Table 2 summarizes the demographics for the teachers and assistants in this study. All ten teachers are experienced in the field of adult ESL. Two teachers had between 6 and 10 years of experience, five had between 11 and 20 years, and three had 21 or more years. Eight teachers reported that they were comfortable using technology and two reported being somewhat comfortable. All of them had experience in a workshop setting. At the time of this study, six of the teachers had facilitated DynEd for 2-3 semesters and four of them for 4-6 semesters. Two educational assistants who assist in our ESL workshops also signed the consent form and participated in the focus group discussion but did not complete the survey. Each assistant had assisted with DynEd for 2-3 semesters.

## Table 2

Teachers and	Years	Years	Semesters	Comfortable
Assistants	teaching	working in	facilitating	with technology?
(pseudonyms)	adult ESL	ESL workshops	DynEd	
Mimi	21 or more	21 or more	4-6	Yes
Lucy	11-20	6-10	4-6	Yes
Jane	6-10	1-5	2-3	Yes
Eleanor	11-20	11-20	4-6	Yes
Beth	21 or more	21 or more	2-3	Yes
Sophie	6-10	6-10	4-6	Somewhat
Enya	11-20	1-5	2-3	Yes
Jacque	21 or more	1-5	2-3	Somewhat
Betsy	11-20	6-10	2-3	Yes
Cindy	11-20	11-20	2-3	Yes
Ellen	NA	11-20	2-3	No
Joe	NA	1-5	2-3	Yes

Demographics for Teachers and Assistants

<u>Students</u>. On July 8, 2015, I visited the summer classes to invite students who had used DynEd the previous semester to participate in my study. Ten female students and seven male students participated in the study. Overall, these seventeen students constitute a small sample group but one that is representative of the diverse ESL student population at our campus. Table 3 summarizes the demographics for the students in this study.

Students in our program are grouped according to the six levels described by the National Reporting System for Adult Education (NRS). Based on the TABE-CLAS E Reading Test, the NRS levels of the students were as follows: five students in NRS level 2, three students in NRS level 3, six students in NRS level 4, two students in NRS level 5, and one student in NRS level 6.

The breakdown by age group was six students ages 20-29, seven students ages 30-39, and four students ages 40-49. The group included four students from Mexico, three from Iraq, two from Brazil, two from Myanmar, and one each from Ethiopia, Palestine, Puerto Rico, Spain, Taiwan, and Vietnam. The breakdown by education varied from one student with some elementary school, two with some middle school, three with some high school, four with a high school diploma or GED, and seven with college degrees.

Time spent living in the United States varied greatly. Five of the students had lived here less than one year, one student between 1 and 2 years, four students between 3 and 5 years, five students between 6 and 10 years, and 2 students more than 10 years. Seven students had used DynEd for only 1 semester, nine students for 2-3 semesters, and one student for 4-6 semesters.

## Table 3

# Demographics for Students

Students' pseudonyms	NRS level	Country	Education	English study	Years living in	English study in
and gender				before U.S.	U.S.	U.S.
Marta F	L4	Brazil	College degree	< 1year	< 1 year	< 1 year
Alexa F	L5	Mexico	College degree	1-2 years	3-5 years	1-2 year
Lucas M	L4	Puerto Rico	High school diploma	6-10 years	6-10 years	1-2 year
Akram M	L3	Iraq	College degree	6-10 years	< 1 year	< 1 year
Amira F	L4	Palestine	Some high school	3-5 years	6-10 years	1-2 year
Ana F	L2	Mexico	Some middle school	0 years	>10 years	< 1 year
Renata F	L4	Mexico	High school diploma	0 years	> 10 years	< 1 year
Ahmed M	L2	Iraq	College degree	1-2 years	3-5 years	1-2 year
Khin M	L5	Myanmar	Some high school	> 10 years	< 1 year	< 1 year
Jaw M	L2	Myanmar	Some elementary	< 1year	3-5 years	1-2 year
Ariana F	L2	Spain	High school diploma	< 1year	1-2 years	NA
Chen M	L4	Vietnam	Some middle school	1-2 years	3-5 years	3-5 year
Laura F	L3	Mexico	High school diploma	6-10 years	6-10 years	< 1 year
Edson M	L6	Brazil	College degree	3-5 years	< 1 year	< 1 year
Hana F	L2	Iraq	College degree	0 years	< 1 year	< 1 year
Eden F	L3	Ethiopia	Some high school	1-2 years	6-10 years	1-2 year
Li Min F	L4	Taiwan	College degree	> 10 years	6-10 years	3-5 year

Setting

Our ESL program is an integral part of the School of Pre-college at a technical college in an urban setting in the upper Midwest. Our institution provides ESL classes at four campuses. At the campus where this study was done, about 550 students were served during the Spring 2015 semester. We follow the guidelines of the National Reporting System for Adult Education (NRS), providing six levels of instruction from basic literacy through advanced instruction. The specific goal of our ESL program is to provide English language instruction to speakers of other languages so that they develop the proficiency needed to live and work in the United States. Recently our program has expanded to help prepare those students who plan to enter the General Education Development Tests (GED) program or college-level programs.

Day students at our campus may register for up to three classes, each meeting five days a week for one hour. Evening students may register for up to two classes, each meeting twice a week for two hours. Course options include traditional face-to-face classes for literacy, computer literacy, reading, writing, oral communication, pronunciation, citizenship, and Accuplacer test preparation. Students may also choose to register for one of the eleven workshops offered days, evenings, and Saturdays where they work independently using DynEd or other online instructional programs.

The ESL workshop is equipped with fifteen desktop and twenty laptop computers, Internet connections, and language learning software including DynEd. In addition, the instructor's multimedia center includes a desktop computer, a document camera, an overhead projector, a microphone, and mounted speakers. The room also contains two large whiteboards and several tables that can be used for small group work.

## Data Collection Technique 1: Questionnaires

A survey in the form of a questionnaire is a practical method of collecting data from a large group of participants, and this method is widely used in second language research (Dörnyei, 2003; Mackey & Gass, 2005). A questionnaire is a written instrument that requires participants to respond to statements or questions about a specific topic. In the field of second language research, published questionnaires have addressed numerous topics including language course evaluation and teacher evaluation (Dörnyei, 2003). With the growing interest in CALL evaluation, researchers have used questionnaires in this field as well (Bingham & Larson, 2006; Brown et al., 2008; Jamieson et al., 2005; Sagarra & Zapata, 2008; Stepp-Greany, 2002).

Questionnaires may use both closed-ended and open-ended questions. In a closedended question, the researcher determines the possible answers. The advantages of using closed-ended questions are greater uniformity of measurement, greater reliability, and easier quantification of results (Dörnyei, 2003; Mackey & Gass, 2005). In contrast, openended questions leave room for individualized input that may provide greater insight for the researcher (Mackey & Gass, 2005). Open-ended questions may elicit graphic examples and illustrative quotes, which will add "greater richness" to a study than quantitative data alone (Dörnyei, 2003, p. 47). Two disadvantages of open-ended questions are that they take more time for the participants to complete and more time for the researcher to read and code (Dörnyei, 2003; Mackey & Gass, 2005). Because each type of question has its strengths, both closed-ended and open-ended questions were used in the student and teacher questionnaires about DynEd. Designing a well-constructed and professional-looking questionnaire can maximize its effectiveness (Dörnyei, 2003; Mackey & Gass, 2005). For this study, the Google survey tool was used to create attractive online questionnaires with an orderly layout. The color and format of the student and teacher versions were similar, but the teachers' form included more closed-ended and open-ended questions. Both questionnaires incorporated many of Dörnyei's (2003) guidelines for constructing and administering a questionnaire survey. Both questionnaires took 30 minutes or less to complete. They included an introduction that stated the topic and importance of the study, the researcher's name and contact information, a request for the participants' honest responses, a promise of confidentiality, and a statement of thanks. A large bold font was used to identify the different sections of the questionnaires. Each section included clear instructions. Open-ended questions were kept to a minimum and placed at the end of each section. This information was summarized in Table 2.

The questions from the Teachers' Survey About DynEd Multimedia Courseware are found in Appendix A. This questionnaire included 88 closed-ended and 11 openended questions that were used to gather the following data: (1) the teachers' perceptions of technology, (2) the teachers' perceptions of their training and duties as DynEd facilitators, (3) the teachers' perceptions of DynEd's content, (4) the teachers' perceptions of their students' performance in DynEd, (5) the teachers' final assessment of DynEd, and (6) the teachers' work experience.

The questions from the Students' Survey About DynEd Multimedia Courseware are found in Appendix B. This questionnaire included 62 closed-ended and 4 open-ended questions that were used to gather the following data: (1) the students' perceptions of technology, (2) the students' perceptions of DynEd's content, (3) the students' perceptions of the facilitator's role, (4) the student's perceptions of their performance in DynEd, (5) the students' final assessment of DynEd, and (6) the students' personal data.

Limitations. Dörnyei (2003) discusses the possibility of encountering unreliable and unmotivated respondents when doing questionnaire research. To address this issue, I made arrangements to go into each classroom to explain the purpose of my project. Another concern is that students who are eager to please their teachers may exhibit the halo effect, which Dörnyei (2003) describes as "the human tendency to overgeneralize" (p. 13). For example, students may be reluctant to say anything negative about a teacher or a class that they generally like. A similar concern is social desirability bias where respondents choose what they think is the desirable or expected answer even if it is not true (Dörnyei, 2003; Mackey & Gass, 2005). To address these two issues, the directions on the questionnaire emphasized that there were no right or wrong answers for the questions. Students were encouraged to give their honest opinions about DynEd and the ESL workshop including what they liked and what they did not like.

Using questionnaires with second language (L2) learners may pose additional problems. First, it may be difficult for learners with low language proficiency to understand and respond to the questions in an L2 (Dörnyei, 2003; Mackey & Gass, 2005). Nevertheless, in our program it was not practical to administer the questionnaire in multiple languages, so our students were asked to take the survey in English. To simplify the survey, questions were worded as clearly as possible with an average length of 10.8 words per question. Nearly all of the closed-item questions asking about an opinion or perception used a simple three-answer scale (*Yes, Some, No*) following the model used in

the Jamieson et al. (2005) study. The answer choices for questions about factual information were written as succinctly as possible.

Another potential problem is that L2 learners may be uncomfortable writing answers for open-ended questions and may provide very limited responses (Dörnyei, 2003; Mackey & Gass, 2005). With this in mind, open-ended questions were used sparingly in the student survey. Directions for the four open-ended questions instructed students to type their answers in the box without worrying about spelling.

## Data Collection Technique 2: Focus Group Interviews

To increase the depth of a study, questionnaires are often used in conjunction with other qualitative data collection methods (Dörnyei, 2003; Mackey & Gass, 2005). In my case study, I conducted three focus group interviews as a follow-up to the questionnaire research. Focus group interviews have been used as a qualitative research methodology within the social sciences since the 1980s. Ho (2006) has found the focus group interview to be a valuable but underused research tool in language and ESL classroom studies.

A focus group interview is a carefully planned small group discussion guided by a trained moderator. Typically, five to ten participants who have knowledge about a particular study topic are invited to participate in a focus group. As in a semi-structured interview, the moderator uses a list of questions to guide the discussion but remains open to the use of prompts to clarify or gather information (Krueger, 2002; Mackey & Gass, 2005; OMNI, n.d.). During the first few minutes in a focus group discussion, the moderator must create a comfortable atmosphere, provide the ground rules, and set the tone for the discussion (Krueger, 2002; OMNI, n.d.). Guided by the moderator, participants share their own opinions and experiences and respond to those of the other

participants, creating an interesting group dynamic that is not present in a standardized interview (Ho, 2006; Krueger, 2002; OMNI, n.d.). This type of group discussion can generate a great deal of rich information in a short time (Krueger, 2002; OMNI, n.d.).

The questions used for the teachers' focus group discussion are found in Appendix C. During the teachers' focus group, participants were asked to discuss their duties as DynEd facilitators and their observations about students' engagement, students' growth in the language skills, and students' growth as independent learners. They were asked to grade DynEd in terms of its content and relevancy for their students and to vote whether or not to keep the program.

The questions used for the students' focus group discussions are found in Appendix D. During the students' focus groups, participants were asked to discuss the challenges of using DynEd and the type of help they needed from their teachers, what they liked the least and the most about DynEd, and what change they would make to improve the workshop. They were also asked about their growth in the language skills and their growth as independent learners. Finally, they were asked to grade DynEd based on how helpful it was for their language learning and to vote whether or not to keep the program.

Limitations. As with other research methods, focus groups have limitations. Participants, especially those with low language proficiency, may give incomplete answers. To obtain more information, the moderator needs to use techniques such as pausing or using neutral questions such as "Anything else?" (Krueger, 2002; Mackey & Gass, 2005). In some cases, rephrasing the question, repeating or rephrasing the reply, or using prompts may elicit fuller responses (Ho, 2006; Krueger, 2002; OMNI, n.d.). In a focus group interview there is also the possibility that a few vocal individuals may dominate the discussion. To balance participation, the moderator needs to thank the vocal individuals and then redirect the question to individuals who are reluctant to talk (Krueger, 2002; OMNI, n.d.). Another possibility is that participants may let social desirability bias influence their comments to portray themselves more favorably (Mackey & Gass, 2005). Students need to be reminded that their honest opinions are the most helpful for the study.

## Data Collection Technique 3: The Records Manager

Using quantitative data from the DynEd Records Manager enhanced the validity and reliability of this study. One advantage of computer-based research is access to the tracking possibilities built into a specific program (Hubbard, 2006; Mackey & Gass, 2005). For my research, I created a DynEd study group that included only the 17 students who participated in this case study. I looked at their data for the Spring 2015 semester, which ran from January 26-May 15, 2015. Second language research often uses a measure of central tendency to provide quantitative information about the behavior of a group of learners (Mackey & Gass, 2005). DynEd provides the mean, or arithmetic average, for time spent in the program, number of voice recordings, and Mastery Test scores for both the individual students and for the group. This data was used to confirm the validity of any trends or patterns that were identified in the qualitative analysis of the questionnaires and interviews (Eisenhardt, 2002).

<u>Limitations</u>. A limitation of using a mean score is that it does not show if an individual student's performance is improving or declining. A second limitation is that

the mean score of a group is sensitive to extreme scores, especially in groups with a low number of participants (Mackey & Gass, 2005).

## Procedure

## Pilot Study

The point of using a pilot study is to test the materials and the methods so that problems are resolved before the main study is conducted (Mackey & Gass, 2005). An earlier version of the students' questionnaire was piloted in December 2014. Eighteen students, levels 2 through 6, completed the questionnaire in my evening workshops. Students used their school email addresses and passwords to log in, and accessing the online questionnaire was not a problem. They seemed to understand the gist of each question, primarily because we use the same language when we coach them during DynEd practice. However, the 38 questions on the pilot study were not sufficient for obtaining the data I needed to answer my research questions. Additional categories and questions were later added. My peer reader reviewed subsequent versions of the students' questionnaire, which helped me develop clearer directions and a cleaner format for the final version.

The teachers' questionnaire was reviewed several times by my second advisor and peer reader. These same two teachers piloted the questionnaire by completing both the closed-ended and open-ended questions. They made notes to help me revise several questions that were still unclear. Both teachers completed the questionnaire in about 30 minutes, which was an acceptable length of time.

## Materials

Before data collection began, I met with students to explain the research study and to distribute a letter of informed consent written in English and translated into the students' native languages. The letter explained the purpose, procedures, and potential risks and benefits of the research. It also explained that participation in the study was voluntary, that it would not affect the participants' grades or placement in the program, and that they could withdraw at any time without negative consequences. In addition, the letter included an assurance of confidentiality and explained the steps taken to protect the participants' anonymity. The letter provided the researcher's name and contact information so participants could ask questions or voice concerns about the project. A similar letter of informed consent was sent to teachers using our institution's email system. Students and teachers were required to sign and return the letter of informed consent.

Questionnaires. I used the Google survey tool to create and deliver the teachers' and students' questionnaires. Google created short URL addresses for the questionnaires, and these were easily linked to our Google email system. After I received their signed letters of consent, I sent teachers and students the URL address for their respective surveys. Both teachers and students logged in with their Google user names, which allowed them to take the survey one time. I made the teachers' responses anonymous, but I later asked the five teachers in the focus group to identify some of their written comments so I could cross-reference them with their focus group comments. Students were informed that I would collect their user names on the surveys so that I could crossreference their responses with data from the DynEd Records Manager. Both teachers and students completed the online questionnaires during the same week. Ten teachers returned signed letters of consent and completed the teachers' online questionnaire at their convenience, submitting their responses between July 13 and 19. I made arrangements to go into the summer classes on July 8 to recruit students who had used DynEd during the Spring 2015 semester. I set dates for the following week to administer the online questionnaire in a computer lab and to conduct two focus group sessions with selected students. Students received printed copies of the Informed Consent to Participate in Research-Students' Form in English and in their first languages.

Twenty-one students returned signed letters of consent and completed the students' questionnaire. Seventeen of these students completed the students' questionnaire on July 14 in a computer lab at school. To accommodate students, an educational assistant was available to help students log in to the survey, and the researcher and one other teacher were available to read questions to students who needed assistance. Taking the survey with other classmates in the familiar surroundings of the campus contributed to the students' comfort level. Three students who were absent completed the questionnaire in the computer lab later in the week, and one student completed the questionnaire from home. The DynEd Records Manager confirmed that four of the twenty-one students had not used DynEd during the Spring 2015 semester, so their responses were subsequently omitted from the study.

<u>Focus group interviews</u>. Following the survey, I conducted three focus group interviews to learn more about the teachers' and students' perceptions of DynEd. Focus Group A, which included seven students in NRS levels 2 and 3, was conducted on July 15. Focus Group B, which included four students in NRS levels 4 and 6 (two other students who had signed consent forms were absent), was conducted on July 16. Each session lasted about one hour. Focus Group C, which included five teachers and two educational assistants, was conducted on July 20. This session lasted one hour and fifteen minutes.

