Promoting Competency-Based Language Teaching through the Application of Multimodal Materials

Tsui-Ying Lin and Wei-Jie Tiao Language Center, Chaoyang University of Technology, Taichung, Taiwan Email: {eileen206, soniatiao}@gm.cyut.edu.tw

Abstract—This paper proposes an improved competency-based language teaching model by integrating multimodal materials along with multimodal performance tasks aiming to develop beginner-level undergraduates' language abilities as well as life competencies in an EFL context. The preliminary self-report results indicate that students have a positive attitude toward multimodal materials, whereas they seem not to have much favor in high cognitive demand multimodal performance tasks which need their integration of applying various multimodal resources. However, the teachers' observation feedback shows students' learning motivation, communicative, critical, and creative thinking skills enhanced along with the improvement of language abilities with the engagement with the multimodal materials.

Index Terms—competency-based language teaching, EFL, multimodal materials

I. INTRODUCTION

*"Education is not preparation for life; education is life itself."....*John Dewey

When talking about competency-based education, John Dewey's quote above provides the best definition for every educational practitioner. In the 21st knowledge era, knowledge is valued not solely for what it is (know what), but for what it can do (know how). Well-known international organizations such as The Organization for Economic Cooperation and Development (OECD) and Cambridge University Press introduced and advocated life competencies frameworks to help global citizens cope with the rise of the new era. Although the above two competencies frameworks can be used in various contexts, in an educational application, they both hold a core value to develop learners' 21st-century skills and shape the future with better lives through the development of learners' knowledge, skills, attitudes, and values [1], [2]. In Taiwan, the implementation of 12-year compulsory curriculum reform [3], which attempts to turn students into lifelong learners, also responds to the global educational trends to encourage teachers and learners to connect teaching and learning to the real world. Although discrete linguistic elements within lexical or sentence level such as phonological, and grammatical paradigms will still serve as the fundamental linguistic basis in 21st language classrooms, how to introduce and integrate these fundamental language elements learning into real-world authentic communication tasks should be the primary principles. Thus, EFL learners in Taiwan should not be confined in the classroom to take the behavioral approach to learn or "memorize" vocabularies and grammar rules in classrooms. They are encouraged to construct the knowledge through their learning experience and process. Teachers, serving as facilitators, have to redesign the learning objectives and tasks and introduce the planned linguistic forms which are required for learners to accomplish authentic tasks. To put it simply, with an appropriate course design, EFL learners, including beginner-level learners could also benefit from the development of 21st-century competencies. In this paper, we adopt the idea from the Cambridge Life Competencies framework indicating that English teaching is particularly suitable to develop skills such as communication, collaboration, learning to learn, and critical thinking in an integrated way with the application of multimodal materials.

The 21st century is also marked as Information Age. Students are nicknamed as the Net Generation or so-called digital students who are defined with the following characteristics: (1) actively participate in technology from their early childhood to young adults; (2) tend to learn visually and socially and (3) use technology as a tool to organize and synthesize knowledge; (4) expect to try things rather than hear about them and (5) want to learn by doing. [4], [5]. Reference [6] indicated that in the rapid digitalization of contemporary communication, the aim and content of language education have been challenged. Nowadays, diverse information these digital students faced every day is always multimodal for example, recording, text messages, emoji symbols, images, and all these multimodal resources have brought a significant impact on the meaning-making of communication. Therefore, in order to promote EFL college learners' communicative competencies, this paper starts with the introduction of a customized competency-based language teaching model with the integration of the Cambridge life competencies framework along with multimodal materials

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for beginner-level undergraduates. Then the paper revealed a preliminary result of how the model enhanced beginner-level undergraduates' attitude toward multimodal materials and 21st-century competencies, especially communication, collaboration, creative and critical thinking skills, and learning to learn based on teachers' observations and students' self-report survey results.

