A Systematic Review of CEFR-Related Research of English Education in South Korea

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Abstract

This study aims to analyze the trend of CEFR(Common European Framework of Reference) related research in South Korea using the method of a systematic review and to discuss the research fields required in relation to CEFR. The Council of Europe released the Common European Framework of Reference for Languages (CEFR) in 2001. It acts as a standard for curriculum, teaching, learning, and evaluation. With this, thirty kinds of literature from the years 2000 to 2020 that satisfied the selection criteria were chosen from a search of CEFR-related research on English education. After the 2015 revised national curriculum was implemented, studies related to CEFR increased by 70% from 2018 in terms of publication year, and 60% of those studies used quantitative methodologies. After organizing the subjects of the studies by the Korean academic levels and CEFR levels, the data showed a focus on research for elementary and university while a wide range of CEFR levels from Basic User to Proficient User was represented. Since CEFR builds vocabulary, grammar, and language competence based on corpus data, 80% of the studies were performed in relation to the curriculum and evaluation using the corpus. However, in order to successfully apply CEFR to Korean English education, research on more detailed level settings and the linkage between each level needs to be actively conducted. More studies are necessary to adapt CEFR to the EFL context in Korea since CEFR describes communication skills that L2 learners should have, including pluricultural competence. This means a wide range of studies on CEFR are needed to expand the quality and quantity of English education in Korea.

Keywords: CEFR, curriculum, Korean curriculum, systematic review, research synthesis

1. Introduction

Foreign language learning takes place in diverse cultural contexts in order to achieve different goals. Therefore, the level of a learner's language proficiency differs by country and language. The purpose of learning a foreign language is to enable the learners to communicate without difficulty beyond their native language and culture (Tedick et al., 1993). Due to this, there is a requirement for universally applicable standards of language proficiency for L2 learners, regardless of their place of origin or first language. With those common standards, it is possible to plan and implement a foreign language curriculum that considers various L2 learners around the world. Additionally, not only curriculum planners but also teachers and learners can utilize the common language standard as a criterion for determining the course of L2 acquisition and assessing the learning outcome. In Europe, where there is a high need for foreign language learning and diverse cultures coexist, CEFR which includes teaching, learning, and evaluation rubrics, was developed in 2001 (Council of Europe, 2001). CEFR was developed with the background of European multilingualism and multiculturalism. It covers all ages and levels of learners from beginner to advanced and describes the language proficiency of learners in various ways by reflecting on the language learning environment. CEFR described L2 learners' language proficiency in six stages (from A1 to C2) that reflect cultural factors and communicative language activities, strategies, and abilities. As a profiling tool that identifies deficits at a particular level, the CEFR organizes what learners know and can accomplish in stages and can offer guidance for foreign language teaching, learning, and assessment (North, 2014). Because CEFR deals with the roles and learning contents of language learners as a social agent, it includes various fields that can be applied to foreign language learning research, such as curriculum, syllabus, teaching method, evaluation, and culture. As a result, the CEFR's description of L2 learners' language proficiency is

thorough, organized in stages, and takes into account variables related to multilingualism and multiculturalism, making it applicable and widely utilized in more than 40 languages worldwide (Council of Europe, 2020).

Recently, many countries that teach English as a foreign language are modifying and restructuring their curriculum with CEFR to suit their situations. This is because CEFR comprehensively describes language knowledge, function, and cultural aspects based on what learners can do. Japan, for example, developed CEFR-J, which subdivided the novice and intermediate levels of CEFR, considering that most of its citizens are at the basic level (Negishi, 2012). Moreover, Japan is actively conducting field studies that measure the level of language used by English teachers and learners in the context of classroom-based CEFR levels (Ohashi & Katagiri, 2020). In line with the international trend, South Korea is trying to apply the competencies that students should possess to their national curriculum (Yoon et al, 2016). South Korea is attempting to incorporate competencies that students should possess into its 2015 revised national curriculum, despite not officially utilizing the CEFR. In the 2015 revised national curriculum, there are 6 core competencies that comprehensively describe what learners can do with language. These competencies include knowledge, skills, and attitudes, and an emphasis on performance aspects. This means the 2015 revised national curriculum can be comparable to CEFR.