Every effort was made to follow the focus group protocol laid out in the literature (Krueger, 2002; Mackey & Gass, 2005; OMNI, n.d.). All three focus group interviews were held in a private conference room at our institution. Numbered identification cards were placed in front of the participants to help my assistant accurately record their comments. All three groups were audiotaped using my Samsung Galaxy 4 cell phone and my assistant's iPhone as a backup. My assistant used her written notes to summarize the main points of each discussion for the participants. After each session concluded, my assistant and I had a short debriefing session to discuss her notes and compare our observations.

Several steps were taken to create a comfortable atmosphere for the participants. First, the participants were grouped with people they knew. While this is not the norm in focus group discussions, Ho (2006) proposes that familiarity among the participants and with the researcher contributes to more natural and more productive interactions in classroom language studies. Since the teachers and educational assistants in my study were colleagues, a high level of familiarity and comfort already existed among them. In each of the students' focus groups, students knew other students from class. Five of the eleven students also knew me from class, and the others had met me when I promoted the project in their classrooms. Generally, similar types of people are grouped together to form a focus group (Krueger, 2002; OMNI, n.d.). With our diverse group of students, it was most practical to group them by their NRS levels. By grouping students who had similar levels of language proficiency, I hoped to increase the comfort level of the students with lower proficiency.

Second, the setting was conducive for encouraging discussion (Krueger, 2002; OMNI, n.d.). All three sessions were conducted at our institution in a private conference room with a large table and comfortable chairs. Third, the format of the discussions was clearly explained to the participants. At the beginning of each session, I posted and discussed five guiding principles for focus group discussions. (1) All answers are important. There are no right or wrong answers. (2) We want everyone to talk today. (3) Only one person talks at a time. (4) Listen to the other speakers. You can agree or disagree. (5) We will record this discussion, but your name will not be used in the report (Krueger, 2002; OMNI, n.d.). In addition, I posted each question on a flip chart so participants had a visual reference to reinforce the auditory prompt. For each question, I prepared several additional prompts to encourage further discussion.

#### Data Analysis

After the data have been collected, the researcher must decide how to best analyze and present the data so that it is accessible to interested parties (Mackey & Gass, 2005; Taylor-Powell & Renner, 2003). The teachers who facilitate DynEd in our ESL program and the administrators who oversee the funding are the main audience for my study. The Results Chapter will have the most significance for the teachers who participated in the study since their input and that of some of their students was the source of the data. Since the purpose of the study is not the generalizability of the results, no inferential statistics are used. Data from the closed-ended questions of the survey are presented as the number of responses (N) and percentages (%), which is the method of reporting used in other CALL studies cited in this report (Bingham & Larson, 2006; Brown et al., 2008; Jamieson et al., 2005; Sagarra & Zapata, 2008; Stepp-Greany, 2002).

One method of analyzing data is to use preset categories from the research literature to provide direction for the analysis (Taylor-Powell & Renner, 2003). In my study, Chapelle's (2001) Criteria for CALL Task Appropriateness and Jamieson et al.'s (2005) operationalized questions of these criteria were used as the conceptual framework in constructing my questionnaires and focus group questions and for analyzing and reporting my results. To analyze my data, I color-coded each of Chapelle's six criteria (language learning potential, learner fit, meaning focus, authenticity, impact, and practicality) and the corresponding questions, quantitative data, and qualitative data from my questionnaires. For each criterion, I created subcategories to accommodate the specific data from my questionnaires and to aid in the interpretation of the data (Taylor-Powell & Renner, 2003). After a quick analysis of data from the teachers' and students' questionnaires, I adjusted some of the questions for the subsequent focus group interviews.

Analyzing and interpreting data requires a thorough understanding of the data (Mackey & Gass, 2005; Taylor-Powell & Renner, 2003). After each of the students' focus group interviews, I reviewed my assistant's notes and listened to the recordings several times (Krueger, 2002; Taylor-Powell & Renner, 2003). I added my impressions to the notes and transcribed some specific quotes that clarified data in my report. After the teachers' focus group interview, I listened to the recording straight through and added my general impressions. The second time through, I stopped frequently to transcribe the

entire discussion. I felt it was important to fully capture the teachers' comments because the teachers are the primary contributors and audience for the results chapter. The teachers were asked to review their comments for accuracy.

As I analyzed the data from the focus group discussions, I considered several tips presented in the literature (Krueger, 2002; Taylor-Powell & Renner, 2003). I read and reread the notes and transcripts several times to identify the major themes and topics that were of most importance. I looked for internal consistency in the participants' opinions and instances where participants reversed their opinions. I paid attention to responses that included specific details and personal experiences, and I looked for quotations that would reflect the similarities and differences in people's responses within each category.

To identify patterns and connections within and between categories (Taylor-Powell & Renner, 2003), I used Chapelle's (2001) Criteria for CALL Task Appropriateness to organize and report the data by theme. I presented the quantitative and qualitative data collected from the teachers followed by the data collected from the students, noting the similarities and differences in their responses (Taylor-Powell & Renner, 2003). I used figures and tables to present key data. Finally, I included excerpts and full quotations from the students and teachers to clarify the quantitative data and add depth to the study (Dörnyei, 2003; Mackey & Gass, 2005; Taylor-Powell & Renner, 2003).

### Verification of Data

Three methods of data collection were used to triangulate the findings and increase the validity of this study (Dörnyei, 2003; Mackey & Gass, 2005). Both quantitative and qualitative data were collected through the use of questionnaires. To

increase the reliability of this study, I used the DynEd Records Manager to verify the students' records between January 26 and May 21, 2015. The DynEd Records Manager showed that two of these students had used DynEd in the previous year but not during the Spring 2015 semester, so their survey responses and DynEd Study Records were not included in the study. The Records Manager also showed that two students had used DynEd for four days and two days, respectively, during Spring 2015. I felt that these students had not spent enough time in DynEd to reliably answer the survey questions, so their survey responses and DynEd Study Records were also omitted from the study.

Focus groups were conducted to verify or question data from the questionnaires and provide more clarity to the study (Dörnyei, 2003; Mackey & Gass, 2005). One criticism of the focus group as a research methodology is that the findings may result from subjective opinions, especially when the moderator has established perceptions about the topic of study (Ho, 2006; Krueger, 2002). In an effort to help me recognize and eliminate bias from my study, my peer reader served as my assistant moderator during all three focus group discussions, and the results of this study were shared with her for verification. Finally, performance data from the DynEd Records Manager were used to verify the teachers' and students' perceptions of student performance.

#### Ethics

In research involving human subjects, international and federal regulations promote or mandate the use of ethical principles and guidelines that are designed to protect the participants in a study (Dörnyei, 2003; Mackey & Gass, 2005). The following safeguards were used in this study: (1) a human subjects review protocol approved by my institution and by Hamline University, (2) signed informed consent letters written in English and translated into the participants' native languages, (3) assurance that participation was voluntary and would not affect grades or placement in our program, (4) assurance that participants could withdraw at any time without negative consequences, (5) assurance that participation posed little to no risk, (6) assurance of confidentiality and anonymity by conducting focus groups in a private conference room and assigning pseudonyms to refer to participants in the study, (7) secure storage of the data on the researcher's private home computer, and (8) deletion of all audio files one year after completion of the project.

### Summary

In Chapter Three I presented an overview of the mixed methods research paradigm used in this study, along with a description of each data collection tool and the protocol for each. I described the two groups of participants and the setting in detail because context is an important part of CALL evaluation. I outlined the procedures used to deliver the questionnaires and to conduct the focus group interviews, and I described the methods used to analyze and verify the data. Finally, I presented the ethical considerations that were followed to protect the rights of the participants. In Chapter Four I present the results of the study.

### CHAPTER FOUR: RESULTS

The purpose of this case study is to examine the teachers' and students' perceptions of the DynEd Multimedia Courseware being used in our adult ESL workshops in order to assess the possibilities for its continued use. This study is focused on a small sample of learners at our institution; therefore, no inferential statistics are used and no generalizations will be presented. A total of ten teachers and seventeen students participated in this study. Data from the teachers' and students' questionnaires were analyzed quantitatively using the number of responses (N) and percentages (%). For most questions, teachers and students had to select one of three answers: *yes, somewhat,* or *no,* which represented positive, neutral, or negative responses. Questions from the teachers' and students' questionnaires are provided in Appendix A and Appendix B, respectively.

Five of the teachers and eleven of the students also participated in one of the following focus group interviews: Focus Group A (seven students who were in NRS levels 2 and 3 during Spring 2015), Focus Group B (four students who were in NRS levels 4 and 6 during Spring 2015), and Focus Group C (five teachers and two educational assistants who facilitated DynEd during Spring 2015). The educational assistants participated in the teachers' focus group but did not complete the teachers' questionnaire. Qualitative data from the focus group interviews are used to bring clarity to the quantitative data and add a personal perspective to the study. Questions from the

teachers' and students' focus group discussions are provided in Appendix C and Appendix D, respectively.

Through the collection and analysis of these data, I sought to answer the following research questions: What are the teachers' perceptions of their training and their readiness to facilitate the DynEd Multimedia Courseware in the ESL workshops at our institution? What do teachers and students at our institution perceive to be the role of the facilitator in supporting our adult learners who are using the DynEd Multimedia Courseware? Given Chapelle's Criteria for CALL Task Appropriateness, how do teachers and students at our institution perceives for the adult learners in our American technical college setting?

The results of this study are organized and discussed using Chapelle's (2001) Criteria for CALL Task Appropriateness as a framework: practicality, language learning potential, learner fit, meaning focus, authenticity, and impact. For each criterion, data from the teachers' questionnaire and focus group interview are presented first, and data from the students' questionnaire and focus group interviews follow.

### Practicality

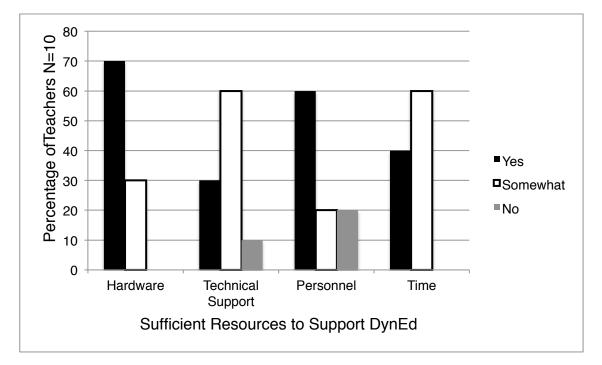
Chapelle defines practicality as "the adequacy of resources to support the use of the CALL activity" (Chapelle, 2001, p. 55). In judging practicality, an evaluation must consider whether the setting has sufficient hardware, personnel, time, and money to support the use of the software (Jamieson et al., 2005).

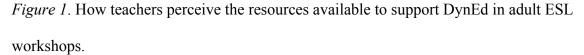
## Teachers' Perceptions of DynEd's Practicality

<u>Technology use</u>. Overall, the teachers' perceptions of technology use were positive with 80% responding that they were comfortable using technology, 80%

responding that they enjoyed using technology with their students, and 90% responding that they thought CALL was an important part of our curriculum.

<u>Resources</u>. On the questionnaire, the teachers evaluated the resources available to support DynEd in the ESL workshops at our institution. Figure 1 summarizes these data.





<u>Hardware</u>. In respect to hardware (computers, laptops, microphones, Internet connection), 70% of the teachers responded that our workshop was properly equipped to support DynEd, while 30% responded that it was somewhat properly equipped. The issue that was mentioned numerous times in both the written and verbal comments was the frustration caused by technology glitches. On the questionnaire, Betsy commented on how this may affect the students' perceptions of DynEd:

Teacher support is critical to continue to help this program stay functional.

Although we have computers and the necessary equipment to use the DynEd

program, technology glitches present problems. Asking students to change computers once or even twice during class due to speaker/recording problems somewhat takes the enthusiasm out of using the program.

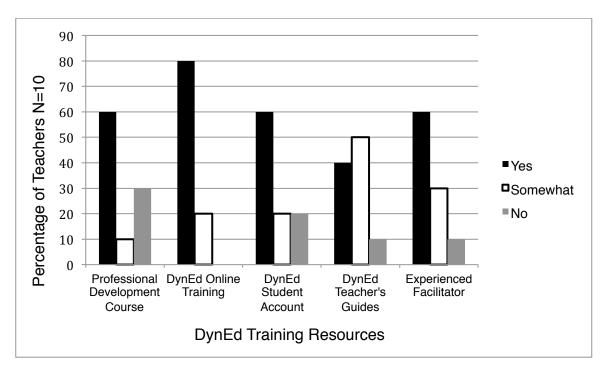
<u>Technical support</u>. The transition from a textbook-based program to a CALL program put greater technology-related demands on the teachers. Overall, the teachers were not positive about the level of technical support they received. Only 30% felt that our institution provided them with adequate technical support. The majority (60%) felt that technical support was somewhat adequate, and 10% felt it was not adequate.

<u>Personnel</u>. While 60% of the teachers felt that their workshops had sufficient personnel to facilitate DynEd, 20% felt that the personnel was only somewhat sufficient and 20% felt it was not sufficient. Brown et al. (2008) acknowledged that a shortage of trained staff is especially problematic at the beginning of the semester when students need the greatest amount of teacher support to learn how to use the software.

<u>Time</u>. Only 40% of the teachers thought the amount of weekly prep time needed to facilitate DynEd was reasonable while 60% thought it was somewhat reasonable. The majority of teachers felt that the students had sufficient time to use DynEd in the workshop.

<u>Money</u>. Because teachers were not informed of the cost of the software, there were no questions about cost on the survey.

<u>Teacher training</u>. This section of the questionnaire specifically addresses my first research question: What are the teachers' perceptions of their training and their readiness to facilitate the DynEd Multimedia Courseware in the ESL workshops at our institution? Most teachers had access to five training resources to help them prepare for their role as DynEd facilitators. The survey showed that each of the teachers used or somewhat used at least three of the training resources available to them. Figure 2 summarizes their use of these resources.



*Figure* 2. Teachers' reported use of training resources to prepare for facilitating DynEd in adult ESL workshops.

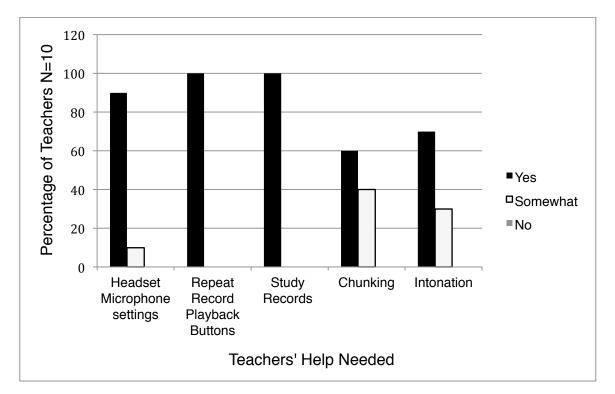
Even with these opportunities for training, only 20% of the teachers thought their duties as a facilitator were clear to them when they began facilitating DynEd. The remaining teachers thought their duties were only somewhat clear (60%) or not clear (20%). Likewise, only 20% found it easy to facilitate DynEd the first semester they used it. The remaining teachers responded that it was somewhat easy (40%) or not easy (40%). This was the most negative response to any of the questions related to facilitating DynEd. These perceptions corroborate the findings in other studies (Baş, 2010; Brown et al., 2008; O'Connor & Gatton, 2004; Şengel et al., 2011) in which teachers reported having difficulties managing the DynEd courseware.

On the survey, 60% of the teachers responded that they would like additional training to learn how to use the DynEd Records Manager more effectively. Eleanor commented that the amount of information in the Records Manager was "overwhelming." Sophie expressed some of her specific concerns about monitoring student progress:

I was not always clear about what the students should work on next. There were way too many scores in the Records Manager. It was time-consuming to sift through so much information.

The challenge of learning how to use the Records Manager was also discussed at length in Focus Group C. Several teachers found that their best training resources were the teachers who had experience with DynEd. Lucy mentioned that she was very fortunate to work with an experienced teacher who helped her substantially in learning to use the program. Mimi and Sophie found that shadowing another teacher who knew how to use the Records Manager was extremely helpful. These positive experiences show the merit of Brown et al.'s (2008) recommendation to incorporate numerous face-to-face sessions in training programs for new CALL teachers.

Even with the technology glitches and the challenges of learning the program, 70% of the teachers reported that their Spring 2015 workshops ran smoothly, and 30% reported that they ran somewhat smoothly. All of the teachers reported that they felt more confident about facilitating DynEd after using it for one semester. Betsy's comment conveyed the general feeling of the teachers: "Gets easier as you use it. [You] feel more confident the more semesters you are involved with it." In spite of this increased confidence, only 50% of the teachers reported that they enjoyed their role as a DynEd facilitator; the other 50% enjoyed it somewhat. Student training. As discussed in the literature review, most learners in CALL need ongoing guidance to succeed in this learning environment (Hubbard, 2013; Reinders & Hubbard, 2013; Stepp-Greany, 2002). The next set of data focuses on the type of support the facilitators in our workshops provided for the students. This section addresses my second research question: What do teachers and students at our institution perceive to be the role of the facilitator in supporting our adult learners who are using the DynEd Multimedia Courseware? Figure 3 summarizes the data and a detailed discussion follows.



*Figure 3*. How teachers perceive their students' need for help while using DynEd in adult ESL workshops.

<u>Navigating through DynEd</u>. An evaluation of CALL should examine whether the interface of the software is easy to use without help and whether the students will get frustrated while using the software (Jamieson et al., 2005). The teachers' perceptions of these issues were not positive. Only 10% of the teachers thought that DynEd was easy for

the students to use initially. Sixty percent thought it was somewhat easy for students to use initially and 30% thought it was not easy. The teachers agreed unanimously that the students needed weekly coaching to use DynEd effectively. These perceptions lend support to researchers' claims that it takes a substantial amount of time and training for students to learn how to use DynEd effectively (Bingham & Larson, 2006; O'Connor & Gatton, 2004; Rowland, 2001).

