



A Journal of Culture, English Language, Teaching &
Literature

ISSN 1414-3320 (Print), ISSN 2502-4914 (Online)

Vol. 22 No.2; December 2022

Copyright © Soegijapranata Catholic University, Indonesia

Bibliometric Analysis on EFL Publication Trends in 2011-2021 Using VOSviewer

Erica Ikramunnisa¹, Surya Mahardika², Afandi³, and Yanti Sri Rezeki⁴

^{1, 2, 4}Department of English Education, Teacher Training and Education Faculty,
Universitas Tanjungpura, Pontianak, Indonesia.

³Department of Biology Education, Teacher Training and Education Faculty,
Universitas Tanjungpura, Pontianak, Indonesia.

¹ericaikram@student.untan.ac.id, ²suryamahardika@student.untan.ac.id,
³afandi@fkip.untan.ac.id, ⁴yanti.sri.rezeki@fkip.untan.ac.id

Received: 19-05-2022

Accepted: 10-12-2022

Published: 30-12-2022

Bibliometric Analysis on EFL Publication Trends in 2011-2021 Using VOSviewer

Erica Ikramunnisa¹, Surya Mahardika², Afandi³, and Yanti Sri Rezeki⁴

¹ericaikram@student.untan.ac.id, ⁴yanti.sri.rezeki@fkip.untan.ac.id

²suryamahardika@student.untan.ac.id, ³afandi@fkip.untan.ac.id,

^{1,2,3}Department of English Education, Teacher Training and Education Faculty, Universitas Tanjungpura, Pontianak, Indonesia.

⁴Department of Biology Education, Teacher Training and Education Faculty, Universitas Tanjungpura, Pontianak, Indonesia.

Abstract: This study provides a comprehensive overview of current publication patterns in the field of English as a Foreign Language (EFL). In this research, the trends investigated are publication and citation growth, researcher's productivity, and the most impactful publications. In addition to the publication trends, network visualizations of the terms co-occurrence and co-authorship are also presented in this research. A quantitative descriptive method with bibliometric analysis is employed as the research design of this research. The data analyzed are 6333 journal articles related to EFL published in 2011-2021. All of the data are obtained from the Scopus database. From the analysis using Scopus and Microsoft Excel, it was found that the highest publication growth in percent is in 2012 with a 98,6% of publication increase, and the highest publication growth in number is in 2020 with a total of 310 more publications compared to the previous year. Using the same tools, the researchers also found that the most productive author is Karim Sadeghi with 10 publications, and the most cited publication is an article titled 'English achievement and student motivation in CLIL and EFL settings' by David Lasagabaster. Meanwhile, from the network visualizations using VOSviewer, the researchers concluded that there are two major research themes in EFL, namely pedagogy and affective factors in learning, and the most collaborative author based on the co-authorship analysis is Ehsan Namaziandost.

Key words: Bibliometric analysis, EFL, Network visualization, Publication trends

Abstrak: Penelitian ini menyajikan gambaran umum yang komprehensif dari tren publikasi di area English as a Foreign Language (EFL). Dalam penelitian ini, tren yang diteliti adalah perkembangan publikasi dan sitiran, produktivitas penulis, dan publikasi yang paling berdampak. Selain tren publikasi, visualisasi jaringan dari istilah-istilah yang muncul bersamaan dalam penelitian dan kerjasama antar peneliti juga disajikan dalam penelitian ini. Metode kuantitatif deskriptif dengan analisis bibliometric digunakan sebagai desain penelitian dalam penelitian ini. Data yang dianalisis adalah 6333 jurnal artikel yang berhubungan dengan EFL pada 2011-2021. Semua data diperoleh dari basis data Scopus. Dari analisis menggunakan Scopus dan Microsoft Excel, ditemukan bahwa persentase publikasi tertinggi terjadi pada tahun 2012 dengan 98,6% peningkatan publikasi, dan angka publikasi tertinggi terjadi pada tahun 2020 dengan 310 publikasi lebih banyak dibandingkan tahun sebelumnya. Menggunakan perangkat analisis yang sama, peneliti juga menemukan bahwa penulis yang paling produktif adalah Karim Sadeghi dengan 10 publikasi, dan publikasi yang paling banyak dikutip atau disitir adalah artikel dengan judul “English achievement and student motivation in CLIL and EFL settings” oleh David Lasagabaster. Sementara itu, dari visualisasi jaringan yang dilakukan menggunakan VOSviewer, peneliti menyimpulkan bahwa ada dua tema utama dalam penelitian EFL, yaitu pedagogi dan faktor-faktor afektif dalam pembelajaran, dan penulis yang paling banyak berkolaborasi berdasarkan analisis kerjasama antar peneliti adalah Ehsan Namaziandost.