In South Korea, studies have been conducted to compare and analyze elements such as achievement standards, language forms, vocabulary, and communicative functions of the 2015 revised national curriculum and CEFR (Jeon, 2022; Lee & Kim, 2009; Hwang, 2016). In addition, since CEFR is converted and used with the results of internationally renowned standardized tests like IELTS, TOEFL, and TOEIC, there has been some research done to indicate the results of those tests as reflective of a CEFR level (Nam & Park, 2020). As described, studies on CEFR are being conducted in various fields, like curriculum, syllabus, textbook development, assessment, and teaching methods (Jeon & Kim, 2021; Lee & Shin, 2019; Lee, 2020; Lee, 2020a, 2020b).

The related Korean CEFR studies were not mentioned in a study that employed a bibliometric approach to assess 770 CEFR-related studies gathered using a SCOPUS database from 2002 to 2021 (Sahib & Stapa, 2022). The study result showed that CEFR-related studies have focused on language assessment. It also pointed out the lack of cooperation with Asian countries in the CEFR study. However, basic research employing the CEFR is underway in Korea, and despite ongoing discussions about its implementation based on the benefits of the CEFR, no analysis study that offers a comprehensive overview of CEFR research exists. Therefore, this study intends to systematically analyze the study of CEFR in Korea. In order to support research that seeks to develop a national curriculum in line with the international educational goal of fostering future competency, and laying the foundation for a globally accepted foreign language education, this present study analyzes the trends of domestic studies on CEFR through a systematic review. For this purpose, specific research questions are as follows:

First, what are the main research fields of CEFR-related English education studies in South Korea?

Second, what direction of research is necessary to incorporate CEFR into English education in South Korea?

2. Literature Review

2.1 CEFR

In 2001, the Council of Europe announced the CEFR as a common language standard that can be used in the curriculum, teaching, learning, and evaluation of foreign language education (Council of Europe, 2001). CEFR was published through multinational organizations' cooperation for many years to ensure the transparency of language education in European countries where multiculturalism and multilingualism coexist. CEFR is a guideline for language learning to design teaching, learning, and evaluation appropriate to the context in consideration of the universality and specificity (Council of Europe, 2001). CEFR sets objective standards according to the learner's development and cultural context. CEFR has been verified in 40 countries to establish objective standards. Therefore, the use of CEFR helps to interpret the results obtained in different learning environments since it has objective standards verified by different countries.

A learner's language use leads to communicative activities, including task performance conditions, texts, and topics, based on language ability. CEFR aims to develop language ability through communicative language activities and strategy based on an action-oriented approach. The description of a learner's ability focuses on what can be done (Council of Europe, 2020). According to the CEFR, communication has several different goals and functions that are focused on speaking, listening, reading, and writing. So, it described communicative language activities and strategies as reception, production, interaction, and mediation following an action-oriented approach (Council of Europe, 2001).

Table 1. Learner's Language Competence

Component	Elements
General competence	knowledge, know-how, existential competence
Communicative language competence	linguistic, sociolinguistic, pragmatic
Communicative language activities	reception, production, interaction, mediation
Communicative language strategies	reception, production, interaction, mediation

Reading and listening are two ways to activate a system for taking in and processing linguistic input. It includes reception skills such as cue identification and inference, as well as oral, reading, and audio-visual comprehension. In order to represent the content clearly and fluently through language, production requires both oral and written output that corresponds to language output. Production strategies contain planning, compensating and monitoring, and repair. Interaction is the center of the language system in CEFR. It aims to maintain interpersonal relationships, collaborate, trade, and learn by integrating reception and production. It includes oral, written, and online interaction. Oral interaction accounts for a bigger portion than written interaction. In particular, online interaction describes characteristics such as real-time data sharing. Interaction strategies consist of turn-taking, co-operating, and asking for clarification. Mediation encompasses reception, production, and interaction. It aims to construct and convey meaning across language barriers. Mediation activities and strategies occur actively in the process of carrying out cooperative tasks in small groups. It is essential for Korean learners who communicate using a foreign language in an EFL environment (Jeon, 2022).

The learner's language skills and communicative language activities and strategies are developed through the use of language. As the learner's language ability increases, the range of language used increases as well as the use of complex forms. CEFR divided learners' language proficiency into six levels through statistical and empirical verification. It is described as Basic User, Independent User, and Proficient User. The three stages of CEFR are subdivided into two levels, A, B, and C. The Basic User level, A1 and A2, can interact effectively with a very limited basic language. The Basic User level, Pre-A1 appeared by subdividing the basic level A1 through the research of Japanese learners (Negishi, 2012). Independent Users can communicate and discuss with others through natural interaction. Proficient Users' vocabulary expands dramatically so they are able to communicate fluently and accurately. Level C2 is not perfect language proficiency at the level of a native speaker, but corresponds to the highest level pursued by L2 learners (North, 2014). This CEFR language proficiency reference becomes the basis for the cut-off score of educational policy and evaluation. It allows verification of a learner's academic achievement and evaluation of the difficulty and validity for each school (Lee & Shin, 2019). The CEFR language proficiency reference can be converted to the corresponding levels in IELTS, TOEIC, and TOEFL. According to the study's intended function, the CELA (Cambridge English Language Assessment) is separated into three categories: school, general and higher education, and business. It contains grades in listening, speaking, reading, and writing.