II. RELATED RESEARCH

A. Competency-Based Language Teaching

Competency-based education, also known as performance-based learning, criterion-referenced learning, and capabilities-driven instruction [7], has its roots in Behaviorist tradition and is commonly applied in vocational training and evaluation of professional skills [8]. Competency-based education is viewed as a way to conceptualize the relation between education and the world of work [9] and since the 1970s, it has been embraced and widely implemented in a variety of global educational contexts. Competency-based language teaching (CBLT) follows the philosophies of competency-based education. The crucial feature of competency-based language teaching holds the belief that language is learned through hands-on experiences from accomplishing real-world tasks in a designed contextual learning process. It is based on the function and interaction of language needs for communication in social contexts. It also focuses on outcome-based learning. Thus, teachers or curriculum designers should set the desired learning outcomes, know exactly what lexical and grammatical knowledge has to be planned, and strategically placed them in the learning process to check whether the target learning outcomes are achieved or not by explicit evaluation [10], [11]. The main goal of CBLT is to prepare learners to use the language to solve real-world problems to achieve the learning transfer and expectedly to connect the language learning to the future workplace. In the CBLT process, learners not only learn to use the language but also use the language to learn [8], in that, authentic tasks and learning materials should be the main concern in planning the course to assist each learner constructs their knowledge, improve skills, cultivate positive and responsible attitude, and ultimately creating new values for better lives. Although CBT and CBLT have been practiced in different learning contexts, we found there are limited course design models integrated multimodal materials and assessment plans in the EFL context.

B. Development of Communicative Competence

Nowadays, communication, notably communication through English, has been perceived as one of the most important skills or life competencies [1] to prepare 21stcentury learners for the global workplace. Communicative competence is not new. According to [12], communicative competence has received attention from Noam Chomsky, who claimed that human language development, or linguistic competence, was much more creative than that represented by Skinnerian behaviorism, and in 1972, Hymes further elaborated the term communicative competence by emphasizing the language use which strengthens the usage and appropriacy in a given social context. To shift from the traditional form-focused instruction to communicative competency-focused instruction, a course or curriculum designer has not to just adopt a new theory (CBLT) but is required to change the classroom practice from the reform of goals, materials, and assessment. More importantly, learners' and teacher's mindset of language learning and teaching needs to be reshaped to promote and sustain the change. However, English practitioners may ask how to do it? It might not be easy to embrace a western idea in a traditional Asian context due to learners' learning styles tend to be more conservative and dependable. Thus, while selecting materials and tasks to provide direct evidence of the development of learners' communicative competence, English practitioners should also concern the cultural and learning style differences.

C. Multimodality in Language Education

With the rapid development of digital technologies, using various modalities in communication has become a daily routine [6]. The use of multimodalities, for example, recording, text messages, emoji symbols, images, videos, has a significant impact on the meaning-making of communication [13]. Advanced technology has changed the communicational landscape of the 21st century both in our everyday life and in schools [14]. Therefore, teaching the digital natives by using multimodal materials in the language classroom is presumed to motivate students to continue to grow in their communicative competence curve and to develop their life competencies such as digital literacy as well.

According to [4], [15] using multimodal texts in the EFL classroom can help students develop their communicative competence in reading, writing, speaking, and listening. Young people today often convey their thoughts or feelings through a mix of texts, pictures, sounds outside of the classroom. Therefore, [6] suggested it's important to support multimodal meaning-making for language education because language is about communication and meaning-making. Language subjects "need to evolve in consort with contemporary communication."

III. RESEARCH CONTEXT AND METHOD

The research context of this paper is set on a two-week, 12-hour intensive English course for 27 beginner-level undergraduates in a technological university in central

Taiwan. The intensive course is a supplementary course for English for General Workplace Purposes (EGWP). Two EGWP teachers co-tailored and co-taught the intensive course. It aimed to bridge beginner-level undergraduates' language skills as well as to develop their life competencies for future workplace life. To cope with the net generation's learning preferences, the course materials are presented with multimodalities to acquaint the target undergraduates with more experiences in meaning decoding and to meet their needs for future workplace life. To make these extra learning hours more meaningful and practical, we proposed and implemented the Multimodal Materials integrated Competence-Based Language Teaching model (MCBLT) by adopting Cambridge Life Competencies Framework (Fig. 1), using authentic multimodal materials, and integrating real-life tasks to achieve the course goal of developing both language skills and life competencies. Along with each task, formative assessments were conducted to check the learning outcomes of each learning stage. Then a summative assessment was carried out through a group final project to evaluate students' language learning and competency development at the end of the intensive course. At last, an online survey was conducted before and after the implementation of the model to further understand students' feedback about the proposed model.