Kata kunci: Analisis bibliometrika, Bahasa Inggris sebagai bahasa asing, Visualisasi jaringan, Tren publikasi

INTRODUCTION

In language learning, the term EFL is not unfamiliar. EFL or English as a Foreign Language is commonly used to describe learners who learn English in non-English-speaking country (e.g., Argentina, China, Japan, and

Indonesia) (Si, 2019). In these countries, English is classified as a foreign language, which means that it is neither spoken in daily communication nor in formal settings (e.g., education, government, and law) (Si, 2019). As a consequence, the learners experience limited exposure to English as the target language which makes their language acquisition harder to achieve (Al-Zoubi, 2018).

Limited exposure to English is only one of the issues faced by the EFL in learning the language (Hibatullah, 2019). Issues like lack of motivation (Abrar, 2016; Akbari, 2015; Ulfa, 2021), lack of engagement (Rahayu, Mudofir, & Sutantohadi, 2019), and lack of resources (Abrar, 2016) are also among the problems that affect the EFL learning. Regarding these problems, numerous scholars have done various research to solve them. To solve students' lack of motivation, media such as a movie (Syahrozi, Rochsantiningih, & Handayani, 2019) and songs (Adara, 2020) have been proven effective in increasing students' motivation to learn English. Rahayu, et al. (2019) used the flipped instruction technique to solve the lack of students' engagement in an EFL speaking class, and it successfully improved students' engagement and improve their speaking performance scores. Meanwhile, Arfiandhani (2020) found that teachers or instructors can utilize Facebook groups to obtain information on educational policy and teaching resources to teach EFL students.

Numerous scientific literature on EFL have been published, and the number will only increase in the coming years. With the increase in these numbers, it is crucial to know the status quo of this research area. By knowing the quo of the research area, the researcher can get an overview of the current trends and plan their future research appropriately from choosing the research topic to positioning the intended research contribution (Donthu, Kumar, Mukherjee, Pandey, & Lim, 2021). Despite the high numbers of published literature in EFL, there are still limited publications on such overview in EFL, especially the one focused on the publication trends. Hence, this study aims to provide an overview of EFL as a research area by uncovering the publication trends and the network visualization on the publication terms.

Since this study aims to provide an overview of a research area, bibliometric analysis will be employed in this study. The bibliometric analysis employs statistical analysis to assess measurable data of the existing scientific literature in a particular research area (Agarwal et al., 2016). It is capable of uncovering "research trends, citation analysis, authorship, impact of publications, journal analysis, as well as national and international contribution in a particular field." (Sweileh et al., 2017, p.2).

The bibliometric analysis had evidenced to be useful in providing an overview of other research areas related to language learning. Zhang (2020) employed bibliometric analysis to know the trends and changes in the field of Second Language Acquisition from 1997 to 2018. The study found that topics such as bilingual advantage, cognitive control, collaborative writing, common European framework, dynamic system(s), and formulaic language have gained popularity over the past 20 years. In another study, Barrot (2021) investigated the use of social media as a language learning and teaching environment. The study discovered that research on social media in the area of language learning has exponentially grown since 2008 and possibly keep growing for the next few years based on the increasing use of sophisticated research designs and expanding topical foci.