2.2 Restructuring CEFR

Recently, CEFR-related research has been actively conducted not only in South Korea but also in many other countries. For example, in Japan, many studies have been carried out in order to restructure their national English curriculum in terms of CEFR in consideration of the educational objectives, educational environment, and students' proficiency level (Moser, 2017; Negishi et al., 2013; Nishimura-Sahi, 2022). In order to incorporate CEFR into its own curriculum, Japanese MEXT(Ministry of Education, Culture, Sports, Science, and Technology) started studies on learners, teachers, and textbooks. Then, modified CEFR components to suit the educational environment of Japan, and conducted a feasibility study. Through this process, CEFR-J was developed (Negishi, 2012). In addition, the levels of CEFR-J were subdivided, based on the results of a large-scale survey targeting elementary, middle, high school, and the general public. The prepared CEFR-J was piloted by each educational institution, and a list of grammar, text, and characteristics of learner's error was produced through the CEFR-J RLD Project (Tono, 2016). Based on the data, the CEFR-J was divided into Grammar Profile, Text Profile, and Error Profile tasks that could be employed in the classroom, and the Rasch model was used to verify the correlation between the level of proficiency of the learner and the difficulty of the evaluation items (Tono, 2019). Currently, MEXT in Japan is working on a project from 2020 to 2025 with the aim of identifying the specific implementation method and effectiveness of classes based on language proficiency descriptors of CEFR-J.

Similar to CEFR-J, assessment methods based on CEFR are necessary to assess the learners, textbooks, and curriculum of each country in order to apply CEFR to that environment's educational system. After the existing

CEFR level and the learners' language proficiency are compared and analyzed based on the evaluation results, the additional segmentation of proficiency levels can be done as necessary. If so, it can be validated by reconstructing the stages and verifying the continuity among the stages by learners, teachers, and experts. Since the developed curriculum, textbooks, and evaluation standards must be realized through teaching and learning in the classroom, field research is necessary like in the case of CEFR-J. Therefore, the goal of the present study is to look at the trends in South Korean CEFR-related research and suggest a research path for integrating CEFR into effective and practical English education.

3. Method

3.1 Selection of Research Literatures

This study conducted a systematic review of CEFR-related literature published in South Korea from 2000 to 2021. Data collection was made through various academic databases in South Korea, including RISS, DBpia, KISS, KyoboScholar, earticle, scienceon, KoreaScholar, and KCI. Keywords such as the CEFR, Common European Framework of Reference, English Education, English learning, Vocabulary, Communicative Language Activities and Strategies, and Curriculum were used for the search. Through the above process, a total of 318 literature were searched. Through procedures such as removing duplicates, reviewing the suitability of subjects, and checking full-text accessibility, Thirty studies were selected for final analysis.

Collect literatures	Research retrieved through domestic database(n=318) Riss(n=56), DBpia(n=48), KISS(n=58), KyboScholar(n=42), earticle(n=37), scienceon(n=40), KoreaScholar(n=37)	
	↓	Primary exclusion of duplicated literatures (n=189)
Selection of literatures	Literatures excluding duplicates(n=129)	
	↓	Exclusion of literatures including incongruent topics and subjects(n=87)
Review of Selection Criteria	Accessible full-text literatures suit with research topics(n=42)	
	↓	Exclusion of nonconforming literatures through expert review(n=12)
Final selection	Final literatures included in this research(n=30)	

Figure 1. Literature Selection Flowchart

This study included open articles with accessible full-text. This is consistent with the purpose of this study to verify studies conducted in Korea related to CEFR, and these limitations did not significantly affect the study results. Since

the focus of this study is on English education in Korea, literature that evaluates CEFR and the Korean language curriculum that has been actively done recently were eliminated throughout the selection stages. In addition, literature that did not contain a specific description of CEFR structures or components was excluded through expert review. Information on the papers to be analyzed is presented in Table 2.