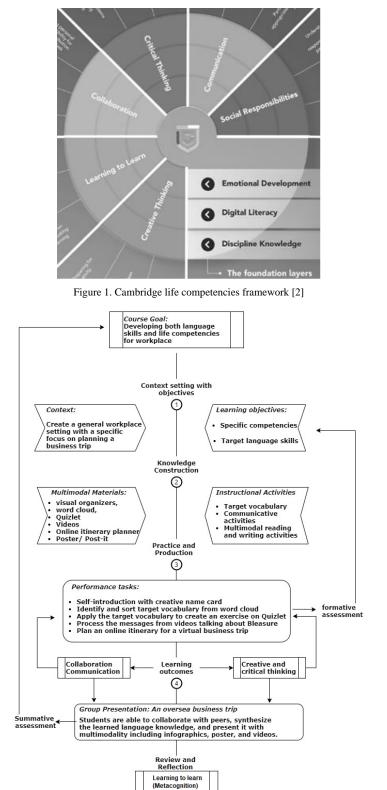


Figure 2. MCBLT course model *Quizlet is an interactive vocabulary learning platform

IV. THE PROPOSED MODEL (MCBLT)

Given the highly contextualized nature of CBLT, this paper proposed a course model by integrating multimodal materials (MCBLT) for beginner-level undergraduates to develop the four language skills while making sense of developing the life competencies that are needed for the 21st century. In that, Cambridge Life Competencies Framework is mainly adopted to achieve the ultimate course goal. In CBLT, competencies can be understood as the final task specified at the end of a learning module [8]. Thus, it is very important to start the course design with well-defined outcomes. The structure for CBLT comes from creating and aligning sets of competencies to learning objectives, materials, performance tasks, assessment, and rubrics, with analytics to track performance. In the following, we describe the backward design principles for the proposed MCBLT model and further illustrate the workplace theme of the MCBLT model. (Fig. 2).

A. Course Goal and Learning Objectives

Previous studies indicate that course goals should communicate and connect to overall learning outcomes. They should capture the big ideas of the course and be achievable, however, not necessarily measurable. The goals set boundaries for the instruction and design process [16], [17]. Under the umbrella of the course goal, there should be clear learning objectives or instructional objectives that state what the students should do, along with clear, observable and measurable criteria [17].

The course goal for the implemented workplace MCBLT is stated as "Developing language skills and life competencies for workplace". The learning objectives for the four learning stages are narrated with "can-do statements". Some examples of the learning objectives for different learning stages are presented as follows. Stage 1

1) Students can appreciate the importance of life competencies in the workplace.

2) Students can understand the need for appropriate communication in the workplace. (competency: communication)

Stage 2.

1) Students can decode the messages of visual organizers

 Students can interpret different types of multimodal materials. (competency: critical thinking competence)
 Stage 3.

- 1) Students can apply the vocabulary for self-introduction.
- 2) Students can utilize Quizlet to create vocabulary learning material and games. (competencies: creative thinking, digital literacy)

Stage 4

- 1) Students can collaborate with team members to design an itinerary poster with an infographic.
- 2) Students can present their final project with their team members. (competencies: collaboration,

communication, creative thinking)

Stage 5

1) Students can reflect and evaluate their learning. (competency: learning to learn)

B. Multimodal Learning Materials

A plethora of studies have proved that learners who were given a combination of text and visuals learned more effectively, so is true for teachers who taught with multimodal materials achieved the instructional objectives more successfully. Since there are different types of multimodal materials and in a learning process, teachers may

include various inputs at a time, which may arouse learners' anxiety and cause distraction to learners. Therefore, when planning to integrate multimodal materials with a course, it's very important to reduce overload to prevent students from being overwhelmed. In this paper, we proposed the following guidelines to plan a course with multimodal materials.

- 1) Provide multimodal materials with a purpose.
- 2) Keep it simple. Don't provide multimodal materials that

are too difficult or complicated for your learners.

3) Find a good balance in organizing instructional activities with multimodal materials, one material for a single activity.