In regard to the previous research that employs bibliometric analysis, this study will focus on providing an overview of EFL as a research area. To get an overview of EFL as a research area, this research will answer the following research questions:

1. What are the publication trends in the area of English as a Foreign Language (EFL) regarding publication and citation growth, researchers' productivity, and the most impactful publication?
2. How are the network visualizations of publication in EFL based on their terms co-occurrence analysis and co-authorship analysis?

LITERATURE REVIEW

Bibliometric analysis is a review method used to quantitatively assess published literature in a particular research area (Donthu et al., 2021; Zupic & Čater, 2015). It is used when either the scope of review is general or the dataset is too big (i.e., more than 500 papers) and takes too much time for manual review (Donthu et al., 2021). The published literature can be obtained from a bibliographical database, such as Scopus, Web of Science, Crossref, Web of Science and Google Scholar (Gutiérrez-Salcedo, Martínez, Moral-Munoz, Herrera-Viedma, & Cobo, 2017). From the published literature, several data are extracted to conduct the bibliometric analysis. They are bibliographic data (e.g., title, author, publication year, and journal), citation data, reference list, and textual data (i.e., abstract, keywords, and article's full text) (Donthu et al., 2021).

There are two main techniques in bibliometric analysis which are performance analysis and science mapping. Performance analysis focuses on analyzing the performance or contributions of different research constituents (e.g., authors, institutions, countries, and journals) in particular fields or areas (Donthu et al., 2021; Zupic & Čater, 2015). Performance analysis is often used to analyze the publication behavior and study the trends from it (Bancong, Nurazmi, Fiskawarni, & Park, 2021; Sun, Wang, & Feng, 2021). Meanwhile, science mapping focuses more on the relationships between the research constituents (Donthu et al., 2021; Gutiérrez-Salcedo et al., 2017). In science mapping, the results can be presented in the form of network visualizations (Donthu et al., 2021; Hallinger & Kovačević, 2019; Lam & Habil, 2021). The result of the bibliometric analysis can provide an overview of the research area by describing the publication patterns and trends, as well as identify the influential research constituents (e.g., authors, institutions, countries, and journals) within the research area (Donthu et al., 2021; Gutiérrez-Salcedo et al., 2017; Zupic & Čater, 2015). As bibliometric analysis is capable of providing an overview of a research area, the result of bibliometrics will be useful in aiding the process of literature review as it guides the researcher to influential works before the reading process begins (Zupic & Čater, 2015). The results of the bibliometric analysis are closely linked to funding and hiring opportunities by government and funding organizations as it provides quantitative measurements of the researchers' works (Agarwal et al., 2016; Haustein & Larivière, 2015).

METHOD

A. Type of Research

This study employs a quantitative descriptive method with bibliometric analysis. In this research, the analyzed publications are journal articles that were obtained from the Scopus database. All data obtained from the Scopus database have been digitally recorded with a Digital Object Identifier (DOI). Next, the data are classified into two categories for the bibliometric analysis, which are the data for the trend of publications and the network visualizations. After the classification, the data are processed using Microsoft Excel for the trends of publication. Meanwhile, for the network visualizations, an application called VOSviewer is used for doing analysis and generating the visualizations. The results of the data analysis will be explained descriptively.

B. Data Collection

The data collection was conducted by using the Scopus database in December 2021. The researchers started the data collection by doing a title search using the keywords “EFL” with the alternative keywords of “English Foreign Language”. Then, the researchers limit the data to journal articles published in 2011-2021. There are 6333 journal articles obtained from this data collection, and they are saved in the form of a Research Information System (.ris). The data collected are journal article title, author name, publication year, journal name, author affiliation, and citation data.