Table 2. Lists of Analyzed Literature

No.	Author	Year	Title	Source
1	Andrew Finch	2009	Europass and the CEFR: Implications for Language Teaching in Korea	English Language & Literature Teaching
2	Young-Shik Lee & Hye-Young Kim	2009	A comparative study of the achievement standards between the Revised Korean National Curriculum of English and Common European Framework of References (CEFR)	Modern English Education
3	Hee-Kyung Lee	2011	Investigating the Applicability of the CEFR to a Placement Test for an English Language Program in Kore, English Language and Linguistics	English Language and Linguistics
4	Jung-Hee Byun	2012	Validating Writing Scale for High School English with Common European Framework of Reference	English Language Teaching
5	Jae-Hak Lee	2013	National Foreign Language Education Policies and CEFR: English as L2 and the Situation of Other Foreign Languages in Korea	The Korean Journal of Hispanic Studies
6	Peter Crosthwaite	2013	An error analysis of L2 English discourse reference through learner corpora analysis	Linguistic Research
7	Susie Kim & Hee-Kyung Lee	2015	Exploring Rater Behaviors During a Writing Assessment Discussion	English Teaching
8	Pil-Ah Hwang	2016	A study on the adequacy of the achievement standards of primary English reading in the 2015 Revised National Curriculum	Journal of the Korea English Education Society
9	EunJou Oh	2018	Learners' Perceptions in a Scaffolded Task of Reading Online	Multimedia-Assisted Language Learning
10	Ji-Hye Jeon & Jeong-Ryeol Kim	2018	An Analysis on the Standard of Language Competence between 2015 Revised English Curriculum and CEFR Basic User Level	Korean Association For Learner-Centered Curriculum And Instruction
11	Ji-hye Jeon, Je-Young Lee, & Jeong-Ryeol Kim	2018	Development of Survey to Inquire Learners' Awareness of Language Competence Based on CEFR Basic User Level	AJMAHS
12	Moonbok Lee, & Dongkwang Shin	2019	An Exploration of Setting the Target Levels of English Proficiency in the National Curriculum of English Through the Analyses of English Textbooks Home and Abroad	Secondary English Education
13	Ji-Hye Jeon & Jeong-Ryeol Kim	2019	An Analysis of Communication Language Forms based on CEFR Basic English Grammar Profile	Korean Association For Learner-Centered Curriculum And Instruction
14	Euijin Lim, Heesung Jun & Yong-Won Lee	2019	Standard Setting to Relate an English Reading Comprehension Test to the CEFR: A Comparison of Modified Angoff and Bookmark Methods	Korean Society for Educational Evaluation
15	Pil-Ah Hwang	2019	A study on the adequacy of the level of vocabulary and meanings in the primary English textbooks revised in 2015	English Language & Literature Teaching

Table 2. Lists of Analyzed Literature (Continued)

No.	Author	Year	Title	Source
16	Daehyeon Nam, & Kwanghyun Park	2019	Lexical bundles as criterial features in L2 academic writing: Structural differences between CEFR A2 and B2 essays	Multimedia-Assisted Language Learning
17	Shin-Jae Park	2020	The Relationship Between English Listening, Reading, Speaking and Gender of English Majors in a Learner Corpus	STUDIES IN HUMANITIES
18	Moon-bok Lee, & Hee-jung Jung	2020	Exploring the Development of English Language Achievement Standards for a Long-term English Language Education in Schools	The Korea Association of English Reading Education
19	Hye Jin Lee	2020	A Comprehensive Corpus-driven Analysis of Secondary School English Teacher Recruitment Exams: Focused on 2002-2020	English21
20	Ji-Hye Jeon & Jeong-Ryeol Kim	2020	An Analysis of Communication Language Function based on CEFR Basic English Communicative Language Activities and Strategies	Korean Association For Learner-Centered Curriculum And Instruction
21	Ji-Hye Jeon & Jeong-Ryeol Kim	2020	An Analysis of Communication Language Functions and Vocabulary of Elementary English Textbooks Based on CEFR Basic User Level	Korean Association For Learner-Centered Curriculum And Instruction
22	Seong Yeub Chu, & Deok Gi Min	2020	A study on the development of an automated algorithm using natural language toolkit (NLTK) and artificial intelligent (AI) chatbot for primary English vocabulary assessment	Primary English Education
23	Byeong Cheon Lee	2020	Applicability of CEFR to National Curriculum and Assessment of English	Korean Journal of English Language and Linguistics
24	Byeong Cheon Lee	2020	Restructuring Achievement Standards in National English Curriculum	English Language & Literature Teaching
25	Bohyon Chung	2021	Identifying phonological barriers in Korean-accented English using artificial intelligence apps	English Language & Literature Teaching
26	Jungyeon Kim	2021	Measuring NP Complexity in Korean EFL Writing across CEFR Levels A2, B1 and B2	Korean Journal of English Language and Linguistics
27	Kyungmin Kang	2021	A comparison of TOEIC and CEFR based CELA as a college English placement test	English Teaching
28	Shinjae Park	2021	A Corpus Study on the Relationship between Syntax Complexity and English Speaking Proficiency	Journal of Linguistic Studies
29	Ji-Hye Jeon & Jeong-Ryeol Kim	2021	A Study on the Application of AI Voice Recognition Programs as a Communication Mediator	Primary English Education
30	Chae Kwan Jung	2021	Designing and building the Korean English Learners' Spoken Corpus (KELSC)	Studies in Foreign Language Education