C. Performance Tasks

Performance tasks are crucial means to connect learners' classroom practice to real-world activities. Since they are usually tightly related to learning objectives, the content validity is higher than traditional assessment. In CBLT, performance tasks are widely used for different purposes of assessment. In our proposed model, all the performance tasks are designed with a dual focus, to assess learners' language abilities and life competencies. The complexity and difficulty of the tasks increase with the progress of the course. Therefore, every performance tasks should be designed by following the principles below.

- 1) The performance tasks must simulate real-world tasks.
- 2) The performance tasks should be designed and performed with multiple modes.
- 3) Since the performance tasks are dual-focused, a well-constructed rubric should be provided for evaluating student's performance.

D. Assessment

In this model, both formative and summative assessments were designed to understand learners' interaction and involvement in multi-modal materials learning. The ultimate purpose of assessment is to engage learners in using multiple modes of communication so they can connect classroom learning to real-world tasks. Teachers served as facilitators, observers as well as evaluators to provide positive and constructive multimodal feedback in the entire learning process. Therefore, it is necessary for teachers to keep the following questions in mind when designing assessments.

- 1) What is the purpose of the assessment?
- 2) What is being assessed? (including both language abilities and competencies)
- 3) How are the ability or/and competencies being assessed?
- 4) How does a teacher give feedback?

In this study, owing to the flexibility of the implemented intensive course, learners were encouraged to practice and demonstrate the learned linguistic knowledge through dynamic multimodal tasks, regardless of formative or summative ones, while at the same time teachers were able to assess the appropriateness of language use for the planned context and observe whether the life competencies were improved as well.

V. PRELIMINARY FINDINGS

As mentioned in the previous section, in order to understand beginner-level undergraduates' feedback for the implementation of the MCBLT model, a pre-and post-survey was conducted. In this section, we report some preliminary findings in terms of students' feedback toward different types of multimodal materials and multimodal performance tasks. Since the intensive course was supplementary to regular English courses, the teachers did not provide formal grading policy or tests to assess students' language performance and the development of the competencies. The development of language skills and life competencies is reported based on the teachers' class observations of the performance in each task.

 TABLE I. Survey Results of Students' Feedback Toward Different Types of Multimodal Material

Types of multimodal materials	Pre-survey results	Post-survey results	
Visual organizers	86%	88%	
Word cloud	88%	88%	
Quizlet	82%	84%	
Videos	80%	78%	
Reading passages	78%	78%	

A. Students' Preference of Multimodal Materials

First, we present students' feedback toward different types of multimodal materials in Table I. The preliminary findings indicate that there is no significant change in students' preference in all types of multimodal materials in the two surveys, although their preferences of visual organizers and Quizlet are slightly higher in post-survey. On the contrary, students' preference toward videos is slightly lower in post-survey. However, among all types of multimodal materials, we found that the traditional material, hard copy reading passages, is less preferred (78%) in both pre-and post-survey.

B. Students' Preferences of Performance Tasks

In order to understand how each multimodal performance task assisted students to develop their language skills and life competencies, we investigate their self-report engagement toward each task (Table II). The results reveal that individual types of performance tasks are more favored than group performance tasks. In addition, as the difficulty and complexity of the task increase, the preference rate decreases. Namely, the beginner-level undergraduates prefer low cognitive demand tasks, for example, vocabulary tasks in which students only need to apply the basic language skills to accomplish the tasks.

TABLE II. SURVEY RESULTS OF STUDENTS' FEEDBACK TOWARD
DIFFERENT MULTIMODAL PERFORMANCE TASKS

Titles of performance tasks	Types of performance tasks	Preference
Identity and sort vocabularies (Word Cloud)	Individual work	52%
Quizlet Games	Individual work	52%
Quizlet App Vocabulary Quiz Creating	Group work	<mark>44%</mark>
My Name Card (visual organizer)	Individual work	40%
Business trip it inerary plan (Poster making)	Group work	32%
Put the events in order (Reading passages)	Group work	24%
Online Itinerary planner	Group work	20%
It's show time (Final project: video presentation)	Group work	16%

C. Teachers' Observation Feedback

The purpose of the intensive course is to encourage more engagement in developing both language abilities as well as life competencies. Based on the three categories of competencies-knowledge, skills, and attitude, Teachers develop specific rubrics to evaluate students' language performance along with their development of the competencies. The findings are reported as follows.