C. Data Analysis

In this research, there are two data analysis techniques. The first data analysis is for the publication trends which analyze the publication's growth in the EFL field. In publication trends analysis, the researchers obtain all of the data from the Scopus database. The data are then sorted and verified for their eligibility with the Mendeley application, which is utilized for the verification procedure. From the verification on Mendeley, the researchers obtain 6328 eligible journal articles. Next, Microsoft Excel was utilized to analyze the publication trends which are the publications and citations growth, the researchers' productivity, and the most impactful publication.

The next data analysis is for the network visualization. The data used in this analysis is the data from the Scopus database which was previously saved in the form of (.ris). Then, the data was input into the VOSviewer application to obtain the network visualization of the terms co-occurrence and co-authorship. To create the terms co-occurrence visualization, the researchers obtain 1301 terms, and among all of them, only 232 terms meet the criteria. The intended criteria are the terms related to the keywords “EFL”. On the other hand, to obtain the co-authorship visualization, the researchers obtain a total of 8202 authors which involved in EFL research over the past 11 years. Among these authors, 315 authors are selected as the data for the network visualization of co-authorship. The selected authors are the authors with 5 or more publications in 2011-2021. From the generated network visualizations, the researchers further analyze the relationships between the existing terms based on the terms co-occurrence visualization and authors' collaboration based on co-authorships visualization.

FINDINGS AND DISCUSSIONS

The findings of this research consist of two categories, which are the publication trends and the science mapping. The findings on publications trends in EFL research are publications and citations growth, the researchers' productivity, and the most impactful publication. Meanwhile, the next findings are terms co-occurrence analysis and co-authorship analysis which will be presented in the form of network visualizations.

A. Trends of Publication in EFL

1. Publications and citations growth

Based on the analysis result of EFL articles from the Scopus database, it was found that there are 6333 journal articles published in 2011-2021. However, after the data were analyzed and verified, 5 journal articles are found to be unrelated to EFL. Thus, the total number of publications from 2011 to 2021 is 6328 journal articles with an average of 575 publications per year.

Over the past eleven years (2011-2021), it was found that the number of publications published each year varied with an uptrend in general. In 2012, the total number of publications was almost double the number of publications from the previous year with an increase of 98.6% publications from 218 publications in 2011 to 433 publications in 2012. From 2012 to 2014, there is a sideways with a slight decrease of 5.61% publications in 2013 (410 publications) compared to 2012 (433 publications), and an increase of 16.4% publications in 2013 to 2014 (504 publications). Next, in 2014-2017, the number of publications is in a downtrend with a slight decrease in publications each year. However, the situation got better in 2018 as the number of publications increase by as much as 139 publications, which accounts for a 34,2% increase compared to 2017.

The increase of publications in 2018 also starts an uptrend in the number of publications until 2021. In 2019, there is a 38.5% increase in publications compared to the previous year, with a total of 210 more publications. 2020 becomes the year with the highest rise in yearly publications, with an increase of 310 publications (41%) from 2019. Lastly, there is an increase of 8% in publications from 1065 publications in 2020 to 1151 publications in 2021.

On the other hand, the number of citations is generally in a downtrend over the past eleven years (2011-2021). The total number of citations is 31349 citations with an average of 2850 citations each year. In 2013, the total number of citations is 3598, and subsequently became the highest number of citations over the past 11 years. In the same year, the highest increase of citations also occurs with a total increase of 12.8% citations compared to 2012 (3188 citations).