3.2 Procedure and Instrument

The data analysis in this study comprehensively reviewed the research topics, methods and results of English education in Korea which is CEFR-related. The characteristics of English education studies on CEFR were derived by comprehensively examining related literature. In particular, the contents of each piece of literature, including research topics, research methods, and research results, were rigorously evaluated in order to increase the validity of the qualitative analysis. This study visualized the results through coding work using Excel and basic statistical analysis using tables and graphs according to the analysis criteria.

**Table 3.** Criteria for Analysis of CEFR-Related English Education Research

Analysis Criteria	Detailed Classification Content
Information	Year of publishment, Source
Subject	Elementary, Middle, High, University, General
	CEFR Proficiency level (Pre-A1 to C2)
Methodology	Quantitative Research, Qualitative Research, Mixed methods Research
	Experimental Research, Data-driven Research, Survey Research, Research and Development, Case Study, Literature Review
Topic	Curriculum, Teaching Methods, Textbook development, Evaluation
	Vocabulary, Grammar, Communicative Language Activities and Strategies, Pluricultural Competence, Communicative Language Competence

The analytic criteria were specified as research information, research subjects, research methodologies, and research topics in Table 3 since the purpose of this study is to assess the trends in CEFR research. First, the publication year and journal-title were looked at in the research information. Second, the study subjects were classified based on elementary, middle, high school, university, and the general public along with CEFR levels. Third, the research method was largely divided into quantitative studies with structured and statistical design and verification stages, as well as qualitative studies with flexible, exploratory, and discovery-oriented features (Kim & Lee, 2012). In addition, studies using both quantitative and qualitative methods were classified as mixed studies (Shin et al., 2015). The methods of each study were subdivided into experimental research, investigation research, development research, case study, and literature review. Fourth, the research topics were analyzed based on curriculum, teaching methods, textbook development, and evaluation. Then, they were classified into vocabulary, grammar, communicative language activities and strategies, pluricultural competence, and communicative language competence, reflecting the CEFR system.

4. Results and Discussion

4.1 Year of Publication

The number of literature on CEFR-based English education showed a continuous increase. Notably, 9 literature (30.0%) were published in 2020, accounting for the highest proportion. Since the 2015 revised national curriculum was announced in Korea, it seems that the number of literature using CEFR as a reference has increased. The fact that 21 literature (70.0%) were published between 2018 and 2021 indicates that CEFR-related research has been actively conducted in South Korea recently.
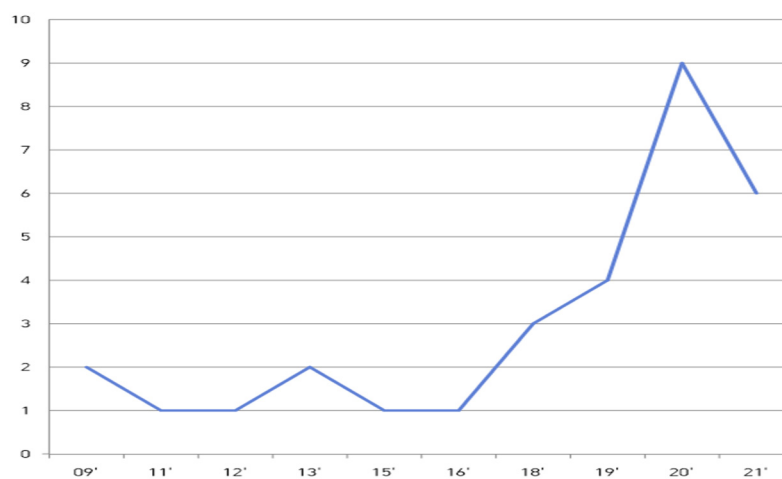
Figure 2. The Number of Literature in English Education Related to CEFR