 Teachers found students' thematic knowledge in terms of a business trip in the workplace slightly increased, especially the improvement in the vocabulary related to the theme. One teacher mentioned that she was quite surprised that these beginner-level students could apply the newly learned vocabulary in the appropriate context.

Teachers found students' communicative and collaborative skills increased while students attempted to achieve the group performance tasks. Also, students demonstrated their creative and critical thinking ability in the process of trying to accomplish several multimodal performance tasks such as creating a poster with an infographic and decoding multimodal messages.

2) Teachers found significant changes in students learning attitudes. Both teachers revealed that students were more motivated and engaged in a multimodal competence-based language learning environment than in the traditional language classroom with the use of hard copy textbooks. Also, they specified that although students might not be able to express themselves fluently and accurately, they participated in each instructional

activity actively and tried to negotiate and collaborate with their team members to accomplish the designated tasks.

In the preliminary findings, we found that the participants, the beginner-level undergraduates, showed a positive attitude toward multimodal learning materials. This finding is in line with the advocates of applying multimodal materials to meet the demand of digital natives' learning preferences. However, perhaps due to the limitation of the participants' language abilities, they encounter some obstacles when attempting to accomplish the high cognitive demand performance tasks in which high demand of English communication ability is needed. This might explain why the raise of task difficulty and complexity decreases students' preference rate of some performance tasks, including the final project. Additionally, the self-reported results of preferring individual performance tasks assumed that these participants may lack the confidence to communicate with their team members, which further impede the development of collaboration, even though the teachers found significant changes in their learning attitudes. From the above preliminary results, we may assume that more language scaffolds are needed for beginner-level learners to enhance their confidence in language use to achieve better learning outcomes through the implementation of the MCBLT model. In addition, more detailed descriptions of criteria for Cambridge life competencies are required to assist teachers to evaluate students' competence development.

VI. CONCLUSION

Competence-based education has attracted more and more attention globally. Competency-based language learning and teaching become influential in the EFL context. How to make learning more meaningful by integrating different knowledge and skills is every language educator's mission and goal. Modern teachers and learners embrace diverse channels of information every day. In the information era, the traditional learning materials no longer meet digital natives' learning preferences and needs. Thus, the proposed MCBLT model may shed light on how to integrate multimodal materials along with multimodal performance tasks to improve both students' language abilities and their 21st-century competencies in language classrooms. Just as what it is said in the introduction of Cambridge life competencies framework, "Life Competencies can be integrated into any subject, but they are particularly suitable for teaching English....it is a way of making sense of the different skills we want our students to develop, in addition to learning English [2]."

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

Tsui-Ying Lin and Wei-Jie Tiao conducted the research together; Tsui-Ying Lin analyzed the data; both authors wrote the paper and had approved the final version.

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Tsui-Ying Lin is currently a doctoral candidate in educational information and measurement at National Taichung University, Taiwan.

She received her M.A.in TESOL in New York University, USA.

She has over 15 years of experience in teaching at colleges and currently serves as the lecture in Language Center at Chaoyang University of Technology, Taiwan. She is also a teacher

trainer and consultant for local government in Taiwan. Her work has appeared in English Literacy Instruction for Chinese Speakers (pp. 75-93). (2019), Palgrave Macmillan, Singapore and she has presented her research at both national and international conferences.

As a college lecture, doctoral candidate and researcher, her research interest involves exploring the meaning-making course design for learning and teaching in bilingual classroom, examining interactional and embodied practices by use of both qualitative and quantitative analysis.



Wei-Jie Tiao received her BA in Philosophy at Tunghai University in Taiwan and her MA in English with concentration in Teaching English to Speakers of Other Languages (TESOL) at San Francisco State University in USA in 1999. Her research interests include English language teaching and learning, and curriculum development.

Ms. Tiao has been teaching at Higher Education Institutes in Taiwan since 2005. Now, she is teaching integrated English

courses in Chao Yang University of Technology and National Chung Hsing University in Taichung, Taiwan.