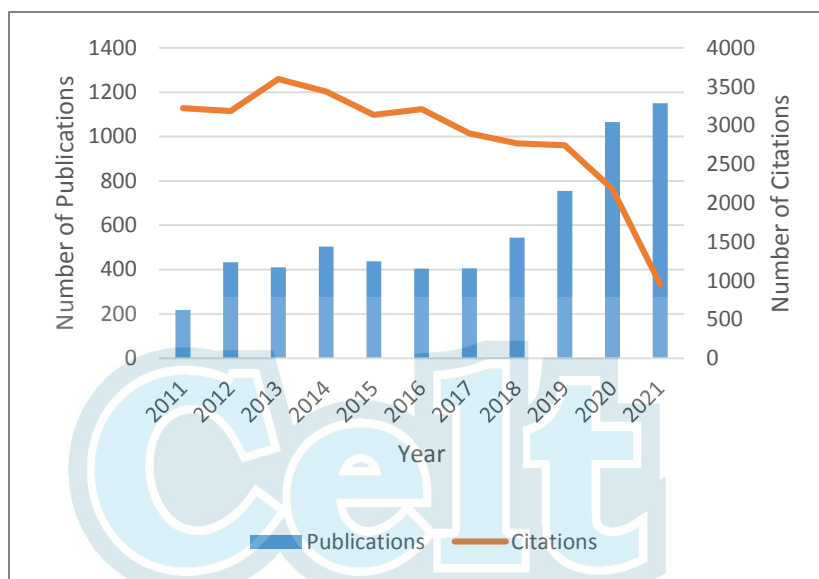


Figure 1:
The chart of publications and citations growth in 2011-2021

Meanwhile, the lowest number of citations occurs in 2021 with 955 citations. It is a 56.2% decrease in citations compared to the previous year (2181 citations).

2. Researchers' productivity

The most productive author from 2011 to 2021 is Karim Sadeghi with a total of 10 publications. Following Sadeghi is Saeed Ketabi with 9 publications and Parviz Alavinia with 8 publications. Next, there are 4 authors with 6 publications, namely Hossein Barati, Reza Pishghadam, Afshin Soori, and Mansoor Tavakoli. Also on the list are authors with 5

publications, they are Reza Biria, Farahman Farrokhi, and Reza Kafipour. The authors and their affiliations are presented in table 1.

Table 1:
The most productive author in 2011-2021

Author	Affiliations	Number of Publication
Karim Sadeghi	Urmia University	10
Saeed Ketabi	University of Isfahan	9
Parviz Alavinia	Urmia University	8
Hossein Barati	University of Isfahan	6
Reza Pishghadam	Ferdowsi University of Mashhad	6
Afshin Soori	Islamic Azad University	6
Mansoor Tavakoli	University of Isfahan	6
Reza Biria	Islamic Azad University, Isfahan Branch	5
Farahman Farrokhi	University of Tabriz	5
Reza Kafipour	School of Paramedical Sciences	5

The next findings on researchers' productivity are affiliations with most publications. From 2011 to 2021, the affiliation with most publications is Islamic Azad University with 35 publications. Next on the list are the University of Isfahan and Urmia University, with 29 and 20 publications respectively. In the list, there is also another branch of Islamic Azad University with 11 publications each, which are Islamic Azad University (Tabriz Branch), Islamic Azad University (Najafabad Branch), and Islamic Azad University (Shiraz Branch). The list of top 10 affiliations with most publications is shown in table 2.

Table 2:
Affiliations with the most publications in 2011-2021

Top Affiliation	Number of Publications
Islamic Azad University	35
University of Isfahan	29

Urmia University	20
Universiti Putra Malaysia	17
Payame Noor University	17
University of Tabriz	12
Ferdowsi University of Mashhad	11
Islamic Azad University, Tabriz Branch	11
Islamic Azad University, Najafabad Branch	11
Islamic Azad University, Shiraz Branch	11

The last findings on researchers' productivity are journal publishers with most publications. *Theory and Practice in Language Studies* with 108 publications became the journal with most publications. Following *Theory and Practice in Language Studies* is *English Language Teaching* with 65 publications and *the International Journal of Applied Linguistics and English Literature* with 26 publications. There are also 2 publishers with 23 publications each, which are *the Asian EFL Journal* and *the European Journal of Social Sciences*. The complete list of the top 10 publishers is listed in table 3.