4.2 Subjects

In each study, the subject included school and CEFR levels differently. But, there were cases which CEFR level was not set up. In this study, thirty studies were initially classified by their level in the Korean school system and the results were segmented further by applying the CEFR levels. In addition, in order to analyze domestic CEFR-related research subjects, the Korean school level was mainly classified. Literature that contains multiple school levels was categorized as the lowest school system to avoid duplication. In Table 2, no. 14 and 15 were targeting both elementary and middle school, but the kinds of literature were categorized as elementary. This was to clarify the initial range of the school level. It will be possible to conclude from which school level, CEFR-related research was actively done. Out of 30 literature, 11 studies (36.7%) were conducted on university students to the general public. Next, 10 kinds of literature (33.3%) were the studies conducted on the elementary school. Among literature conducted in elementary school, no. 8, 10, 13, 15, 20, and 21 in Table 2, analyzed vocabulary, language form, and achievement standards with CEFR.

Table 4. The Number of Literature Analyzed by Korean School System Levels

School Level	Elementary	Middle	High	University	Unclassified
Articles	10 (33.3%)	0 (0.0%)	2 (6.7%)	11 (36.7%)	7 (23.3%)

"Unclassified" refers to subjects like curriculum, teaching methods, textbook development, and evaluation in the Korean school system where level-based classification is not used but instead solely the CEFR level. There were 7 literature (23.3%) that belonged to 'unclassified', and they mainly analyzed curriculum and textbooks. On the other hand, 2 kinds of literature were performed in high school (6.7%). As a result of the classification, it is possible to conclude that the majority of CEFR-related research was focused on two academic levels, elementary and university.

Next, both the Korean school system and levels of CEFR were analyzed together. The three levels of the learner's stages identified by the CEFR—Basic User, Independent User, and Proficient User—were further broken down into two sub-levels each (Council of Europe, 2020). When research included all the sub-stages (e.g., B1 and B2), it was classified as 'All'. Moreover, research subjects with numerous CEFR levels and educational system levels were categorized using duplication. This study tried to catch the flow of comparative analysis between the Korean School system and the CEFR levels.

Table 5. Number of Articles Analyzed by School System and CEFR Levels

Levels	Basic User			Independent User			Proficient User			Unclassified
School	A1	A2	All	B1	B2	All	C1	C2	All	
Elementary			10 (11.5%)			5 (5.7%)			5 (5.7%)	
Middle			3 (3.4%)			3 (3.4%)			3 (3.4%)	
High			3 (3.4%)			3 (3.4%)			3 (3.4%)	1 (1.1%)
University		2 (2.3%)	8 (9.2%)	1 (1.1%)		9 (10.3%)			5 (5.7%)	1 (1.1%)
General			2 (2.3%)			2 (2.3%)			2 (2.3%)	1 (1.1%)
Unclassified			4 (4.6%)			4 (4.6%)			4 (4.6%)	3 (3.4%)
Total		2 (2.3%)	30 (34.5%)	1 (1.1%)		26 (29.9%)			22 (25.3%)	6 (6.9%)

There was a literature not classified by CEFR level, but targeting high school, university, and the general public. No 1 in Table 2 urged the development of Koreapass based on CEFR reflecting the trend of multilingual global citizenship education. There were 3 literature (3.4%) unclassified by both the school system and CEFR levels. Those literature discussed the requirements needed to adapt CEFR for the entire domestic curriculum. Specifically, literature no. 5 in Table 2 explains the advantage of adapting CEFR into the domestic curriculum due to plurilingualism and pluriculturalism which enforced learners' competence in diverse languages and cultures.

Focusing on the CEFR levels, 30 kinds of literature (34.5%) were conducted on Basic User, followed by Independent User (26, 29.9%) and Proficient User (22, 25.3%). In the case of Basic User, the number of literature related to elementary school and the university was the highest with 10 studies (11.5%). For Independent User, the number of literature among university students was the highest (10, 11.5%), whereas with Proficient User, the number of literature for both elementary school and the university was the highest with 5 (5.7%). Since there is no official reference between he that Korean school system and the CEFR levels, it is difficult to clarify the linkage through Table 5. It shows that research that applies the CEFR levels is being conducted in Korea throughout the entire school system of Korea. Also, we can see that CEFR-related research is being actively conducted at all levels from Basic User to Proficient User.