<u>Sound devices</u>. In respect to technical issues, 90% responded that the students needed coaching to learn how to adjust the control settings for their headsets and microphones. However, the bigger issue was teaching students when to use their microphones.

Repeat record sequence. All of the teachers reported that students needed coaching to use the "repeat, record, listen, repeat" sequence effectively, which corroborated the findings of other DynEd studies (Brown et al., 2008; Hegelheimer & Tower, 2004). Although this sequence is integral to the program (Hegelheimer & Tower, 2004), there are no written or verbal instructions in the software telling students to use these options during their practice. During Focus Group C, Enya summed up one of the primary tasks of the facilitators:

Frequent—to the point of almost obsessive—reminders of how to use the programs, how to go back in the Study Records, how to click the red lock to see where they need to go, how to repeat, record—that whole process—all of that.

Figure 4 displays a screen shot of the DynEd Records Manager showing statistics for the 14 students who worked in New Dynamic English during the Spring 2015 semester. (The remaining three students worked in other DynEd courses.) The screen shot shows a great variation in the students' use of the help options to repeat the model, record their voices, and listen to their voices. While two students made over 1000 voice recordings each during the Spring 2015 semester, one student made only two recordings. Using DynEd's guideline of 15 to 20 recordings per hour of use, eleven of the fourteen students made a sufficient number of recordings during their time using the program. Using a guideline of at least 2 repetitions for every recording, only six of the fourteen students used the repeat button a sufficient number of times. Incorrect use of the help options reduces the students' study scores and slows down their progress in the modules. This situation illustrates the need for ongoing and cyclic learner training during CALL (Hubbard, 2004).

26-Jan-15	to 21-M	ay-15 👻	New I	Dynami	c Englisi	ı	14 Stu	dents		-							
		New Dyna	mic En	glish ·	– Entir	e Course											
-	Time	Module	м	PTL	Days	MT-AVG	SS	Rep	ABC	Tra	Mic	Head	Glos	SR-C	SR-A	SR %	1.
	17:29	Module 1	2	0.5	22	87.0	0	626	4		1228	992		377	685	55%	1.
	20:29	Module 6	6	0.5	10	58.8	-5	919	100		2	2		587	926	63%	
	35:18	Module 6	6	0.0	7	79.9	0	1557			936	1073		637	1513	42%	
	25:07	Module 1	3	0.5	9	75.0	1	2297	186		1041	1087		29	245	12%	
	29:26	Module 2	3	0.2	1	71.6	-4	53			355	224	1	191	707	27%	
	00:15	Module 1	1	0.0	20	4.0		1	1								
	33:09	Module 5	5	0.7	17	69.0	-8	74	2		36	40		1168	2184	53%	
	15:40	Module 2	2	0.0	3		-7	867	446		220	102		2	202	1%	
	18:28	Module 5	5	1.0	7	84.4	-5	773			518	470		172	567	30%	
	08:41	Module 2	2	0.0	31		-2	438	3		410	400		9	37	24%	
	05:13	Module 5	5	0.7	14	65.8	-7	252	43		49	59		162	285	57%	
	07:58	Module 3	3	1.2	93		-7	62			156	110		243	478	51%	
		Module 4	4	0.5	9	71.3	-3	2457	120		622	1169		271	478	57%	
		Module 4	4	0.5	8	39.1	-9	117	1		187	124	1	126	311	41%	

*Figure 4*. Screen shot of the DynEd Records Manager showing the students' use of help options to repeat the model (Rep), record their voices (Mic), and play back their voices (Head).

DynEd provides training videos, but only 30% of the teachers thought the videos in English were helpful for our multilingual group of students while the majority (60%) thought they were only somewhat helpful. On the questionnaire, Eleanor commented on the rate of speech in the videos: "The speakers in the video talk too fast for English Language Learners. I prefer to explain and to model myself instead of using the videos." After the students have some experience with the program, Jacque finds it "helpful to play a few of the 'how to' videos to reinforce the process and explain why they do specific things." This strategy of training students after they have achieved a certain level of comfort with the software is a direct application of Hubbard's (2004) cyclic approach to CALL training.

<u>Detail Reports</u>. During Focus Group C, teachers discussed their role in teaching students how to access their DynEd Detail Reports, which show the number of repeats and voice recordings they make during a DynEd practice session. Mimi commented:

That has been one of my roles as a facilitator, to just come around and say show me your Detail Report so that we can look at it together and talk about it. But I don't know that they would have any clue it's there unless we explicitly teach that and then explicitly ask them to show us.

Lucy asks students to sync their records at the end of a session and report how many times they used the repeat and record buttons. She also asks students with good Detail Reports to project their records on the front screen as a model for the rest of the students. She reported that these techniques have "helped tremendously" in teaching students to use the recording sequence. Student reflection on learning strategies is recommended by CALL researchers (Hubbard, 2004) and has resulted in better computer use and more learner engagement (Kolaitis et al., 2006).

Speech recognition. Students also needed coaching to improve their performance on other DynEd tasks that are central to the courseware. Only 20% of teachers reported that their students had consistent success with speech recognition exercises. Sixty percent reported that students were only somewhat successful during these exercises, and 20% reported that their students were not successful. Rowland (2011) also reported limited success for university students using DynEd's speech recognition feature. Teachers' comments during the focus group discussion and on the questionnaire indicated that students become frustrated during speech recognition tasks. On the questionnaire, Jacque expressed the opinion of several teachers:

The speech recognition feature isn't good. Students became frustrated because they had to repeat so many times, and often the program didn't accept their speech. As a teacher, I repeated the same thing after the students, and it very often didn't accept my voice.

One limitation of speech recognition features is that feedback in the form of a meter score does not indicate what the speaker needs to do to improve (Hubbard, 2009), which was a complaint made by some students in the Kim et al. (2014) study.

Figure 5 displays a screen shot of the DynEd Records Manager, which also shows statistics for student usage of the speech recognition feature. For many students, the percent of successful speech recognition attempts (SR%) seems to be related to time spent in the program. When I cross-referenced the SR% (far right column) with the students' number of semesters in DynEd, I found that four of the five students with the

lowest SR% had used DynEd for only one semester. All but one of the students with SR% > 41% had used DynEd for two to three semesters. These findings corroborate those of O'Connor and Gatton (2004) whose students showed increased success with speech recognition over the course of several DynEd sessions. These findings also support Bingham and Larson's (2006) conclusion that consistency and repetition are essential for success; therefore, a CALL program needs to be continued from one year to the next to provide consistency for the learners.

26-Jan-15	to 21-M	ay-15 🗸 🗸	New I	Dynami	c Englist	1	14 Stu	dents		-							
		New Dyna	imic En	glish	– Entir	e Course											
-	Time	Module	м	PTL	Days	MT-AVG	SS	Rep	ABC	Tra	Mic	Head	Glos	SR-C	SR-A	SR %	1
	17:29	Module 1	2	0.5	22	87.0	0	626	4		1228	992		377	685	55%	1
	20:29	Module 6	6	0.5	10	58.8	-5	919	100		2	2		587	926	63%	
	35:18	Module 6	6	0.0	7	79.9	0	1557			936	1073		637	1513	42%	
	25:07	Module 1	3	0.5	9	75.0	1	2297	186		1041	1087		29	245	12%	
		Module 2	3	0.2	1	71.6	-4	53			355	224	1	191	707	27%	
		Module 1	1	0.0	20	4.0		1	1								
		Module 5	5	0.7	17	69.0	-8	74	2		36	40		1168	2184	53%	
		Module 2	2	0.0	3		-7	867	446		220	102		2	202	1%	
	18:28	Module 5	5	1.0	7	84.4	-5	773			518	470		172	567	30%	
	08:41	Module 2	2	0.0	31		-2	438	3		410	400		9	37	24%	
	05:13	Module 5	5	0.7	14	65.8	-7	252	43		49	59		162	285	57%	
							_				450						
		Module 3 Module 4	3		93	74.2	-7 -3	62 2457	420		156	110		243 271	478	51%	
		Module 4	4	0.5	9 8	71.3 39.1	 -9	2457	120		622 187	1169 124	1	126	478 311	57%	
	15:50	Module 4	4	0.5	0	29.1	-9	117	1		107	124	1	120	511	41%	
•								III									
Average:	17:55		3	0.4	17	64.2	-4.3	749	90		443	450	1	305	662	39%	1
s) Average:	17:55		3	0.4	17	64.2	-4.3	749	90		443	450	1	305	662	39%	

*Figure 5*. Screen shot of the DynEd Records Manager showing the students' percent of successful speech recognition attempts (SR%).

<u>Chunking</u>. While technology issues may affect the quality of the recording, there are other issues in play. On the survey, 60% of teachers reported that their students needed coaching to notice and reproduce the chunking patterns used in the models. Chunking words together is an important skill that is emphasized in DynEd (Knowles, 2008), especially when students are repeating long sentences with multiple clauses. During Focus Group C, Sophie discussed the students' frustration when they cannot successfully record long sentences:

They know they are supposed to repeat, but they don't do chunking. They want to prove they can do it all . . . and they are making mistakes because they are trying to do too much. They are getting frustrated because they are not taking it in recognizable amounts.

<u>Pronunciation and intonation</u>. Two other factors affecting the quality of the students' recordings are pronunciation and intonation. On the questionnaire, Jane suggests "that pronunciation instruction would be useful, especially for students who are having trouble with the voice recognition component of DynEd." Pronunciation may not be the only problem. In the survey, 70% of the teachers thought their students needed coaching to notice and reproduce the intonation patterns used in the models. During Focus Group C, Sophie suggested using a splitter to plug in a second headset, which enables the teacher to monitor what a student is hearing and repeating. This makes it much easier to help students with pronunciation and intonation.

<u>Motivation</u>. Ninety percent of the teachers thought that their students needed weekly coaching to stay motivated throughout the semester. All of the teachers had observed students who seemed frustrated when they had to review the same lesson several times. Enya commented that the biggest challenge was "keeping their interest and getting them to buy into the whole process of how to use DynEd properly." Similarly, Rowland (2001) reported on students' lack of enthusiasm for repeating lessons multiple times when they felt that they understood the material. In these situations, teachers need to explain basic language learning principles (Hubbard, 2004) so that students understand the theory behind DynEd's recursive design (Knowles, 2008).

During Focus Group C, the teachers discussed the student dropout rate at the beginning of the semester. Ellen commented: "Not even so much at the beginning—even as they get farther into it and aren't feeling success or aren't feeling good about themselves." On the survey, Mimi made a similar observation:

I think the students who truly like to study with DynEd also really understand how to use it well. For many, it can take quite a while to get to this point. Many students would choose to quit before they really understood the way it all works. These observations once again confirm the need for ongoing learner training that helps students develop effective CALL strategies (Hubbard, 2004; Kolaitis et al., 2006).

<u>Study Records</u>. Some of the students' frustration seemed to be related to use of their DynEd Study Records. All of the teachers reported that their students needed coaching to use their Study Records to determine where they should work in the program. On the survey, Mimi explained the type of instruction that DynEd facilitators should provide for the students:

An understanding of what skills this program can improve. The facilitators should provide direction in how to interpret students' scores and data in the Records Manager. Beyond that they should help students understand how to use this information to determine a learning path for themselves—both with DynEd as well as other material.

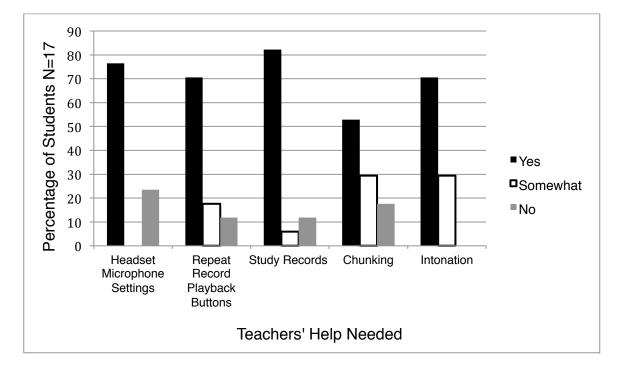
#### Students' Perceptions of DynEd's Practicality

<u>Technology use</u>. Like the teachers, the majority of students surveyed had positive attitudes about using technology for language learning. In the study group, 64.7% knew how to use a computer before they came to the workshop and 23.5% had some computer skills. Only 11.8% reported that they did not know how to use a computer before they came to class. Even so, these two students reported that using DynEd was a positive or somewhat positive experience for them.

Learning to use DynEd. Five of seventeen students (29.4%) who completed the survey reported that in the beginning DynEd was easy to use without help. However, four of these students reported that they had used DynEd for 2-3 semesters, so their responses may reflect their current perceptions rather than their first perceptions of using the software. The majority of students (58.8%) reported that DynEd was somewhat easy to use without help while the remaining 11.8% reported that it was not easy. Bingham and Larson (2006) observed that it takes time for students to learn how to use CALL effectively. During Focus Group A, Hana, level 2, commented that it took one month to really understand how to use the program while Akram, level 4, said he was not comfortable with the program even after one semester. Forty-seven percent of the students responded that the DynEd videos were helpful, which was more positive than the teachers' response.

<u>Teachers' help</u>. Even those students who found it somewhat easy to use DynEd acknowledged that they needed their teachers' help, which confirmed the teachers' perceptions. All of the students felt that the teachers were helpful in showing them how to use DynEd and in showing them which DynEd course to use. All but 11.8% reported that

they needed (47%) or somewhat needed (41.2%) their teachers' help all semester. The majority of students reported that they needed their teachers' help for checking headset and microphone settings (76.5%), for using the repeat, record, and playback buttons (70.6%), for checking their study records (82.3%), for learning to do chunking (52.9%), and for improving their intonation (70.6%). Several students in the focus groups commented that speech recognition was one of their favorite features of DynEd but also the most challenging to use. Lucas, level 4, expressed his frustration with speech recognition tasks: "Sometimes you say correct word and computer say no." Marta, level 4, had more success with speech recognition after her teacher helped her with her intonation. Figure 6 summarizes the type of help the students needed from their teachers.



*Figure 6*. How students perceived their need for help while using DynEd in adult ESL workshops.

Answers to the open-ended questions on the survey indicated that students would also like more help from their teachers in the following areas: pronunciation (N=4),

grammar (N=2), improving vocabulary (N=2), and writing good sentences (N=1). These requests for help demonstrate the need for teachers to maintain an active presence in the CALL environment, helping and encouraging students when needed (Bingham & Larson, 2006).

Motivation. Even though 64.7% of the students said they learned better when they repeated the same module, the majority still reported some degree of frustration when they had to repeat a lesson several times. Seven of eleven students in the Focus Groups indicated that repeating the modules was boring. Edson, level 6, explained that he would not mind the repetition if the content were more challenging. The thing he liked least about DynEd was spending time trying to reach a certain completion percentage in a module that was not appropriate for him. In his words: "I don't have a choice—I have to reach a certain percentage to open a new module. I know everything. I can't learn much."

## Language Learning Potential

### Teachers' Perceptions of DynEd's Language Learning Potential

Chapelle defines the criterion of language learning potential as "the degree of opportunity present for beneficial focus on form" (Chapelle, 2001, p.55). An evaluation should consider the quantity and quality of the exercises, evidence of student learning in grammar, vocabulary, and pronunciation, and student test scores (Jamieson et al., 2005).

<u>DynEd's content and exercises.</u> Overall, the majority of the teachers expressed neutral opinions about DynEd's online activities. Figure 7 shows that they were the most positive about the variety of exercises provided in DynEd and the most negative about the focus on form. Only 20% of the teachers felt that the online exercises provided sufficient focus on form. Likewise, only 20% felt that the students' grammar skills had improved as a result of using DynEd. Fifty percent felt that the students' grammar skills had improved somewhat, and 30% felt their grammar skills had not improved.

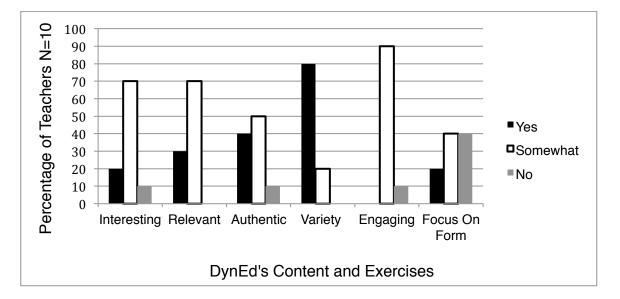


Figure 7. How teachers perceived the content and exercises in DynEd.

Jamieson et al. (2004) propose that providing input elaboration in the form of metalinguistic language and explicit instruction increases the language learning potential of CALL materials. Most of the teachers felt that the DynEd software and worksheets did not adequately draw the learners' attention to form. Consequently, 60% of the teachers introduced explicit grammar instruction to help students notice the forms in the DynEd modules, and 20% did this somewhat. Forty percent of the teachers also felt that it was important to correct the students' grammatical errors during extension activities, and 50% felt it was somewhat important.

Teachers' comments from the open-ended questions provided more insight. Sophie wrote that teachers should explain the grammar behind the lesson because "that is where DynEd is lacking." Lucy suggested that teachers "do weekly group work with different grammar issues." Eleanor emphasized the importance of using the language forms in the extension activities:

The extension activities should be directly related to the online content. Students hear a language form. Then the teacher models the same form in a small group. Then the students use that form to talk about their own lives. This is good, direct application.

On the survey, five teachers noted that students in their workshops had requested more grammar instruction and practice. Enya explained how grammar issues often affect the students' performance on Mastery Tests:

The students don't receive much structured grammar instruction from DynEd, especially in New Dynamic English, and they often express frustration about this. As I observe students taking the Mastery Tests, I often see them get tripped up on questions that involve their knowledge of English grammar.