Table 3:
Journals with the most publications

Top Publisher	Number of Publications
Theory and Practice in Language Studies	108
English Language Teaching	65
International Journal of Applied Linguistics and English Literature	26
Asian EFL Journal	23
European Journal of Social Sciences	23
World Applied Sciences Journal	19
Journal Of Asia TEFL	17
International Education Studies	15
Mediterranean Journal of Social Sciences	12
System	12

3. The most impactful publication

The most impactful publications in this research are analyzed from the total number of citations on the publication. From the findings, it is found that the article titled “English achievement and student motivation in CLIL and EFL settings” written by David Lasagabaster is the most impactful publication with a total of 134 citations. Next on the list are article titled “Towards an ecological understanding of willingness to communicate in EFL classrooms in China” by Jian-E Peng with 116 citations. Following both articles is the article with 109 citations which is written by Mohammad Javad Ahmadian and Mansoor Tavakoli with the title “The effects of simultaneous use of careful online planning and task repetition on accuracy, complexity, and fluency in EFL learners' oral production”. The details of the most impactful publications are shown in the table 4 below.

Table 4:
The most impactful publications based on citations

Author	Title	Year	Published in	Number of Citations
David Lasagabaster	English achievement and student motivation in CLIL and EFL settings	2011	Innovation in Language Learning and Teaching	134
Jian-E Peng	Towards an ecological understanding of willingness to communicate in EFL classrooms in China	2012	System	116
Mohammad Javad Ahmadian, and Mansoor Tavakoli	The effects of simultaneous use of careful online planning and task repetition on accuracy, complexity, and fluency in EFL learners' oral production	2011	Language Teaching Research	109
Chih-Kai Chang, et al.	A mobile-assisted synchronously collaborative translation-annotation system for English as a foreign	2011	Computer Assisted Language Learning	104

	language (EFL) reading comprehension			
Mostafa Papi, et al.	Teacher Motivational Practice, Student Motivation, and Possible L2 Selves: An Examination in the Iranian EFL Context	2012	Language Learning	102
Neil Cowie	Emotions that experienced English as a Foreign Language (EFL) teachers feel about their students, their colleagues, and their work	2011	Teaching and Teacher Education	93
Yu-Chih Sun, et al.	Blogging to learn: Becoming EFL academic writers through collaborative dialogues	2012	Language Learning and Technology	76
Mutsumi Kondo	Mobile Assisted Language Learning in university EFL courses in Japan: Developing attitudes and skills for self-regulated learning	2012	ReCALL	72
Ali Farhan AbuSeileek	The effect of computer-assisted cooperative learning methods and group size on the EFL learners' achievement in communication skills	2012	Computers and Education	71
Arman Abednia	Teachers' professional identity: Contributions of a critical EFL teacher education course in Iran	2012	Teaching and Teacher Education	70

The most impactful publications listed above discuss various topics in EFL, such as motivation, learners' perception, and the integration of

technology in teaching. The first impactful publication written by Lasagabaster (2011) discusses the relationships between motivation and language learning achievement in two different settings which are Content and Language Integrated Learning (CLIL) and English as Foreign Language (EFL). The participants involved in this research are 191 language learners which come from a bilingual community called Basque Country. The community uses both Basque and Spanish as the official language that is also used in schools. From this research, the author concludes that there is a powerful relationship between motivation and the CLIL approach. Next, the publication by Peng (2012) focuses on the ecological understanding of Chinese University students' willingness to communicate in English inside the EFL classroom. In their study, Ahmadian and Tavakoli (2011) discuss the effect of simultaneous applications of careful online planning and task repetition on the students' speaking proficiency in the EFL context.