4.3 Research Methods

The literature on CEFR-related English education can be divided into quantitative research, qualitative research, and mixed research, based on the method. There were 18 kinds of literature (60.0%) conducted using the quantitative statistical method, and this proportion was the highest. With 11 kinds of literature, experimental research made up the majority of the quantitative research (36.7%). This was followed by 7 literature (23.3%) that attempted quantitative analysis through the use of corpus-related tools. Since the vocabulary and grammar profile of CEFR was created based on corpus data, it can be seen that data-based research using EVP and EGP is being conducted actively.

Qualitative research including development research and case study were 10 (33.3%). Among them, there were relatively many development studies (16.7%) that applied and supplemented materials or tools which are designed for managing effective classes. This demonstrates the research trend of comparing and contrasting the CEFR's characteristics with those of the 2015 curriculum revision and applying the CEFR's characteristics of communicative language use and strategy to the curriculum. In this study, when the use of both experimental research that undergoes verification by statistical design and qualitative research that draws inductive conclusions through extensive data collection in the field was classified, it was done as mixed methods research. There were two mixed methods researches (6.7%). One of the kinds of literature developed a writing evaluation scale reflecting the CEFR level. On the other hand, a domestic development evaluation tool was compared and analyzed with the CEFR reading scale and verified by expert panels.

Table 6. The Number of Literature Analyzed by Methodology

Methods	Specific classification	Articles
Quantitative Research	Experimental Research	11(36.7%)
	Data-driven Research	7(23.3%)
	Survey Research	0
Qualitative Research	Research and Development	5(16.7%)
	Case Study	1(3.3%)
	Literature Review	4(13.3%)
Mixed methods Research	Research and Development	1(3.3%)
	Survey Research	1(3.3%)

4.4 Research Topics

Thirty CEFR-related literature were classified into curriculum, teaching methods, textbook development, and evaluation. Research topics were duplicated if there were two or more of them in a single study. In the analysis process, the literature no.12 in Table 2, which analyzed textbooks using CEFR-J vocabulary profile and compared national curriculum with other countries was duplicated in categories of curriculum and textbook development.

Table 7. Number of Articles Analyzed by Topics

Topics	Curriculum	Teaching Methods	Textbook Development	Evaluation
Articles	10(33.3%)	3(10.0%)	3(10.0%)	14(46.7%)

As a result of the analysis, studies on evaluation (14, 46.7%) and curriculum, (10, 33.3%) accounted for a large portion. On the other hand, the number of literature targeting textbook development and teaching methods was relatively low. According to the result of a study that analyze 770 CEFR studies conducted in various countries around the world using the SCOPUS database, most of the studies focused on language evaluation (Sahib & Stapa, 2022). Similarly, in the results of this study, there were many studies in the field of evaluation. This means that studies using CEFR as a language evaluation tool and standard have been conducted in Korea, similar to the global language research trend.

Table 8 shows the results of the classification of research topics based on CEFR components such as vocabulary, grammar, communicative language activities and strategies, pluricultural competence, and communicative language competence. In this study, the literature that analyzed the frequency and types of errors based on the learners' corpus were classified as communicative language competence. In CEFR, a learner's communicative language competence includes linguistic competence, as it deals with lexical scope and control. CEFR provides the reference of a learner's vocabulary and language forms per each level based on corpus data. Therefore, when the EVP(English Vocabulary Profile) and EGP(English Grammar Profile) data were used in the research topic, they were classified as related fields.

Table 8. Amount of Literature Analyzed by Topics and CEFR Structure

Topics / CEFR	Curriculum	Teaching Methods	Textbook Development	Evaluation
Vocabulary	1(3.3%)		2(6.7%)	3(10.0%)
Grammar	1(3.3%)			2(6.7%)
Communicative Language Activities and Strategies	6(20.0%)	1(3.3%)	1(3.3%)	7(23.3%)
Pluricultural Competence				
Communicative Language Competence		1(3.3%)		
Unclassified	2(6.7%)	1(3.3%)		2(6.7%)

The scale of CEFR was used to analyze students' proficiency in university entrance exams and placement tests, and to develop communicative function scales on listening, speaking, reading, and writing. In curriculum-related research, six kinds of literature (20.0%) compared and analyzed the achievement standards of the Korean national curriculum with language ability descriptors in CEFR, and tried to find ways to link achievement standards among school grade levels. However, the number of culture-related studies was relatively small. CEFR defines a learner as a social subject and describes how they can develop mutual understanding, linguistic, and cultural competency necessary to participate in social and educational contexts according to the learner's level (Council of Europe, 2020). CEFR focuses on developing Plurilingual and Pluricultural Competence from the perspective of mutual understanding rather than independently learning and using a language. Therefore, the ability of learners to mediate communication in a common language based on their understanding of each other's language and culture is emphasized. In this context, considering the educational situation in Korea, which learns English as a foreign language and communicates by using it with multinational people, research related to intercultural competence needs to be implemented more actively. Through all of this research process was done, the classification results were re-verified through expert reviews.