<u>Students' mastery of the content</u>. Overall, the teachers' responses concerning their students' mastery of the DynEd content were not positive. When teachers were asked if their students usually scored 85% or higher after their completion percentage was high enough to unlock a Mastery Test, 50% of the teachers responded *somewhat* and 50% responded *no*. Only 10% of teachers thought their students had mastered the content in DynEd. The majority, 70%, thought their students had mastered the content somewhat while 20% thought their students had not mastered the content.

The statistics in the DynEd Records Manager support the teachers' perceptions. Figure 8 displays a screen shot of the DynEd Records Manager showing statistics for the 14 students who worked in New Dynamic English during the Spring 2015 semester. The Mastery Test average (MT-AVG) for the group was 64.2%, well below the 85%

benchmark for mastery. Five of the 14 students showed a MT-AVG below 70%.

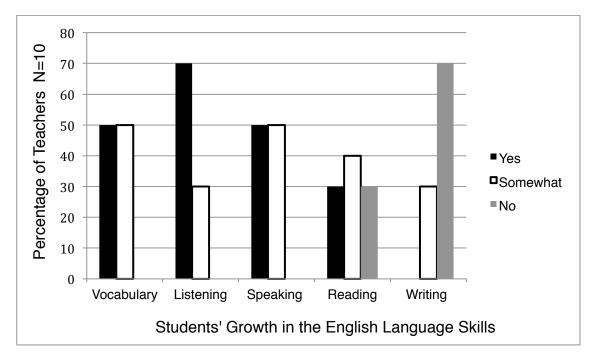
New Dyna Module 1 Module 6 Module 6 Module 1 Module 2 Module 2 Module 2 Module 5 Module 2 Module 5 Module 5 Module 5	M 2 6 6 3 3 1 5 2 5	PTL 0.5 0.5 0.2 0.0 0.7 0.0	Entin Days 22 10 7 9 1 20 17 3	MT-AVG 87.0 58.8 79.9 75.0 71.6 4.0 69.0	SS 0 -5 0 1 -4	Rep 626 919 1557 2297 53 1	4 100 186	Tra Mic 1228 2 936 1041 355	2 1073 1087	Glos	SR-C 377 587 637 29	SR-A 685 926 1513 245	SR % 55% 63% 42% 12%
Module 1 Module 6 Module 6 Module 2 Module 2 Module 2 Module 2 Module 5 Module 5 Module 5 Module 5	2 6 3 3 1 5 2	0.5 0.5 0.0 0.5 0.2 0.0 0.7 0.0	22 10 7 9 1 20 17	87.0 58.8 79.9 75.0 71.6 4.0	0 -5 0 1 -4	626 919 1557 2297 53	4 100 186	1228 2 936 1041	992 2 1073 1087		377 587 637 29	685 926 1513	55% 63% 42% 12%
Module 6 Module 6 Module 1 Module 2 Module 2 Module 5 Module 5 Module 5 Module 5	6 6 3 3 1 5 2	0.5 0.0 0.5 0.2 0.0 0.7 0.0	10 7 9 1 20 17	58.8 79.9 75.0 71.6 4.0	-5 0 1 -4	919 1557 2297 53	100 186	2 936 1041	2 1073 1087		587 637 29	926 1513	63% 42% 12%
Module 6 Module 1 Module 2 Module 2 Module 5 Module 5 Module 5 Module 5	6 3 3 1 5 2	0.0 0.5 0.2 0.0 0.7 0.0	7 9 1 20 17	79.9 75.0 71.6 4.0	0 1 -4	1557 2297 53	186	936 1041	1073 1087		637 29	1513	42% 12%
Module 1 Module 2 Module 1 Module 5 Module 2 Module 5 Module 5	3 3 1 5 2	0.5 0.2 0.0 0.7 0.0	9 1 20 17	75.0 71.6 4.0	1 -4	2297 53		1041	1087		29		12%
Module 2 Module 1 Module 5 Module 2 Module 5 Module 5	3 1 5 2	0.2 0.0 0.7 0.0	1 20 17	71.6 4.0	-4	53						245	
Module 1 Module 5 Module 2 Module 5 Module 5 Module 2	1 5 2	0.0 0.7 0.0	20 17	4.0				355	224				
Module 5 Module 2 Module 5 Module 2	5 2	0.7 0.0	17			1		555		1	191	707	27%
Module 2 Module 5 Module 2	2	0.0		69.0			1						
Module 5 Module 2			3		-8	74	2	36			1168	2184	53%
Module 2	5	10			-7	867	446	220			2	202	1%
		1.0	7	84.4	-5	773		518	470		172	567	30%
Mandada C.	2	0.0	31		-2	438	3	410	400		9	37	24%
Module 5	5	0.7	14	65.8	-7	252	43	49	59		162	285	57%
Module 3	3	1.2	93		-7	62		156	110		243	478	51%
Module 4	4		9	71.3	-3	2457	120	622	1169		271	478	57%
Module 4	4		8	39.1	-9	117	1	187	124	1	126	311	41%
	8 Module 3 Module 4 5 Module 4	Module 4 4	Module 4 4 0.5	Module 4 4 0.5 9	Module 4 4 0.5 9 71.3	Module 4 4 0.5 9 71.3 -3	Module 4 4 0.5 9 71.3 -3 2457	Module 4         4         0.5         9         71.3         -3         2457         120           5         Module 4         4         0.5         8         39.1         -9         117         1	Module 4         4         0.5         9         71.3         -3         2457         120         622           Module 4         4         0.5         8         39.1         -9         117         1         187	Module 4 4 0.5 9 71.3 -3 2457 120 622 1169 Module 4 4 0.5 8 39.1 -9 117 1 187 124	Module 4         4         0.5         9         71.3         -3         2457         120         622         1169           6         Module 4         4         0.5         8         39.1         -9         117         1         187         124         1	Module 4         4         0.5         9         71.3         -3         2457         120         622         1169         271           5         Module 4         4         0.5         8         39.1         -9         117         1         187         124         1         126	Module 4         4         0.5         9         71.3         -3         2457         120         622         1169         271         478           Module 4         4         0.5         8         39.1         -9         117         1         187         124         1         126         311

*Figure 8*. Screen shot of the DynEd Records Manager showing the students' Mastery Test averages (MT-AVG).

One issue related to low Mastery Test scores is that there is no easy way to help students with error correction because DynEd does not show students where they made their errors. This lack of feedback on the Mastery Tests was a complaint of some students in the Kim et al. (2014) study. Mimi expressed her concern about this situation during Focus Group C and in her written comments that follow:

I don't feel that DynEd explicitly teaches grammar, nor do I think the program suggests that it will do that. However, it also doesn't allow for teachers or students to see what items were wrong, thus making it next to impossible for any teacher to zero in on specific skills that are lacking and need teacher attention. This is not in the best interest of the teaching-learning process. Mistakes are one of the best ways to learn; however, one must be able to see the mistakes in order to learn from them.

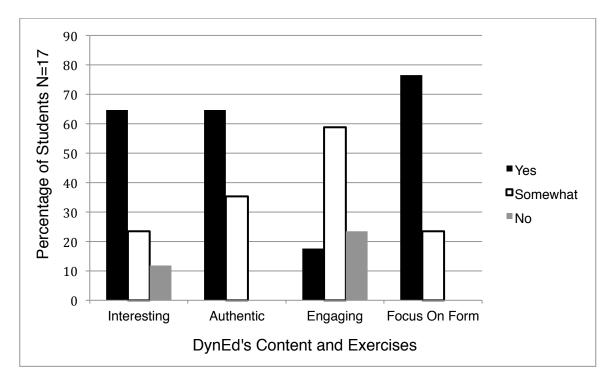
<u>Students' growth in the language skills</u>. In evaluating DynEd's effect on their students' language skills, the teachers were most positive about the students' improvement in listening. Half of the teachers also perceived growth in their students' vocabulary and speaking skills. Only reading and writing skills received negative (*no*) responses from some teachers. Some teachers may have perceived that the students' reading and writing skills did not improve since the majority of the students in our program used New Dynamic English, a fluency-building program, rather than Reading for Success. Figure 9 shows the teachers' perceptions of their students' growth in listening, speaking, vocabulary, reading, and writing skills.

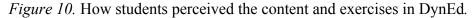


*Figure 9*. How teachers perceived their students' growth in the English language skills as a result of using DynEd.

Students' Perceptions of DynEd's Language Learning Potential

DynEd's content and exercises. Overall, the students' perceptions of the online activities were more positive than those of the teachers. Figure 10 summarizes the data.





The students also responded more positively to the questions about focus on form. Over 76% of the students thought that the exercises helped them learn about English grammar, and 82.3% reported that DynEd had helped them improve their grammar skills. These figures are quite a contrast to the low percentage of teachers (20%) who thought DynEd provided sufficient focus on form and the low percentage (20%) who felt that their students' grammar skills had improved as a result of using DynEd.

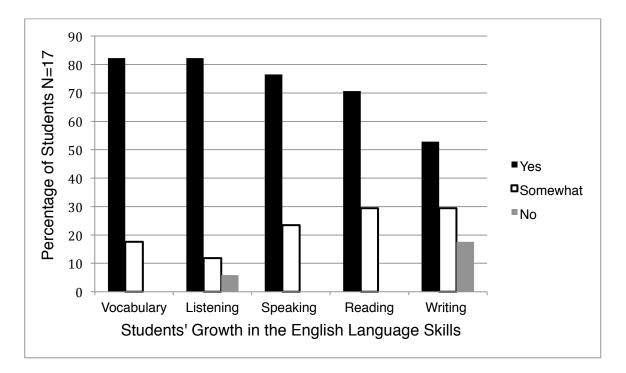
Despite their perceived improvement, students still requested more grammar instruction from their teachers. During Focus Group B, Edson, level 6, expressed a

preference for the teacher to help with error correction: "In a conversation group you give your opinion, but maybe your opinion is completely wrong in grammar and in structure."

<u>Students' mastery of the content</u>. Students' perceptions of their Mastery Test scores were also more positive but less accurate than those of the teachers. When the students were asked if they usually scored 85% or higher the first time a Mastery Test was unlocked, 47.0% responded *yes*, 41.2% responded *some*, and 11.8% responded *no*.

The DynEd Records Manager (See Figure 8) shows that only 2 out of 14 students (14%) maintained a Mastery Test average (MT-AVG) of 85% or better, the benchmark for mastery of the content. In spite of their low Mastery Test averages, 70.6% of the students reported that the Mastery Tests helped them with their learning, and 29.4% reported that the tests helped them somewhat. In Focus Group A, Eden, level 2, reported that the Mastery Tests were the most difficult part of using DynEd because she could not remember the content she had studied.

Students' growth in the language skills. In evaluating DynEd's effect on their growth in the English language skills, the students responded more positively than the teachers in all skill areas. Figure 11 shows the students' perceptions of their improvement in vocabulary, listening, speaking, reading, and writing skills. These perceptions of improved skills lend support to the findings of other DynEd studies with adults (Bingham & Larson, 2006; Brown et al., 2008; Chartrand, 2008; O'Connor and Gatton, 2004).



*Figure 11.* How students perceived growth in their English language skills as a result of using DynEd.

About half of the students perceived that their writing skills had improved as a result of using DynEd whereas 70% of the teachers perceived no improvement. This may be related to the ambiguity of the question on the survey, which did not specify the type of writing skills. Students may have been referring to improving their writing skills at the sentence level because many of DynEd's online exercises work on sentence construction. Teachers, on the other hand, may have been referring to improving writing skills at the paragraph and essay level, which is not a component of DynEd.

## Learner Fit

## Teachers' Perceptions of DynEd's Learner Fit

Chapelle defines learner fit as "the amount of opportunity for engagement with language under appropriate conditions, given learner characteristics" (Chapelle, 2001, p. 55). Evaluators should consider whether the material is at the appropriate difficulty level for learners to benefit and if the material is appropriate for the characteristics of the learners (Jamieson et al., 2005). This criterion is of primary importance in answering my third research question: Given Chapelle's Criteria for CALL Task Appropriateness, how do teachers and students at our institution perceive DynEd's appropriateness for the adult learners in our American technical college setting? As with any teaching resource, CALL courseware needs to fit the characteristics of the learners.

<u>Student placement</u>. One significant factor that affects learner fit is the students' initial placement in the software program. Responses to the open-ended question about student placement in DynEd ranged from Eleanor's comment that "student placement seems accurate" to Jane's comment that "the placement varied greatly." Figure 12 shows that the teachers thought the DynEd Placement Test did a better job of placing their NRS level 1 and 2 students than it did of placing their NRS level 3 and 4 or NRS level 5 and 6 students.

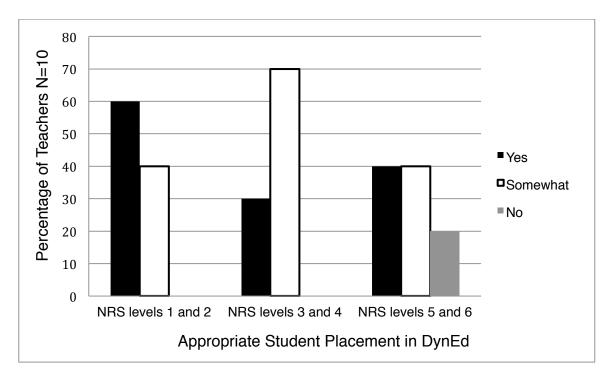
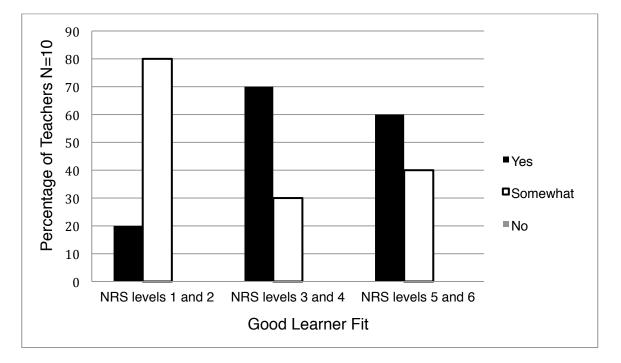
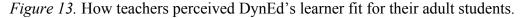


Figure 12. How teachers perceived their students' placement in DynEd.

When the teachers were asked if they thought the content in DynEd was at the appropriate difficulty level for their students, 20% responded *yes*, 70% responded *somewhat*, and 10% responded *no*. Even though teachers sometimes questioned their students' placement, 60% had never asked students to retake the DynEd General Placement Test. This may have contributed to some students' lack of interest in DynEd. CALL evaluators need to determine if the material is at the appropriate difficulty level for learners to benefit (Jamieson et al., 2005).

In the final assessment, the teachers' perceptions of learner fit did not align with their previous perceptions of student placement. Figure 13 shows a reversal of perceptions in all three groups.





Although 60% of teachers thought that their NRS Level 1 and 2 students were placed appropriately, only 20% thought that DynEd was a good fit for these students. The situation was reversed for the other levels. Only 30% of teachers thought that their NRS Level 3 and 4 students were placed appropriately, but 70% felt that DynEd was a good fit for them. Only 40% of teachers thought that their NRS Level 5 and 6 students were placed appropriately, but 60% felt that DynEd was a good fit for them.

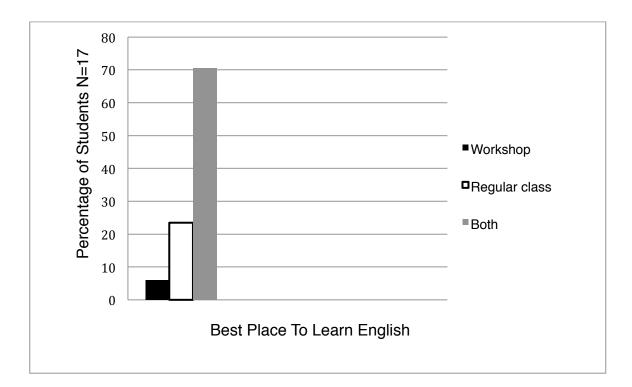
Unlocking tests, modules, and courses. After students completed the DynEd General Placement Test, all of the teachers advised their students on which DynEd course/s to use based on the students' individual interests and needs. None of the teachers relied exclusively on the DynEd Study Path Manager to unlock new lessons, new modules, and Mastery Tests for the students. Their responses indicated that 80% unlocked Mastery Tests for students who had made sufficient progress in the module, 50% unlocked Mastery Tests for students who wanted to retake a test, 80% unlocked new modules for students who were ready to move on, and 90% unlocked new DynEd courses to give students more choices. Enya explained the reason for unlocking modules: "We often unlocked more difficult modules or new programs for students who were becoming so unsatisfied with DynEd that we were afraid they'd stop attending the workshop."

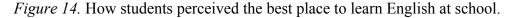
Student engagement. The topic of student engagement was discussed at length during the teachers' focus group. Their comments indicated that student engagement varied greatly from student to student. Ellen commented that students looked "isolated" when they sat for long periods of time working on DynEd. Enya observed that students were "most engaged when you pull them out in small groups," and Joe added that students enjoyed the opportunity "to socialize there." Cindy summarized these perceptions on the survey: "Conversation activities in small groups enhance students' engagement and overall desire for many to continue using DynEd." These observations support Neumeier's (2005) proposal to integrate CALL activities, which may be isolating, with activities that involve social interaction.

Even though most students seemed to enjoy discussion groups, some were more serious about making progress in the program. Lucy had students who preferred working on DynEd "to get a good detail report." Other students requested not to work in small groups on days that they wanted to pass a Mastery Test.

#### Students' Perceptions of DynEd's Learner Fit

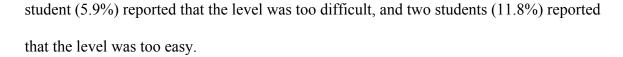
<u>Technology use</u>. Figure 14 shows that when students were asked about the best place for them to learn English at school, 1 student (5.9%) chose "in the workshop," 4 students (23.5%) chose "in a regular class," and 12 students (70.6%) chose "in both the workshop and a regular class." During Focus Group B, Edson, level 6, explained the benefits of learning in the two environments: "DynEd judges if our pronunciation is good or not. On the other hand, in the regular class we have a chance to listen and practice our English. I think both systems are complementary." The students' responses were surprising to the teachers and assistants in Focus Group C. Six out of the seven thought the students would have chosen "in a regular class" because they preferred the interaction, subject matter, consistency, and organization of the traditional classroom.





Similarly, when students were asked about the best way for them to learn English, 88.2% chose "using both a computer and books." Perceptions of DynEd were somewhat lower, with 58.8% reporting that they liked using DynEd to learn English, 29.4% reporting that they liked it somewhat, and 11.8% reporting that they did not like it. The two students who did not like using DynEd both had computer skills before they started the program. Marta, level 4, explained her preference for learning English in a regular class: "For me, it's more easy to learn. The workshop gets me tired. It's boring for me. I like conversation."

<u>Student placement</u>. Evaluators should consider whether the material is at the appropriate difficulty level for learners to benefit (Jamieson et al., 2005). Figure 15 indicates that most students in this study felt that the level of difficulty in DynEd was appropriate. Fourteen students (82.3%) reported that the level of DynEd was good, one



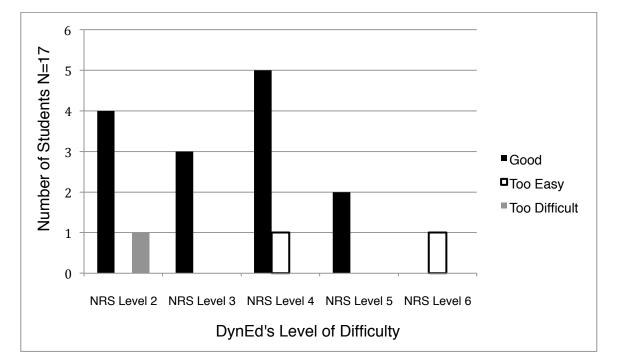


Figure 15. How students perceived the difficulty level of DynEd.

<u>Student engagement</u>. The majority of students (64.7%) reported that the DynEd lessons were interesting. In an open-ended question on the survey, students listed a variety of reasons that they liked DynEd: listening (N=5), recording my voice (N=5), spelling (N=2), repeating and memorizing quickly (N=1), tests and dictation (N=1), vocabulary (N=1), reading (N=1), writing (N=1), questions (N=1), The Lost Secret (N=1), and everything (N=1).

### Meaning Focus

## Teachers' Perceptions of DynEd's Meaning Focus

Chapelle defines meaning focus as "the extent to which learners' attention is directed toward the meaning of language" (Chapelle, 2001, p. 55). An evaluation should consider whether the students understand or remember the content (Jamieson et al., 2005).

<u>DynEd's worksheets and extension activities</u>. Overall, the teachers did not have positive perceptions of the DynEd worksheets or extension activities. Only 30% of the teachers thought that the DynEd worksheets helped students remember the content in the modules. Forty percent thought the worksheets helped somewhat, and 30% thought the worksheets did not help. On the questionnaire, Enya commented that students often had no interest in doing the extension worksheets.

In addition to worksheets, DynEd provides other extension activities to extend and personalize the content in the online modules. Thirty percent of the teachers thought the extension activities provided by DynEd were beneficial, 60% thought they were somewhat beneficial, and 10% thought they were not beneficial. Only 20% thought that the extension activities needed to be directly related to the DynEd modules that the students were studying, and 70% thought they should be somewhat related.

On the survey, Beth expressed the challenge of doing extension activities with multilevel groups: "It is really hard to group students so that the activities directly relate to what they are studying online." Consequently, 80% of teachers frequently used their own extension activities. In Focus Group C, Sophie commented that she "spent an enormous amount of time thinking outside of the box" to find lessons and activities to reinforce DynEd. Jacque made a similar comment on the survey: "I didn't really like the extension activities provided by DynEd. I tried to use my own and related them to what the students were focusing on at the time. Students commented that they liked the conversation cards better than anything else."

#### Students' Perceptions of DynEd's Meaning Focus

DynEd's worksheets and extension activities. The students' perceptions about the DynEd worksheets were more positive than the perceptions of the teachers. Compared to 30% of the teachers, 82.3% of the students thought that the worksheets helped them remember what they learned and 52.9% reported that they did a good job on the worksheets.

Students were especially motivated about using the language to practice with other students in the workshop. The majority (70.6%) enjoyed conversation practice and 29.4% enjoyed it somewhat. Likewise, 70.6% want to have conversation practice twice a week, and 29.4% want it once a week. In response to the open-ended question about what other activities they would like in the workshop, ten students requested more conversation practice with teachers, students, and other Americans.

#### Authenticity

### Teachers' Perceptions of DynEd's Authenticity

Chapelle defines authenticity as "the degree of correspondence between the learner activity and the target language activity of interest to the learners outside of class" (Chapelle, 2001, p. 55).

When the teachers were asked if the content in DynEd was relevant for their students, 30% responded *yes*, and 70% responded *somewhat*. They expressed varying opinions in the open-ended question about DynEd content. On a positive note, Beth wrote: "There is a lot of variety, particularly at the upper levels. Students were particularly appreciative when Reading for Success was introduced." Betsy wrote the

caveat that the "content was relevant if the student was placed in the correct level." Enya had concerns about the interest level of the content:

I think the higher-level students were often placed in modules that were too low for them in New Dynamic English. Overall, I think most of the topics and repetition of those topics was boring for all students regardless of their levels. When teachers were asked if the language used in DynEd was authentic, or like that used in our community, 40% responded *yes*, 50% responded *somewhat*, and 10% responded *no*. Eleanor, who thinks the language in DynEd is authentic, wrote that the content is "normal, natural language."

#### Students' Perceptions of DynEd's Authenticity

Once again the students' perceptions were more positive than the teachers' perceptions. When the students were asked if the English they learned in DynEd was useful for them outside of class, 64.7% responded *yes* and 35.3% responded *somewhat*. Several students in the focus groups commented that DynEd helped them understand English that they need outside of class. Akram, level 2, commented that he felt more comfortable speaking in places such as the hospital, office, or supermarket. Renata, level 4, said that after using Reading for Success she could understand her daughter's homework better. She also commented that DynEd helped her learn words that she used in her math class.

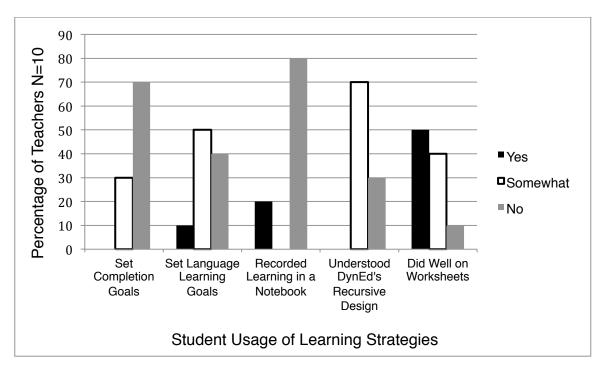
#### Impact

### Teachers' Perceptions of DynEd's Impact

Chapelle defines positive impact as "the positive effects of the CALL activity on those who participate in it" (Chapelle, 2001, p. 55). Evaluators should consider whether

the software has created a sound pedagogical practice, helped students learn about strategies, and created a positive learning experience (Jamieson et al., 2005).

Learning strategies. DynEd studies have documented the positive effects of setting goals (Bingham & Larson, 2006; Brown et al., 2008) and using journals to reflect on the learning that takes place during CALL (Hubbard, 2004; Kolaitis et al., 2006). Figure 16 shows that very few teachers thought that their students set completion goals, set language learning goals, or used journals to reflect on their learning. It also shows that the teachers did not think their students completely understood DynEd's recursive design.

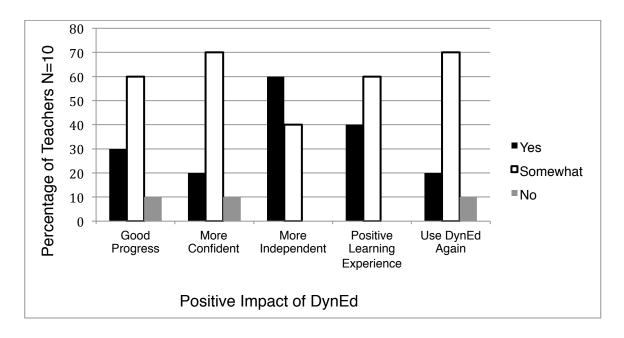


*Figure16*. How teachers perceived their students' use of learning strategies while using DynEd.

<u>Positive impact</u>. Overall, most teachers were not very positive about their students' progress in terms of the number of modules they completed during the Spring 2015 semester. Similarly, most did not perceive a noticeable increase in student confidence levels. During Focus Group C, Mimi commented that DynEd might increase student

confidence levels "for those that are willing to buy in to speaking repeatedly." The teachers' comments were more positive about their students' growth as independent learners. Enya saw growth in the lower level students who come in with no computer skills. After using DynEd, "they start feeling empowered and more comfortable" with technology. Sophie commented that students begin "to own their progress" and "know that they have to show up and use their hour or two hours well." Joe pointed out that studying DynEd at home is also "an indication of their independence."

The teachers' final assessment of DynEd was generally neutral. Only 40% of the teachers felt that using DynEd was a positive learning experience for their students, and only 20% thought their students would want to use DynEd for another semester. Figure 17 summarizes the teachers' perceptions of DynEd's impact.



*Figure 17*. How teachers perceived DynEd's impact in terms of their students' progress, confidence levels, independence, learning experience, and desire to use DynEd again.

<u>Final recommendation</u>. Despite their generally neutral perceptions, 50% of the teachers recommended that we continue using DynEd in our ESL workshops, and 30% recommended that we continue using it somewhat. The other 20% did not recommend using DynEd again.

# Students' Perceptions of DynEd's Impact

Learning strategies. Figure 18 summarizes the students' use of learning strategies. Contrary to what the teachers perceived, 29.4% of the students reported setting completion goals for the number of modules they wanted to finish, 82.3% reported setting language learning goals, and 70.6% reported using a notebook to record their learning. The divided perceptions of teachers and students support Chapelle's (2008) assertion that the use of technology distances the teacher from the learning process; consequently, the teacher does not have direct knowledge of the learners' strategies and working styles.

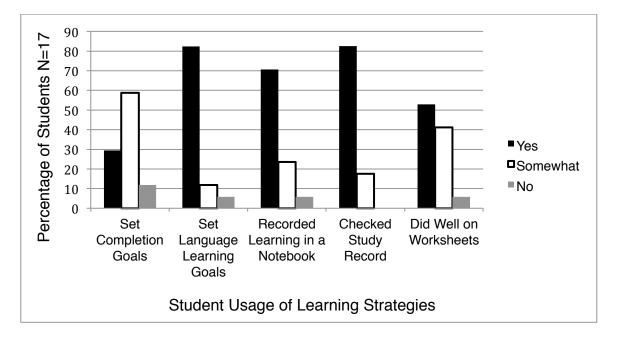
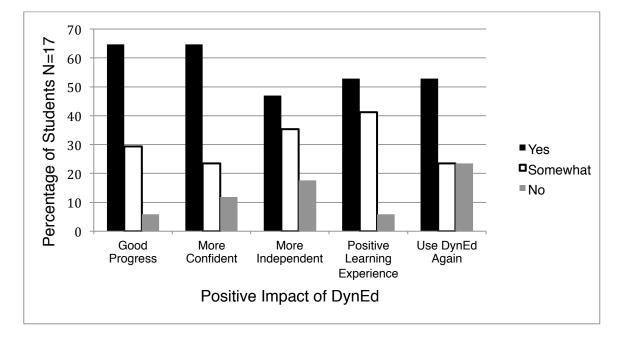
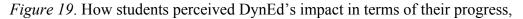


Figure 18. How students reported their use of learning strategies while using DynEd.

<u>Positive impact</u>. Figure 19 summarizes the students' perceptions of DynEd's impact. The students' perceptions of their progress in DynEd and their confidence levels were more positive than the perceptions of the teachers. While only 30% of teachers felt their students had made good progress in DynEd, 64.7% of students felt they had made good progress. While only 20% of teachers thought their students were more confident about speaking English, 64.7% of students reported feeling more confident. However, students' perceptions of their growth as independent learners were less positive than their teachers' perceptions. Whereas 60% of teachers thought their students showed growth in this area, only 47.0% of students responded positively. In terms of the overall experience, more than half of the students felt that DynEd was a positive learning experience.





confidence levels, independence, learning experience, and future use.

<u>Final recommendation</u>. In the final analysis, nine students (52.9%) reported that they would like to use DynEd again, which closely corresponds to the percentage of

teachers that recommended keeping DynEd. The NRS levels of these nine students range from level 2 to level 5. These students have diverse nationalities, language backgrounds, levels of education, and years of English study. Appendix D summarizes the students' demographics and their responses about using DynEd again. While I was analyzing these data, I could find no common factor that might indicate why DynEd is a good fit for this group of nine students.

## Summary

In this chapter I presented the results of my data collection. The results show that student perceptions of DynEd were generally more positive than teacher perceptions in relation to language learning potential, learner fit, meaning focus, authenticity, and positive impact. In relation to practicality, both groups were in agreement that students needed their teachers' help to use this courseware effectively. In Chapter Five I will discuss my major findings, their implications, and suggestions for further research.

## CHAPTER FIVE: CONCLUSION

In this case study I sought answers to three research questions. My first two questions pertain to the role of the teacher as a facilitator of CALL: What are the teachers' perceptions of their training and their readiness to facilitate the DynEd Multimedia Courseware in the ESL workshops at our institution? What do teachers and students at our institution perceive to be the role of the facilitator in supporting our adult learners who are using the DynEd Multimedia Courseware? My third question drew from Chapelle's (2001) Criteria for CALL Task Appropriateness and the questions used by Jamieson et al. (2005) to operationalize these criteria: Given Chapelle's Criteria for CALL Task Appropriateness, how do teachers and students at our institution perceive DynEd's appropriateness for the adult learners in our American technical college setting?

In this final chapter I report the findings related to each of my research questions. I discuss the limitations of this study, its implications for our ESL program, and the need for further research.

### Major Findings

## Research Question 1

What are the teachers' perceptions of their training and their readiness to facilitate the DynEd Multimedia Courseware in the ESL workshops at our institution?

Data from the teachers' questionnaire and focus group interview confirmed my own experience of facilitating DynEd. The teachers in my study found that the role of a CALL facilitator is not an easy one, especially for teachers who are new to the CALL environment. Only a small percentage of the teachers thought that their duties as a DynEd facilitator were clear from the start. Likewise, only a small percentage of teachers found it easy to facilitate DynEd the first semester they used it. While DynEd's online Teacher Training Course and Instructor's Guides provide a good overview of the courseware, they did not sufficiently prepare the teachers to use the Records Manager to guide and monitor student progress. Over half of the teachers reported that they would like some additional training to use the Records Manager more effectively. This corroborates findings from several studies in which teachers found the DynEd Records Manager difficult to master (O'Connor & Gatton, 2004; Rowland, 2001; Şengel et al., 2011).

Several researchers emphasize the need for teacher training and support when implementing a complex program such as DynEd (Baş, 2010; Brown et al., 2008; O'Connor & Gatton, 2004; Rowland, 2001). Pairing new teachers with experienced facilitators is highly recommended, especially during the first few weeks of the semester (Brown et al., 2008). Although several teachers in this study benefitted from working with experienced facilitators, others had little or no opportunity for this type of training.

Finally, only half of the teachers in this study reported that they enjoyed their role as DynEd facilitators while half reported that they enjoyed it somewhat. Considering that this dedicated group of teachers usually displays a great deal of enthusiasm for teaching, this finding was disappointing. The lukewarm response of half the teachers implies that teachers in this study would have benefitted from further training and support before stepping into the role of a CALL facilitator.

#### Research Question 2

What do teachers and students at our institution perceive to be the role of the facilitator in supporting our adult learners who are using the DynEd Multimedia Courseware?

The perceptions of teachers and students in my study confirm the importance of the teacher's role as a facilitator in the CALL environment. Their perceptions support the findings of researchers who contend that the role of the facilitator in CALL is significant and multifaceted (Chapelle, 2008; Hubbard, 2004; Jones, 2001; Stepp-Greany, 2002). The role of the facilitator extends far beyond the role of a technician. As a facilitator, the teacher must train, guide, and motivate a diverse group of students who are working independently in multiple modules in a variety of online courses. The teachers in my study found this to be a challenging role, which is not surprising since managing the high degree of individualization in the CALL environment requires a great deal of teacher flexibility (Warschauer & Healy, 1998).

In my study, all of the teachers and the majority of the students felt that the students needed weekly coaching to use DynEd effectively. Likewise, both groups reported that students needed help using their Study Records to make their DynEd practice more efficient. As in other DynEd studies (Brown et al., 2008; Hegelheimer & Tower, 2004), the teachers reported that students needed training and constant reminders to use DynEd's help options to record and monitor their speech. These findings lend support to Hubbard's (2013) argument that learners need initial scaffolding and ongoing learner training to succeed in the CALL environment. Like students in other studies (O'Connor & Gatton, 2004; Rowland, 2001), the students in my study found it

challenging to make acceptable recordings using DynEd's speech recognition feature. Thus, another role of the teachers was helping students with the pronunciation, intonation, and chunking skills that they needed to improve their speech.

Chapelle (2001) evaluates the language learning potential of a CALL activity by the extent to which it provides sufficient opportunity for the learners to focus on form. Because DynEd does not provide explicit grammar instruction or feedback that specifies the learners' errors, the majority of teachers and many of the students in my study felt that it was important for teachers to supplement DynEd with grammar instruction. Some teachers felt that explicit grammar instruction would help students notice the grammar forms in the DynEd modules, which might result in their attaining higher Mastery Test scores. Their opinions are supported by those is the field who suggest that learners are more likely to acquire linguistic input when their attention is drawn to linguistic features (Jamieson et al., 2004; Robinson, 1995; Schmidt, 1990; Sharwood Smith, 1993).