5. Conclusion

This study comprehensively and systematically analyzed kinds of literature related to CEFR-related English education, and suggested the direction of future research necessary to incorporate CEFR into English education in South Korea. In order to do so, 30 studies that met the selection criteria were extracted by searching journals. As a result, with the implementation of the 2015 revision to the national curriculum, 21 kinds of literature (or 70%) connected to the CEFR were completed. This shows that South Korea had tried to adapt learners' competency and the achievement standard with a focus on performance in the 2015 national curriculum with various perspectives and methods including CEFR. It is justifiable since CEFR describes a learner's competency based on an action-oriented approach. The 2022 revised curriculum focuses on clarifying learners' competencies and improving achievement standards. Therefore, it is necessary to refer to the way CEFR describes the learner's language performance in detail at each level.

In terms of the study subjects, CEFR-related research was largely conducted in elementary schools and universities.

CEFR-related research has been largely done on aspects of the elementary school curriculum such as vocabulary, language format, and achievement standards. In research targeting universities and the general public, CEFR was used as an evaluation tool for language ability. This study does not verify the linkage between CEFR levels and school systems. The results only indicated that studies had been conducted at all school system levels related to broad CEFR levels. Based on the CEFR level, the range was very wide from Basic User to Proficient User. Through this, it was found that various studies compare and analyze CEFR with the Korean national curriculum. In order to successfully apply CEFR to Korean English education, research on more detailed level settings and the linkage between each level needs to be conducted actively.

CEFR is a guideline for curriculum policymakers, teachers, and learners. It can be a tool to plan learning programs, language certification, and self-directed learning. CEFR was used in domestic quantitative, qualitative, and mixed research because it can be used as a research subject, method, and instrument depending on the purpose of the researcher. It provides RDL (Reference Level Description) such as vocabulary, grammar, and text profile based on corpus data. Also, a CEFR-related study showed data-based research had been actively conducted in Korea. In particular, among quantitative research, experimental research mainly verified learners' language ability at the CEFR level. It is important to verify the learner's proficiency to adapt CEFR to English education. Extensive research on Korean learners should be conducted at first. If the learner's proficiency can be converted to the CEFR level, then restructured curriculum, teaching method, textbook development, and evaluation can be applied.

It is a requisite to restructure CEFR to adapt it to domestic English education. In this regard, the case of CEFR-J can be referred to. Japan has worked to develop and utilize CEFR-J through restructuring of CEFR in consideration of its own educational environment. Based on the survey of Japanese learners' proficiency, the curriculum, textbook, and evaluation had been reorganized into CEFR-J. The developed CEFR-J is used as a tool for verifying whether teachers and learners have the appropriate vocabulary, language forms, and communicative functions for each level. Therefore, if CEFR is introduced in English education in Korea, there will need to be more studies for restructuring the educational environment and classroom-oriented studies in curriculum, teaching methods, textbook development, and evaluation.

The CEFR separates the communicative competence of L2 learners into four categories: listening, speaking, reading, and writing. The categories are further expanded into reception, production, interaction, and mediation. In the case of interaction, it is in line with the direction of the Korean 2022 revised national curriculum in that it describes the method and environment in which learners communicate in various stages, reflecting online communication. In addition, since mediation describes the ways for effective communication between learners who speak different languages, it is an ability that is absolutely required for Korean L2 learners in an EFL situation. CEFR is a common language standard that includes learning content, knowledge, skills, and cultural context, so it can serve as a guideline for many educational environments. Therefore, it is necessary to carry out further studies on the specification of curriculum, evaluation, textbooks, teaching methods, and continuity, related to CEFR. This study's limitation is that it does not diverse data, including those from CEFR-related books, journals, and academic presentations, because it only looked at full-access literature published in Korea between 2000 and 2020. If various materials such as domestic CEFR-related books and academic presentation materials are included, the result of this analysis could change. The bibliometric approach in the analysis of trends related to CEFR will be needed in follow-up studies. Therefore, follow-up studies including CEFR-related studies are required in relation to English education in Korea in the future. Furthermore, additional research has to be done on pluricultural and plurilingualism, as mentioned in the results of the study.

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