Teachers and students alike saw great value in conversation practice that allowed students to use the target language in face-to-face interaction. DynEd was designed to be part of a BL program, and Knowles (2008) proposes that using the language in a social context is an important part of acquisition. While a few teachers felt that the DynEd face-to-face extension activities were beneficial, the majority of teachers preferred to create their own extension activities. Only two teachers felt strongly that extension activities should be directly related to the online content that the students are studying. Their views are supported by research indicating that student motivation is increased when students perceive a connection between the CALL mode and the face-to-face mode (Brown et al., 2008; Neumeier, 2005; Warschauer, 1996).

The teachers also found it necessary to provide students with constant encouragement to keep their motivation levels high, which is consistent with findings of other DynEd studies (Bingham & Larson, 2006; Brown et al., 2008; O'Connor & Gatton, 2004). Some teachers in my study reported cases in which students who felt frustrated or bored stopped attending the workshop. In contrast, students who understood how to use DynEd effectively were more motivated to complete the semester and to register for subsequent workshops to continue using DynEd.

Although the teachers in this study trained students to use several important learning strategies, their responses imply that they did not help students set completion goals. Since this practice has resulted in more learner engagement and increased achievement in other programs using DynEd (Bingham & Larson, 2006; Brown et al., 2008; O'Connor & Gatton, 2004), teachers in our workshops should consider using this strategy with our students. There was also little indication that the teachers helped students focus on specific language learning goals. Hubbard (2004) asserts that learners need to understand basic language learning principles so that they can connect the CALL activity to a learning objective. Applying this principle may be another way for the teachers to motivate our students and increase their language learning potential. Research Question 3

Given Chapelle's Criteria for CALL Task Appropriateness, how do teachers and students at our institution perceive DynEd's appropriateness for the adult learners in our American technical college setting?

<u>Practicality</u>. The quantitative and qualitative data collected during this study indicate that both teachers and students had positive perceptions of using technology to

assist language learning. Despite technology glitches, most teachers feel that our workshop is properly equipped to support DynEd. However, most teachers reported that the technical support at our institution was only somewhat adequate, which leaves room for improvement in both the reporting and resolving of technical issues.

The majority of teachers and students agreed that the interface of DynEd was not easy for students to use initially. Both groups reported that students needed the teachers' support to use the DynEd courseware effectively, which corroborates the findings of other DynEd studies (Bingham & Larson, 2006; Brown et al., 2008; Hegelheimer & Tower, 2004; O'Connor & Gatton, 2004; Rowland, 2001). However, both teachers and students reported that with training and practice DynEd became easier for teachers to manage and students to use. Based on these findings, it appears that we have sufficient resources to support the use of DynEd in our workshops.

Language learning potential. The teachers and students had different perceptions of DynEd's focus on form. Overall, the majority of students felt that DynEd had helped them improve their grammar skills and the Mastery Tests had helped them with their learning. In contrast, the majority of the teachers expressed either neutral or negative opinions about DynEd's language leaning potential and focus on form. The majority did not perceive a substantial improvement in their students' grammar skills or mastery of the DynEd content. Moreover, the DynEd Records Manager provides evidence that some students are not mastering the content in the modules. This empirical evidence indicates that DynEd does not provide sufficient focus on form. Based on Chapelle's (2001) argument that language learning potential should be the primary focus of CALL, the evidence indicates that DynEd does not meet this criterion. In regard to the other language skills, both the teachers and the students perceived that the students' language skills had improved in vocabulary, listening, speaking, and reading. Again, the students' perceptions were more positive in all skill areas. Overall, the evidence for DynEd's language learning potential in skills other than grammar is positive.

Learner fit. Initially, the teachers did not have positive perceptions of DynEd's placement of students in NRS levels 3 through 6. In contrast, the majority (82.3%) of the students reported that the level of DynEd was appropriate. Chapelle (2008) asserts that the use of technology distances the teacher from the learning process; therefore, it may be safe to assume that the students' perceptions are more reliable. Also, the questionnaire indicates that in the final assessment teachers were considerably more positive about learner fit for students in NRS levels 3, 4, 5, and 6. However, their perceptions were less positive for students in levels 1 and 2, indicating the need for further evaluation of DynEd's use with lower proficiency students. The evidence indicates that for the criterion of learner fit, DynEd is an appropriate program for most students.

<u>Meaning focus</u>. The teachers' perceptions of the DynEd content, worksheets, and extension activities were less positive than the students' perceptions. Although most teachers were positive about the variety of online exercises, most did not think DynEd's content was especially interesting or engaging for their students, and most did not feel that the worksheets helped the students remember the content. In contrast, more than half of the students felt that the DynEd lessons were interesting and more than 80% thought that the worksheets helped them remember the content. Since the students have more knowledge about the content inside the software, I believe their perceptions have the most significance. Therefore, I feel that the evidence indicates that DynEd is an appropriate program in terms of meaning focus.

Authenticity. Most teachers had neutral perceptions of DynEd's relevancy for their students and the authenticity of the language. Once again, the students' perceptions were more positive with some students citing examples of how the language in DynEd helped them in school and in the community. During the teachers' focus group interview, most discussion focused on New Dynamic English, a fluency-building program. Only one teacher mentioned the variety of courses provided in the DynEd courseware, which may indicate that some teachers are not familiar with the content of the other courses. Teachers may have a more positive viewpoint of DynEd's relevancy and authenticity if they become familiar with these programs. The evidence provided by the students indicates that they perceive the language in DynEd to be useful and authentic.

<u>Positive impact</u>. Overall, the teachers had neutral or negative perceptions of their students' use of learning strategies. Their perceptions of DynEd's impact on their students' progress, confidence levels, and learning experience were neutral, although they were more positive about their students' growth as independent learners. Only a few teachers thought students would definitely want to use DynEd again. Overall, the students were very positive about their use of most learning strategies and about the positive impact of DynEd.

<u>Final analysis</u>. In the final vote, both the teachers and the students were evenly divided about the continued use of DynEd. Half of the teachers recommended that we continue using the courseware, and slightly more than half of the students indicated that

105

they wanted to use DynEd again. Between 20% and 30% in each group voted to use it somewhat, and 20% in each group voted not to use the program again.

Evidence from the questionnaires and focus group interviews indicates that DynEd is a good fit and an appropriate program for many but not all of our students. As facilitators become more comfortable managing the courseware and more familiar with its content, they may perceive DynEd more positively. Recommendations for the continued use of DynEd are presented in the implications.

### Limitations

One limitation of this study was the amount of time that elapsed between the student's use of the DynEd Multimedia Courseware in the spring and the actual collection of data in the summer. This seven-week time gap may have affected the students' recall and perceptions of the program. In addition, the sample group for the questionnaire was limited to the small number of students who were available to complete the survey during the summer. The DynEd Records Manager reported that 216 students used the courseware at our campus during the Spring 2015 semester, but only 17 students participated in the survey research. Although the sample group was representative of the diverse ESL student population at our campus, a larger sample group would have provided more reliable statistical data to guide our decision about extending the DynEd contract. Also, due to the small number of participants and the descriptive rather than statistical nature of the data, the results from this study may not be generalized.

Another limitation was related to the Google survey tool that I used to create my questionnaires. Although the initial process of creating the questionnaires was quite

manageable, I discovered a glitch when I tried to remove the responses of four students who had not used DynEd during the period stipulated for the study. I discovered that it was not possible to remove individual responses from the Google spreadsheet or the final summary report. Consequently, I had to remove the responses of these four students manually and recalculate the percentages on the summary report. When I checked Google online help, I found several complaints about this glitch in the survey tool.

## Implications

### **Recommendations for Teacher Training**

Research in the field documents the complex nature of the CALL environment and the need for teachers to be adequately trained to work in this environment (Bañados, 2006; Chapelle, 2008; Hubbard, 2004; Jones, 2001; Kolaitis et al., 2006; Stepp-Greany, 2002; Warschauer & Healey, 1998). It is essential that each of our ESL workshops be staffed with sufficient personnel to support the students, especially while they are in the initial phase of learning how to use the software. Therefore, as we discuss the possibilities for the continued use of DynEd in our ESL workshops, I propose the following recommendations:

- Provide teacher training in CALL by offering a professional development course that applies toward the continuing education requirements at our institution. A professional development course would provide the platform for teachers to learn new pedagogical, technical, and management skills that are needed in the CALL environment.
- Pedagogical training should focus on the main premise of CALL: learning tasks need to be developed around sound pedagogical decisions that use

technology to deliver meaningful language learning content (Chapelle, 2008; Hubbard, 2008; Tai, 2015). Teachers should discuss how to apply Hubbard's (2004) principles for learner training to increase their students' language learning potential in the CALL environment.

- Technical training should cover the management of sound devices and the
  process of submitting online help requests to IT personnel. Training should
  also provide hands-on practice with the DynEd Records Manager, which
  includes finding students in the DynEd database, transferring students, adding
  new students, administering the General Placement Test, monitoring student
  progress, accessing class reports, accessing student detail reports, and
  unlocking tests, modules, and courses.
- Management training should include pairing teachers who are new to the workshop with experienced mentors. The faculty should develop a workshop guide that provides new teachers with an overview of the workshop environment, training and support documents, and summaries of the software programs and online resources available to the students in our workshop. This project is underway under the guidance of our Instructional Chair.
- Divide the students in each workshop into subgroups and assign each teacher a group to coach and monitor for the entire semester. Managing 20 to 40 students in a workshop is a time-consuming task and an inefficient use of time if two or three teachers are tracking the same students. Tracking a smaller group allows the teacher to spend more time coaching individual students and increases her awareness of those students' needs.

#### Recommendations for Learner Training

Despite all of the affordances of multimedia CALL, research indicates that learners need to develop better strategies for engaging with language-learning software (Bañados, 2006; Cárdenas-Claros & Gruba, 2009; Chapelle, 2008; Figura & Jarvis, 2007; Hegelheimer & Tower, 2004; Hubbard, 2004, 2013). To help our students use DynEd more effectively, I propose the following recommendations:

- Create and utilize a leaner needs survey to determine the specific language learning goals of the students. The DynEd Multimedia Courseware includes a variety of programs that focus on specific language skills at different levels of proficiency. Introduce the appropriate program, and let the learners work in the program for several weeks. Schedule a conference with each individual learner to assess if the program is a good fit. If necessary, make adjustments by opening new modules or new courses that better address the learner's proficiency, learning goals, and interests.
- Use Hubbard's (2004) cyclic approach to teach students new skills and to review those skills in a cycle to aid retention. Teach learners the strategies needed to use DynEd effectively. This includes explaining the structure of the modules and the recursive design of DynEd.
- Help students set specific language learning goals for the semester. Make use of Hubbard's (2004) second principle to teach students basic language learning principles so that they can connect their DynEd practice to specific learning objectives.

- Help students set reasonable completion goals to encourage them to become more accountable for their progress. Ask students to use journals to record their language learning goals and to reflect on them weekly by sharing them with the teacher and other students in their group. These methods may improve the students' perceptions of becoming independent learners.
- Connect the CALL mode to the face-to-face mode. Provide students with explicit grammar instruction that focuses on form. Use the DynEd Instructor's Guides to become familiar with the content in each module. During the faceto-face extension activities, introduce the new grammar structures that students will encounter in the modules they are practicing. After students practice online, use these forms again during the face-to-face conversation practice. Use the DynEd worksheets to review these structures and the vocabulary in the modules before the students take the Mastery Tests.

#### Further Research

This case study provided insight into the perceptions of a small group of learners at our institution. Further studies should be conducted at all four campuses of our institution to get an all-inclusive picture of the students' perceptions of DynEd. If student responses indicate that it is a valuable tool for helping them achieve their language learning goals, we should extend our contract. If not, we should begin the process of evaluating other CALL programs that may better meet our students' needs.

Another situation that warrants investigation is the variation in student use across the four campuses. The DynEd Records Manager reports the following data for the Spring 2015 semester:

- Campus one: 216 active students; 3169 study hours; AVG study time 14.67 hours;
- Campus two: 76 active students; 2353 study hours; AVG study time 30.96 hours;
- Campus three: 83 active students; 981 study hours; AVG study time 11.81 hours;
- Campus four: 34 active students; 148 study hours; AVG study time 4.35 hours. A study focusing on workshop management skills and learner training strategies may indicate which strategies being used by teachers at our institution are the most successful in maintaining student engagement and motivation in our workshops. This type of study may inform the objectives of a future professional development course.

A curriculum change that merits consideration is the decision to enroll more of our NRS level I students in DynEd. Teachers have reported great enthusiasm for DynEd among some of these beginning level students. However, it was noted that some students have made excellent progress in DynEd while others have made minimal progress. A study of these level 1 students may indicate the best instructional path for our students with low language proficiency.

#### Conclusion

As a teacher-researcher, I began this case study with certain biases that favored the *Side by Side* series of books that had been used in our ESL workshop for over twenty years. I approved of the grammar-based scope and sequence of the series, and I felt confident about teaching the content. When our program switched from *Side by Side* to DynEd, I was unsure of my responsibilities in the workshop. I was not prepared for the technological or the pedagogical challenges of implementing the courseware, which lessened my enthusiasm for DynEd. Throughout the course of this case study, I came to realize the affordances that multimedia has to offer. While I do not feel that New Dynamic English is a perfect program in terms of its scope and sequence, I appreciate the variety of exercises and language learning tasks that it provides. I have observed the positive impact that occurs when students use the program effectively by recording and listening to their own voices. In the final analysis, I feel that DynEd's greatest affordance is that it provides our diverse group of students with multiple courses to meet their language learning goals. In the final analysis, I vote to keep DynEd.

### **APPENDICES**

### Appendix A: Teachers' Survey about DynEd

I have shared this survey\* with you because you have given your consent to participate in my research study on TEACHER AND STUDENT PERCEPTIONS OF DYNED MULTIMEDIA COURSEWARE: A CASE STUDY IN AN AMERICAN TECHNICAL COLLEGE.

During an evaluation of computer software, the opinions and perceptions of both teachers and students are important. The data collected during this research study will be used to evaluate the use of DynEd Multimedia Courseware (DynEd) in our ESL workshops. Results of both the teacher and student surveys will be shared with teachers when the project is completed. All participants will remain anonymous.

In Part 1 you will evaluate your role as a facilitator in the ESL workshop. In Part 2 you will evaluate your students' performance during the Spring 2015 semester. In Part 3 you will share information about your teaching experience. Your input will be very helpful for my study, so please type any additional comments that you feel are relevant. I appreciate your taking the time to help me with this project.

Researcher: Gail Ellsworth Office Phone: 414-571-4649 Cell Phone: 414-852-3525

\*This survey was formatted and shared online with my colleagues using Google Forms. All answers in the close-ended questions were aligned vertically in a multiple-choice format. All open-ended questions were formatted with a text box for typing comments.

Part 1: Your Role as a DynEd Facilitator							
Number of Teachers	=10						
Technology Use	è						
	Y	es	Sor	newhat		No	
	N	%	N	%	N	%	
1. In general, are you comfortable using technology?	8	80%	2	20%	0	0%	
2. Do you enjoy using technology with your students?	8	80%	2	20%	0	0%	
3. Do you think that computer assisted language learning (CALL) is an important component of our curriculum?	9	90%	1	10%	0	0%	
4. Do you think that our workshops are properly equipped (computers, laptops, Internet, microphones) to support DynEd?	7	70%	3	30%	0	0%	
5. Do you think that our institution provides teachers with adequate technical support?	3	30%	6	60%	1	10%	
6. Do you think that DynEd provides sufficient teacher support?	3	30%	7	70%	0	0%	
7. Do you think that your workshops had sufficient personnel to facilitate DynEd?	6	60%	2	20%	2	20%	
8. Do you think that your students had sufficient time to use DynEd in the workshop?	8	80%	2	20%	0	0%	
9. Do you have any additional comments about tech type your comments in the box.	nology	use in	our v	vorksho	p? P	lease	

Facilitating DynEd						
	Yes		Sor	newhat		No
	N	%	N	%	N	%
10. Did you participate in one of the DynEd Professional Development Classes at our institution?	6	60%	1	10%	3	30%
11. Did you complete the online modules in the DynEd Teacher Training Course?	8	80%	2	20%	0	0%

12. Did you work along with an experienced	6	60%	3	30%	1	10%	
teacher in your workshops?							
13. Were your duties as a facilitator clear to you	2	20%	6	60%	2	20%	
when you first began facilitating DynEd?							
14. Did you find it easy to facilitate DynEd the first	2	20%	4	40%	4	40%	
semester that you used it?							
15. Would you like additional training to help you	4	40%	2	20%	4	40%	
use the DynEd Records Manager more							
effectively?							
16. Do you think the amount of weekly prep time	4	40%	6	60%	0	0%	
needed to facilitate DynEd was reasonable?							
17. Overall, do you feel that the DynEd workshops	7	70%	3	30%	0	0%	
that you facilitated ran smoothly?							
18. Did you enjoy your role as a DynEd facilitator?	5	50%	5	50%	0	0%	
19. Did you feel more confident about facilitating	10	100%	0	0%	0	0%	
DynEd after using it for a semester?							
20. Do you have any additional comments about your role as a DynEd facilitator? Please							
type your comments in the box.							
21. In addition to technology use, what type of instruction should the DynEd facilitators							
provide for the students? Please type your comments in the box.							

DynEd Content and Extension	on Ao	ctivities				
	Yes		Somewha			No
	N	%	N	%	N	%
22. Did you use the DynEd Instructor's Guides to become familiar with the online content in the DynEd units/modules that your students were using?	4	40%	5	50%	1	10%
23. Did you create and use your own personal student account to become familiar with the online content in the DynEd units/modules that your students were using?	6	60%	2	20%	2	20%
24. Do you think that the online content in the DynEd units/modules was interesting for your students?	2	20%	7	70%	1	10%
25. Do you think that the online content in the DynEd units/modules was relevant for your students? (Will the content be useful for them outside of class?)	3	30%	7	70%	0	0%

Part 2: Teachers' Observations	s abou	ıt Studen	ts			
Student Placeme	nt					
		Yes	Ĺ	Some		No
	N	%	N	%	N	%
41. Do you think that the DynEd Placement Test placed your NRS level 1 and level 2 students at the appropriate level in DynEd?	6	60%	4	40%	0	0%
42. Do you think that the DynEd Placement Test placed your NRS level 3 and level 4 students at the appropriate level in DynEd?	3	30%	7	70%	0	0%
43. Do you think that the DynEd Placement Test placed your NRS level 5 and level 6 students at the appropriate level in DynEd?	4	40%	4	40%	2	20%
44. Did students ever comment that the content of DynEd was too easy for them?	6	60%	4	40%	0	0%
45. Did students ever comment that the content of DynEd was too difficult for them?	0	0%	3	30%	7	70%
46. Did you ever ask students to retake the DynEd Placement Test in order to reassess their placement?	3	30%	1	10%	6	60%
47. Did you advise your students on which DynEd course/s to use based on their individual interests and needs?	10	100%	0	0%	0	0%
48. Did you rely exclusively on the DynEd Study Path Manager to unlock new lessons, new units, new modules, and unit tests/Mastery Tests for students?	0	0%	4	40%	6	60%
49. Did you unlock Mastery Tests for students because you felt they had made sufficient progress in the unit/module?	8	80%	2	20%	0	0%
50. Did you unlock Mastery Tests for students who wanted to retake a test because they scored below 85%?	5	50%	3	30%	2	20%
51. Did you unlock new units/modules because you felt that students were ready to move on?	8	80%	1	10%	1	10%
52. Did you unlock new courses (e.g., The Lost Secret, Clear Speech Works, Functioning in Business, etc.) for students to give them more choices?	9	90%	0	0%	1	10%

53. Do you have any additional comments about student placement in DynEd? Please type your comments in the box.

Student Trainin	ng					
	Yes		Soi	newhat		No
	N	%	N	%	N	%
54. Do you think that most of your students had basic computer skills before they came to class?	3	30%	7	70%	0	0%
55. Do you think the DynEd Multimedia Courseware was easy for your students to use initially?	1	10%	6	60%	3	30%
56. Do you think the DynEd videos in English were helpful for your students?	3	30%	6	60%	1	10%
57. Do you think your students needed weekly coaching to use DynEd effectively?	10	100%	0	0%	0	0%
58. Did your students need coaching to learn how to adjust the control settings for headsets and microphones?	9	90%	1	10%	0	0%
59. Did your students need coaching to use the repeat, record, listen, and repeat sequence effectively?	10	100%	0	0%	0	0%
60. Did your students need coaching to use the DynEd Student Study Records and the red lock to determine where they should work?	10	100%	0	0%	0	0%
61. Did your students need coaching to notice and reproduce the chunking patterns used in the models?	6	60%	4	40%	0	0%
62. Did your students need coaching to notice and reproduce the intonation patterns used in the models?	7	70%	3	30%	0	0%
63. Do you think that your students needed weekly coaching to stay motivated throughout the semester?	9	90%	1	10%	0	0%
64. Do you have any additional comments about stu comments in the box.	ident t	raining?	Plea	se type y	our	

Student Perform	ance					
		Yes	Sor	newhat		No
	N	%	N	%	N	%
65. Did your students set goals stating how many units/modules they wanted to complete during the semester?	0	0%	3	30%	7	70%
66. Did your students set language-learning goals to focus on while using DynEd? (e.g., I want to improve my listening skills. I want to improve my intonation. I want to improve my vocabulary.)	1	10%	5	50%	4	40%
67. Did your students use journals or learning logs to reflect on their learning in the workshop?	2	20%	0	0%	8	80%
68. Do you think that your students understood the recursive design (i.e., going back to previous modules to review) of DynEd?	0	0%	7	70%	3	30%
69. Did you observe your students doing a variety of exercises during each study session?	5	50%	5	50%	0	0%
70. Did your students ever seem frustrated because they had to review the same lesson several times?	10	100%	0	0%	0	0%
71. Did your students consistently record their voices 10 or more times per session?	1	10%	7	70%	2	20%
72. Did your students have success with the speech recognition exercises? (Did they consistently see green bars when they did these exercises?)	2	20%	6	60%	2	20%
<ul><li>73. Did your students do well on the DynEd worksheets that accompany each unit/module?</li></ul>	5	50%	4	40%	1	10%
74. Did your students usually score 85% or higher the first time they took a Mastery Test? (This question refers to the first test they took after their completion percentages were high enough to unlock a test.)	0	0%	5	50%	5	50%
75. Do you think that your students mastered the content in the DynEd units/modules?	1	10%	7	70%	2	20%
76. Do you feel that your students made good progress in terms of the number of units/modules they completed during the Spring 2015 semester?	3	30%	6	60%	1	10%

	-	-	-			
77. Do you think that your students improved	7	70%	3	30%	0	0%
their listening skills as a result of using						
DynEd?						
78. Do you think that your students improved	5	50%	5	50%	0	0%
their speaking skills as a result of using						
DynEd?						
79. Do you think that your students improved	3	30%	4	40%	3	30%
their reading skills as a result of using						
DynEd?						
80. Do you think that your students increased	5	50%	5	50%	0	0%
their vocabulary as a result of using DynEd?						
81. Do you think that your students improved	0	0%	3	30%	7	70%
their writing skills as a result of using						
DynEd?						
82. Do you think that your students improved	2	20%	5	50%	3	30%
their grammar skills as a result of using						
DynEd?						
83. Do you think that your students feel more	2	20%	7	70%	1	10%
confident about speaking English as a result						
of using DynEd?						
84. Do you think that DynEd helped your	6	60%	4	40%	0	0%
students become more independent as						
learners?						
85. Do you have any additional comments about yo	our stu	idents' p	erfor	mance in	Dyr	nEd?
Please type your comments in the box.		1			5	

Final Assessment									
	Yes		Yes Some		Yes Somewhat			No	
	N	%	N	%	N	%			
86. Do you think that using DynEd was a positive learning experience for your students?	4	40%	6	60%	0	0%			
87. Do you think that your students will want to use DynEd for another semester?	2	20%	7	70%	1	10%			
88. Overall, do you feel that the DynEd Multimedia Courseware was a good fit for your NRS level 1 and level 2 students?	2	20%	8	80%	0	0%			
89. Overall, do you feel that the DynEd Multimedia Courseware was a good fit for your NRS level 3 and level 4 students?	7	70%	3	30%	0	0%			

90. Overall, do you feel that the DynEd	6	60%	4	40%	0	0%
Multimedia Courseware was a good fit for						
your NRS level 5 and level 6 students?						
91. Would you recommend that we continue	5	50%	3	30%	2	20%
using the DynEd Multimedia Courseware in						
our ESL workshops?						
92. Do you have any final comments about the Dy	nEd N	Iultimedi	a Cou	ırseware	e? Ple	ease
type your comments in the box.						

Part 3: Your Teaching and W	orkshop Experience
-----------------------------	--------------------

After each question, click on the answer that reflects your personal experience. At the end of this section, please type any comments that you feel are relevant.

of this section, please type any comments that you	leel are relevant.
93. How many years have you taught adult ESL	Less than 1 year
at our institution and elsewhere?	1-5 years
	6-10 years
	11-20 years
	21 or more years
94. How many years have you worked in an ESL	Less than 1 year
workshop at our institution and elsewhere?	1-5 years
	6-10 years
	11-20 years
	21 or more years
95. How many semesters have you facilitated the	1 semester
DynEd Multimedia Courseware?	2-3 semesters
	4-6 semesters
	7 or more semesters
96. How was DynEd used in the Spring 2015	All students used DynEd as the core
ESL workshops that you facilitated?	program.
	Most students used DynEd as the
	core program.
	Some students used DynEd as the
	core program.
	DynEd was not used.
97. How do you feel the ESL workshop should	All students should use DynEd as
be structured?	their core program for the entire
	semester.
	Students should have the option of
	choosing an alternate program as
	their core program for the entire
	semester.
	Students should try a variety of
	programs throughout the semester.

98. Do you feel that your institution values your professional opinions about the courseware being used?	Yes	Somewhat	No			
99. Do you have any additional comments about how the ESL workshop should be structured? Please type your comments in the box.						
Thank you for completing this survey!						

# Appendix B: Students' Survey About DynEd

I have shared this survey\* with you because you have given your consent to participate in my research study on TEACHER AND STUDENT PERCEPTIONS OF DYNED MULTIMEDIA COURSEWARE: A CASE STUDY IN AN AMERICAN TECHNICAL COLLEGE.

The information from this survey will help us evaluate how we use DynEd in the ESL workshop. Your honest opinions about DynEd are very important. All participants will remain anonymous when I share the results of this study. Your name will not be used anywhere in my report.

Thank you for helping me with this research study!

Researcher: Gail Ellsworth Office Phone: 414-571-4649 Cell Phone: 414-852-3525

\*This survey was formatted and shared online with students using Google Forms. All answers in the close-ended questions were aligned vertically in a multiple-choice format. All open-ended questions were formatted with a text box for typing comments.

	Part 1: General Questions About Using DynEd After each question, click on one answer. Ask the teacher if you need help reading								
1.	the questions. How many semesters have you used DynEd?	1 semester	2-3 semesters	4-6 semesters		more esters			
2.	What was your ESL level during the Spring 2015 semester (January-May)?	Level 2	Level 3	Level 4	Level 5	Level 6			
3.	What time did you study English during the Spring 2015 semester?	During the day between 8 a.m. and 3 p.m.	At night between 5 p.m. and 9 p.m.	Both day and night classes					
4.	How many days a week did you use DynEd in the WORKSHOP during the Spring 2015 semester?	0 days a week	1-2 days a week	3-4 days a week		days ⁄eek			

5.	How many days did you use DynEd AT HOME during the Spring 2015 semester?	0 days a week	1-2 days a week	3-4 days a week	5-7 days a week
6.	Did you use DynEd from the beginning to the end of the Spring 2015 semester?	Yes			No
7.	Which main DynEd course did you use THE MOST during the Spring 2015 semester?	First English	New Dynamic English None	English for Success of these	Reading for Success
8.	Which other DynEd course did you use THE MOST during the Spring 2015 semester?	The Lost Secret Dynamic Business English	Clear Speech Works Advanced Listening	English by the Numbers None	Functioning in Business e of these

Part 2: Your Opinions about Using DynEd						
There are no right or wrong answers for these questions. I am interested in your honest opinions about the DynEd program. Please tell me what you like and what you don't like.						
Number of stude		= 17				
Technology						
After each question, click on one answer. A the questions.	sk tl	ne teacher	if y	ou need	help	reading
9. What is the best place for you to learn	In a			In a	Ir	n both
English at school?	w	orkshop	shop regular			
				class		
	Ν	%	Ν	%	Ν	%
	1	5.9%	4	23.5%	12	70.6%
10. What is the best way for you to learn	U	Jsing a	Ū	Jsing	J	Jsing
English?		e		ooks		both
	Ν	%	Ν	%	Ν	%
	0	0.0%	2	11.8%	15	88.2%
		Yes		Some		No
	Ν	%	Ν	%	Ν	%
11. Did you know how to use a computer	11	64.7%	4	23.5%	2	11.8%
before you came to the workshop?						
5 1						

12. Did you like using a computer to learn English?	13	76.5%	4	23.5%	0	0.0%
13. Did you like using DynEd to learn English?	10	58.8%	5	29.4%	2	11.8%

DynEd Content and Ext	ensic	on Activi	ties			
14. How was the level of DynEd for you?	the level of DynEd for you? Good Too easy			Too difficu		
	Ν	%	Ν	%	Ν	%
	14	82.3%	2	11.8%	1	5.9%
		Yes	, I	Some	1	No
	N	%	N	%	N	<u>%</u>
15. Were the DynEd lessons interesting?	11	64.7%	4	23.5%	2	11.8%
16. Is the English you learned in DynEd useful for you outside of class?	11	64.7%	6	35.3%	0	0.0%
17. Were the DynEd exercises engaging (fun)?	3	17.6%	10	58.8%	4	23.5%
18. Did the DynEd exercises help you learn about English grammar?	13	76.5%	4	23.5%	0	0.0%
19. Did the DynEd paper worksheets help you remember what you learned?	14	82.3%	2	11.8%	1	5.9%
20. Did you enjoy the conversation practice with the other students in the workshop?	12	70.6%	5	29.4%	0	0.0%
21. How often do you want to do conversation	C	Ince a	Т	wice a		on't want
practice in the workshop?		week		week		versation
	N	%	Ν	%	Ν	%
	5	29.4%	12	70.6%	0	0.0%

22. What other activities would you like to do in the workshop? Type your answer in the box. Don't worry about spelling. (Open-ended question)

- N=10 More conversation practice with teachers, students, other Americans
- N=2 Prefer to work on computer
- N=2 Watch video stories like Rebecca's Dream
- N=1 Learn English songs
- N=1 More games
- N=1 Talk about the news

Learning to Use DynEd

Think about when you first started using DynEd. After each question, click on your honest opinion. Ask the teacher if you need help reading the questions.

		Yes		Some		No
	Ν	%	Ν	%	Ν	%
23. Did your teachers help you decide which DynEd program to use?	17	100%	0	0.0%	0	0.0%
24. In the beginning, was the DynEd program easy to use by yourself?	5	29.4%	10	58.8%	2	11.8%
25. Were the videos helpful for showing you how to use DynEd?	8	47.0%	7	41.2%	2	11.8%
26. Were the teachers helpful for showing you how to use DynEd?	17	100%	0	0.0%	0	0.0%
27. In the beginning, did you need your teachers' help to check your headset and microphone settings?	13	76.5%	0	0.0%	4	23.5%
28. In the beginning, did you need your teachers' help to use the repeat, record, listen, and repeat buttons?	12	70.6%	3	17.6%	2	11.8%
29. In the beginning, did you need your teachers' help to check your study records?	14	82.3%	1	5.9%	2	11.8%
30. Did you need your teachers' help to do chunking (breaking sentences into smaller parts)?	9	52.9%	5	29.4%	3	17.6%
31. Did you need your teachers' help to improve your intonation (the way your voice goes up and down)?	12	70.6%	5	29.4%	0	0.0%
32. Did you need your teachers' help all semester?	8	47.0%	7	41.2%	2	11.8%
<ul> <li>33. What else do you want your teachers to help y answer in the box. Don't worry about spelling did not answer)</li> <li>N=4 Pronunciation/making a good recording N=3 Nothing—everything is good</li> <li>N=2 Improving my vocabulary</li> <li>N=2 Help with grammar</li> <li>N=1 Writing good sentences</li> <li>N=1 Group review of the lesson</li> <li>N=1 Setting up my headset</li> <li>N=1 More conversation groups</li> </ul>						

Your Performance i	n Dy	nEd				
		Yes Some			No	
	Ν	%	Ν	%	Ν	%
34. Did you set a goal for how many units/modules you wanted to finish?	5	29.4%	10	58.8%	2	11.8%
35. Did you set any language learning goals at the beginning of the semester?	14	82.3%	2	11.8%	1	5.9%
36. Did you use a notebook to write down what you learned in DynEd?	12	70.6%	4	23.5%	1	5.9%
37. Did you check your Study Record whenever you used DynEd?	14	82.5%	3	17.6%	0	0.0%
38. Did you learn better when you repeated the same unit/module several times?	11	64.7%	5	29.4%	1	5.9%
39. Did you sometimes feel frustrated when you had to repeat the same module several times?	7	41.2%	8	47.0%	2	11.8%
40. Did you record and listen to your voice 10 or more times whenever you used DynEd?	8	47.0%	7	41.2%	2	11.8%
41. Did you do a good job on the DynEd paper worksheets?	9	52.9%	7	41.2%	1	5.9%
42. Did you score 85% or higher the first time you took a Mastery Test?	8	47.0%	7	41.2%	2	11.8%
43. Did the Mastery Tests help you with your learning?	12	70.6%	5	29.4%	0	0.0%
44. Did you make good progress in DynEd in Spring 2015?	11	64.7%	5	29.4%	1	5.9%
45. Did DynEd help you improve your listening skills?	14	82.3%	2	11.8%	1	5.9%
46. Did DynEd help you improve your speaking skills?	13	76.5%	4	23.5%	0	0.0%
47. Did DynEd help you improve your reading skills?	12	70.6%	5	29.4%	0	0.0%
48. Did DynEd help you improve your vocabulary?	14	82.3%	3	17.6%	0	0.0%
49. Did DynEd help you improve your writing skills?	9	52.9%	5	29.4%	3	17.6%
50. Did DynEd help you improve your grammar skills?	14	82.3%	2	11.8%	1	5.9%
51. Did DynEd help you feel more confident about speaking English outside of class?	11	64.7%	4	23.5%	2	11.8%
52. Did DynEd help you become an independent learner?	8	47.0%	6	35.3%	3	17.6%

53. What was the best thing about DynEd? Type your comments in the box. Don't worry about spelling. (Open-ended question. Some students gave multiple answers) N=5 Listening N=5 Recording my voice N=2 Spelling N=1 You can repeat and memorize quickly N=1 Tests and dictation N=1 Vocabulary N=1 Reading N=1 Writing N=1 The questions N=1 The Lost Secret—the real situation makes it easier to learn English N=1 Everything is good 54. Is there anything you did NOT like about DynEd? Type your comments in the box. Don't worry about spelling. (Open-ended question. Some students gave multiple answers) N=3 No N=2 Repeating and recording gets boring N=2 The system runs too slow N=1 The vocabulary is easy N=1 New Dynamic English is too difficult for me N=1 I don't like this methodology N=1 Some conversation N=1 Repeating the unit when I don't remember the content from last semester N=1 The Lost Secret

Your Final Assessment	

In this section, tell me your final opinions about DynEd. Ask the teacher if you need help reading the questions.

neip reading the questions.						
		Yes	S	Some		No
	N	%	Ν	%	Ν	%
55. Do you think that DynEd was a good program for you?	9	52.9%	5	29.4%	3	17.6%
56. Was using DynEd a positive (good) learning experience for you?	9	52.9%	7	41.2%	1	5.9%
57. Do you want to use DynEd again?	9	52.9%	4	23.5%	4	23.5%
58. How do you want to study in the workshop	Use	DynEd	J	Jse a	a Use many	
next time?	all s	emester	di	fferent	different	
			program		programs	
			all		duı	ring the
			se	mester	se	mester
	Ν	%	Ν	%	Ν	%
	4	23.5%	3	17.6%	10	58.8%

# Part 3: Information About You

Please tell me about yourself. You will remain anonymous in this study. Your name will not be used in this study.

59. What country are you from? Type the name of the country in the box.

60. What language did you speak in your country? Click on the arrow to see a list of languages.

61. What is your age group?	Under 20	Ages 20-29	Ages 30-39
	Ages 40-49	Ages 50-59	Ages 60 or over
62. Are you a woman or a man?	Woman	Man	
63. Tell me about your education. Check the highest level that you have.	No school	Some elementary school (1-5 years)	Some middle school (6-8 years)
	Some high school (9-12 years)	High school diploma or GED	Some college or technical school
	College degree	(Associate, Bachelo higher)	or's, Master's, or
64. How long did you study English before you came to the United States?	0 years	Less than 1 year	1-2 years
the United States?	3-5 years	6-10 years	More than 10 years
65. How many years have you lived in the United States?		Less than 1 year	1-2 years
	3-5 years	6-10 years	More than 10 years
66. How many years have you		Less than 1 year	1-2 years
studied English in the United States?	3-5 years	6-10 years	More than 10 years
Thank y	ou for completing	this survey!	

#### Appendix C: Teachers' Focus Group Questions About DynEd

Engagement question:

 One of the questions on the students' survey was "What is the best place for you to learn English at school—in the workshop, in a regular class, or both?" How do you think the majority of students responded? Why do you think that?

## **Exploration questions:**

- 2. Think back over the semesters that you have worked with DynEd. What was your biggest challenge as a DynEd facilitator?
- 3. What type of help or instruction should the facilitators provide for the students?
- 4. How would you describe student engagement in your workshops? Do you notice any difference between lower-level and higher-level students?
- 5. The majority of students indicated that repeating modules over and over was boring. What are your feelings about taking the following actions: lowering the completion percentage, unlocking tests, unlocking modules, and unlocking courses?
- 6. How has DynEd contributed to your students' growth in the language skills? Which skill did they improve the most—listening, speaking, reading, writing, or grammar?
- 7. How has DynEd contributed to your students' growth as independent learners?
- 8. If you had to assign a grade to DynEd based on its content and relevancy for our students, what grade would you give—excellent, very good, good, fair, or poor?
- 9. If you could make one change that would improve the way in which we implement DynEd, what would it be?

10. If you had to vote for keeping DynEd or for finding another software program, how would you vote?

# Exit question:

11. Do you have any additional comments about the DynEd courseware?

# Appendix D: Students' Focus Group Questions About DynEd

# Engagement question:

1. What is the best place for you to learn English at school—in the workshop, in the regular classroom, or both?

## Exploration questions:

- 2. What was the most difficult part of using the DynEd program?
- 3. When you were using DynEd, what kind of help did you need from your teachers?
- 4. What did you like the most about DynEd?
- 5. What did you like the least about DynEd?
- 6. Why did DynEd tell you to repeat the same lesson many times? How did you feel about this?
- 7. Which skill did you improve the most when you used DynEd—listening, speaking, reading, writing, or grammar?
- 8. How did DynEd help you learn independently?
- 9. Think about the lessons and exercises in DynEd, and if they were helpful for you. What grade would you give DynEd—excellent, very good, good, fair, or poor?
- 10. If you could make one change to improve the workshop, what would it be?
- 11. If you had to vote to keep DynEd, would you vote Yes or No?

# Exit question:

12. Do you have anything else to say about DynEd?

Students' Pseudonyms And Gender	NRS Level	Was DynEd a positive learning experience?	Do you want to use DynEd again?	Students' Education	English Study Before Living in U.S.	Years Living in U.S.	English Study in U.S.
Marta F	L4	Some	No	College degree	< 1year	< 1 year	< 1 year
Alexa F	L5	Yes	Yes	College degree	1-2 years	3-5 years	1-2 years
Lucas M	L4	Yes	Yes	High school diploma	6-10 years	6-10 years	1-2 years
Akram M	L3	Yes	Some	College degree	6-10 years	< 1 year	< 1 year
Amira F	L4	Yes	Yes	Some high school	3-5 years	6-10 years	1-2 years
Ana F	L2	Yes	Yes	Some middle school	0 years	>10 years	< 1 year
Renata F	L4	Some	Yes	High school diploma	0 years	> 10 years	< 1 year
Ahmed M	L2	Some	Some	College degree	1-2 years	3-5 years	1-2 years
Khin M	L5	Some	Some	Some high school	> 10 years	< 1 year	< 1 year
Jaw M	L2	Yes	Yes	Some elementary	< 1year	3-5 years	1-2 years
Ariana F	L2	Some	No	High school diploma	< 1year	1-2 years	NA
Chen M	L4	Some	Yes	Some middle school	1-2 years	3-5 years	3-5 years
Laura F	L3	Yes	Yes	High school diploma	6-10 years	6-10 years	< 1 year
Edson M	L6	Yes	No	College degree	3-5 years	< 1 year	< 1 year
Hana F	L2	Yes	Some	College degree	0 years	< 1 year	< 1 year
Eden F	L3	Some	Yes	Some high school	1-2 years	6-10 years	1-2 years
Li Min F	L4	No	No	College degree	> 10 years	6-10 years	3-5 years

Appendix E: Students' Responses About DynEd

#### REFERENCES

- Al-Seghayer, K. (2001). The effect of multimedia annotation modes on L2 vocabulary acquisition: A comparative study. *Language Learning & Technology*, 5(1), 202-232.
- Bañados, E. (2006). A blended-learning pedagogical model for teaching and learning EFL successfully through an online interactive multimedia environment. *CALICO Journal*, 23(3), 533-550.
- Baş, G. (2010). Evaluation of DynEd courses used in elementary schools from the views of teachers in Turkey. *Journal of Language and Linguistic Studies*, 6(1), 14-39.
- Bingham, S., & Larson, E. (2006). Using CALL as the major element of study for a university English class in Japan. *The JALT CALL Journal, 2*(3), 39-52.
- Brett, P. (1997). A comparative study of the effects of the use of multimedia on listening comprehension. *System, 25*, 39-53.
- Brown, I., Campbell, A., & Weatherford, Y. (2008). Using DynEd and ALC with lowlevel university freshmen. *The JALT CALL Journal*, *4*(3), 37-53.
- Cárdenas-Claros, M. S., & Gruba, P. A. (2009). Help options is CALL: A systematic review. *CALICO Journal*, 27(1), 69-90.
- Chapelle, C.A. (1998). Multimedia CALL: Lessons to be learned from research on instructed SLA. *Language Learning and Technology*, *2*(1), 22-34.

Chapelle, C.A. (2001). *Computer applications in second language acquisition*. Cambridge: Cambridge University Press.

Chapelle, C. A. (2005). Hints about CALL use from research. PacCALL Journal, 1, 1-8.

- Chapelle, C. A. (2008). Computer assisted language learning. In B. Spolsky & F. M. Hult (Eds.), *The handbook of educational linguistics* (pp. 585-595). Malden, MA: Blackwell Publishing.
- Chapelle, C. A. (2009). The relationship between second language acquisition theory and computer-assisted language learning. *The Modern Language Journal*, 93, 741-753. doi:10.1111/j.1540-4781.2009.00970.x
- Chartrand, R. (2008). Students' perceptions of studying English in a computer assisted language classroom. In K. Bradford Watts, T. Muller, & M. Swanson (Eds.), *JALT2007 Conference Proceedings*, Tokyo: JALT.

Retrieved from

http://jalt-publications.org/archive/proceedings/2007/E033.pdf

- Dörnyei, Z. (2003). *Questionnaires in second language research*. United States of America: Lawrence Erlbaum Associates
- DynEd International, Inc. (2004). *Instructor's guide: New Dynamic English* (version 2.4). Burlingame, CA.

DynEd International, Inc., (2014). DynEd. Retrieved from https://www.DynEd.com/

Eisenhardt, K. M. (1989). Building theories from case study research. *The Academy of Management Review*, 14(4), 532-550.

- Figura, K., & Jarvis, H. (2007). Computer-based materials: A study of learner autonomy and strategies. *System*, 35(4), 448-468. doi:http://dx.doi.org/10.1016/j.system.2007.07.001
- Gambari, A. I., Kutigi, A. U., & Fagbemi, P. O., (2014). Effectiveness of computer assisted pronunciation teaching and verbal ability on the achievement of senior secondary school students in oral English 1. *Gist Education and Learning Research Journal*, 8, 11-28.
- Grgurovic, M. (2011). Blended learning in an ESL Class: A case study. *CALICO Journal*, *29*(1), 100-117.
- Gulcan, E. (2003). Exploring ESL: Learner's use of hypermedia reading glosses. *CALICO Journal*, *3*(4), 75-91.

Hagood, M.C. (2003). New Media and online literacies. Research Quarterly, 38, 387-391.

- Hegelheimer, V., & Tower, D. (2004). Using CALL in the classroom: Analyzing student interactions in an authentic classroom. *System 32*, 185-205.
- Ho, D. (2006). The focus group interview: Rising to the challenge in qualitative research methodology. *Australian Review of Applied Linguistics 29*(1), 5.1–5.19. doi:10.2104/aral0605.
- Hubbard, P. (1988). An integrated framework for CALL courseware evaluation. *CALICO Journal*, 6(2), 51-72. doi: 10.1558/cj.v6i2.51-72
- Hubbard, P. (2004). Learner training for effective use of CALL. In S. Fotos, & C. M.
  Browne (Eds.), *New perspectives on CALL for second language classrooms* (pp. 45-67). Mahawah, NJ: Lawrence Erlbaum Associates.

- Hubbard, P. (2006). Evaluating CALL software. In L. Ducate & N. Arnold (Eds.), Calling on CALL: From theory and research to new directions in foreign language teaching (pp. 313-338). San Marcos, TX: CALICO.
- Hubbard, P. (2008). CALL and the future of language teacher education. *CALICO Journal*, *25*(2), 175-188.

Hubbard, P. (2009). General Introduction. In P. Hubbard (Ed.), Computer assisted language learning, Vol. 1: Foundations of CALL: Critical concepts in linguistics (pp. 1-20). New York, NY: Routledge.

- Hubbard, P. (2013). Making a case for learner training in technology enhanced language learning environments. *CALICO Journal*, 30(2), 163-178.
  doi:10.11139/cj.30.2.163-178
- Jamieson, J., Chapelle, C., & Preiss, S. (2004). Putting principles into practice. *ReCALL 16*(2), 396-415. doi:10.1017/S0958344004001028
- Jamieson, J., Chapelle, C., & Preiss, S. (2005). CALL evaluation by developers, a teacher and students. *CALICO Journal*, 23(1), 93-138. doi: http://dx.doi.org/10.11139/cj.23.1.93-138
- Jones, J. F. (2001). CALL and the responsibilities of teachers and administrators. *ELT Journal*, *55*(4), 360-367.
- Jones, L., & Plass, J. (2002). Supporting listening comprehension and vocabulary acquisition in French with multimedia annotations. *The Modern Language Journal*, *86*, 546-561.

- Kim, J., Cho, Y., & Lee, Y. (2014). Exploring the effects of multimedia-based selfdirected English speaking practice. *Multimedia-Assisted Language Learning*, 17(4), 61-87.
- Knowles, L. (2008). A brain-based theory of language acquisition: RHR. Conference proceedings from FEELTA/NATE 2008. Retrieved from http://www.backbonecommunications.com/wp-content/uploads/DynEd-2008-abrain-based-theoryrev.pdf
- Kolaitis, M., Mahoney, M., Pomann, H., & Hubbard, P. (2006). Training ourselves to train our students for CALL. In P. Hubbard & M. Levy (Eds.), *Teacher education in CALL* (pp. 317-332). Amsterdam: John Benjamins.
- Krueger, R. A. (2002). Designing and conducting focus group interviews. Retrieved from

http://www.eiu.edu/~ihec/Krueger-FocusGroupInterviews.pdf

- Lauer, C. (2009). Contending with terms: "Multimodal" and "multimedia" in the academic and public spheres. *Computers and Composition 26*(4), 225-239.
- Liu, H. (2002). How can we tell others multimedia language education is useful or effective? *Multimedia-Assisted Language Learning*, *5*(1), 122-150.
- Mackey, A., & Gass, S.M. (2005). *Second language research*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Mishra, P., & Koehler, M. (2006). Technological pedagogical content knowledge: A framework for integrating technology in teacher knowledge. *Teachers College Record*, 108(6), 1017-1054.

- Molinsky, S. J., & Bliss, B. (2000). *Side by side* (3<sup>rd</sup> ed.). Upper Saddle River, NJ: Pearson Education ESL.
- Murday, K., Ushida, E., & Chenoweth, N. A. (2008). Learners' and teachers' perspectives on language online. *Computer Assisted Language Learning*, 21(2), 125-142.
- Neumeier, P. (2005). A closer look at blended learning parameters for designing a blended learning environment for language teaching and learning. *ReCALL*, *17*, 163-178. doi:10.1017/S0958344005000224
- New Dynamic English: Instructor's Guide (version 2.5) (2013). DynEd International, Inc. Retrieved from

https://web.DynEd.com/sites/default/files/downloads/TGNDE1E.pdf

- Nikolova, O. (2002). Effects of students' participation in authoring of multimedia materials on student acquisition of vocabulary. *Language Learning & Technology*, *6*(1), 100-122.
- O'Connor, P., & Gatton, W. (2004). Implementing multimedia in a university EFL program: A case study in CALL. In S. Fotos & C. Browne (Eds.), *New perspectives on CALL for second language classroom* (pp. 199-224). Mahwah, NJ: Lawrence Erlbaum Associates.
- Oliver, M. (2000). An introduction to the evaluation of learning technology. *Educational Technology & Society, 3*(4).

OMNI Institute (n.d.). INFORMATION. GATHERING. TOOLKIT. Basic tools for quantitative and qualitative data collection. Retrieved from http://www.omni.org/Media/Default/Documents/Information%20Gathering%20T

oolkit.pdf

- Prensky, M. (2001). Digital natives, digital immigrants part 1. On the Horizon, 9(5), 1-6.
- Reinders, H., & Hubbard, P. (2013). CALL and learner autonomy: Affordances and constraints. In M. Thomas, H. Reinders, & M. Warschauer (Eds.), *Contemporary computer-assisted language learning* (pp. 359-375). London: Continuum.
- Robinson, P. (1995). Attention, memory, and the 'noticing' hypothesis. *Language Learning*, *45*, 285-331.
- Rowland, J. (2001). New dynamic English, professional version. *TESL-EJ* 5(1). Retrieved from

http://www.zait.uni-bremen.de/wwwgast/tesl ej/ej17/m2.html

- Sagarra, N., & Zapata, G.C. (2008). Blending classroom instruction with online homework: A study of student perceptions of computer-assisted L2 learning. *ReCALL*, 20, 208-224.
- Sankey, M., Birch, D. & Gardiner, M. (2010). Engaging students through multimodal learning environments: The journey continues. In C.H. Steel, M.J. Keppell, P. Gerbic & S. Housego (Eds.), *Curriculum, technology & transformation for an unknown future. Proceedings ascilite Sydney 2010* (pp. 852-863). Retrieved from http://ascilite.org.au/conferences/sydney10/procs/Sankey-full.pdf

Schmidt, R.W. (1990). The role of consciousness in second language learning. Applied

*Linguistics*, 11(2), 129-158.

- Şengel, E., Öncü, S., & Baltaci Goktalay, S. (2011). Attitudes and motivation of English language teachers concerning the DynEd system in secondary schools. 5<sup>th</sup> International Computer & Instructional Technologies Symposium, 22-24 September, Firat University, Elazig-Turkey. Retreived from http://web.firat.edu.tr/icits2011/papers/27668.pdf
- Sharwood Smith, M. (1993). Input enhancement in instructed SLA: Theoretical bases. *Studies in Second Language Acquisition*, 15, 165-179.
- Stenson, N., Downing, B., Smith, J., & Smith, K. (1992). The effectiveness of computerassisted pronunciation training. *CALICO Journal*, *9*(4), 5-20.
- Stepp-Greany, J. (2002). Student perceptions on language learning in a technological environment: Implications for the new millennium. *Language Learning & Technology 6*(1), 165-180.
- Stracke, E. (2007). A road to understanding: A qualitative study into why learners drop out of a blended language learning (BLL) environment. *ReCALL*, 19, 57-78. doi:10.1017/S0958344007000511.
- Test of Adult Basic Education Complete Language Assessment System—English (n.d.). CTB McGraw-Hill.
- Tai, S. J. D. (2015). From TPACK-in-action workshops to classrooms: CALL competency developed and integrated. *Language Learning & Technology*, 19(1), 139-164.
- Taylor-Powell, E., & Renner, M. (2003). Analyzing qualitative data. University of Wisconsin-Extension. Retrieved from

http://learningstore.uwex.edu/assets/pdfs/g3658-12.pdf

- Warschauer, M. (1996). Comparing face-to-face and electronic discussion in the second language classroom. *CALICO Journal, 13*(2), 7-26.
- Warschauer, M. & Healy, D. (1998). Computers and language learning: An overview. *Language Teaching 31*, 57-71.
- Yin, R.K. (2003). *Case study research: Design and methods*. Thousand Oaks, CA: Sage Publications.