B. Network Visualization of Publications in EFL

1. Terms co-occurrence analysis

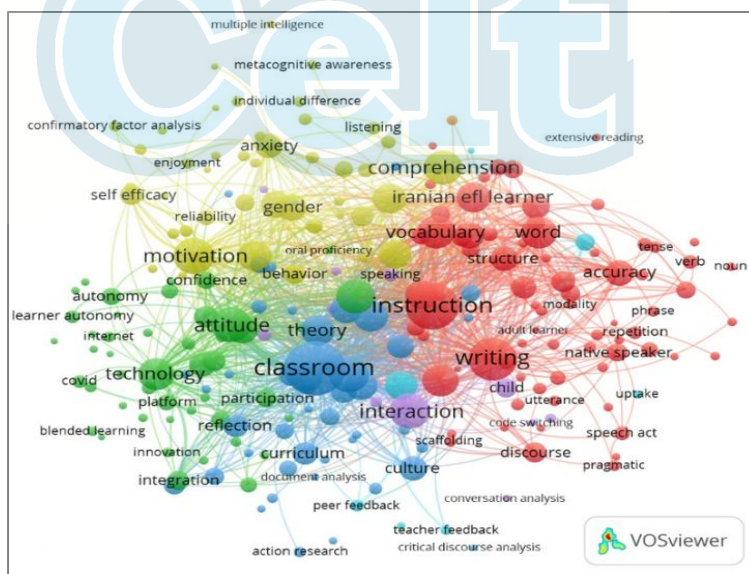


Figure 2:
The network visualization of terms co-occurrence in EFL
during 2011-2021

Analyzed using the VOSviewer, the terms that have been obtained from the Scopus database are processed on this application by adding the files and sorting based on the keywords criteria. The terms in the network visualization are represented by their label and cluster. The frequency of the term occurrence determines the size of its label. The larger the label of a term, the more frequently it occurs. Every cluster has lines connecting each term. The thickness of the line which used to display the link shows the strength of the link between two terms in the visualization of the presently active map. In addition, the terms of publication might provide important information related to a research topic (Tian et al., 2018).

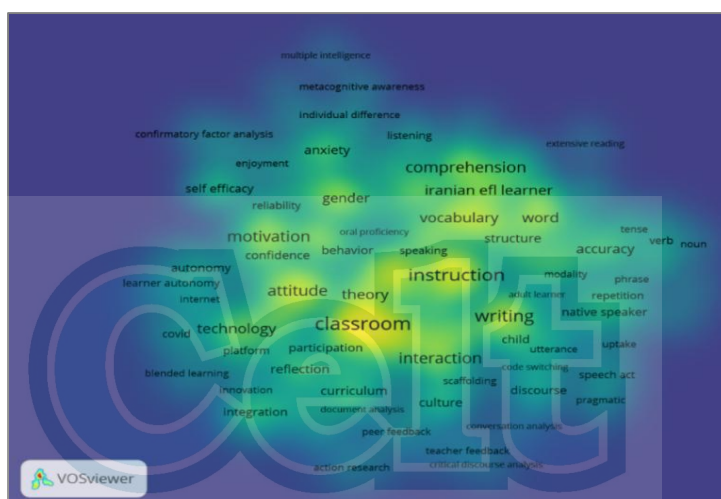


Figure 3:
The density visualization of research in EFL
during 2011-2021

As shown in Figure 3, a density visualization was also created to get additional information on these terms. The density of terms represents the prominence of areas on the map (Sinkovics, 2016). The color brightness of each area on the map is determined by the density of terms in that area. The higher density of terms is associated with a more mature and well-developed theme (Chen et al., 2016, as cited in Chui Lam & Habil, 2021). The density view directly exposes the map's overall structure (Jan van Eck & Waltman, 2018). Moreover, the illustration in this figure has the same data as the map in Figure 2. As shown on the map above, the area of instruction in the middle of the map represents the cluster of instruction aspects, and the area of the classroom represents the

cluster of course design aspects. Both are the terms with the highest density on this visualization.

Based on the network visualization of co-word occurrence (Figure 2), there are seven clusters classified in this research which include 232 terms in it. The clusters are instruction with 76 terms, attitude with 47 terms, course design with 46 terms, motivation with 44 terms, interaction with 11 terms, evaluation aspect with 7 terms, and Quasi-Experimental design with 1 term. From the classification, the way how different terms can co-occur in publications can also be discovered (Jan van Eck & Waltman, 2018). Furthermore, the classification of these clusters is categorized into two major themes: pedagogy and affective factors in learning.

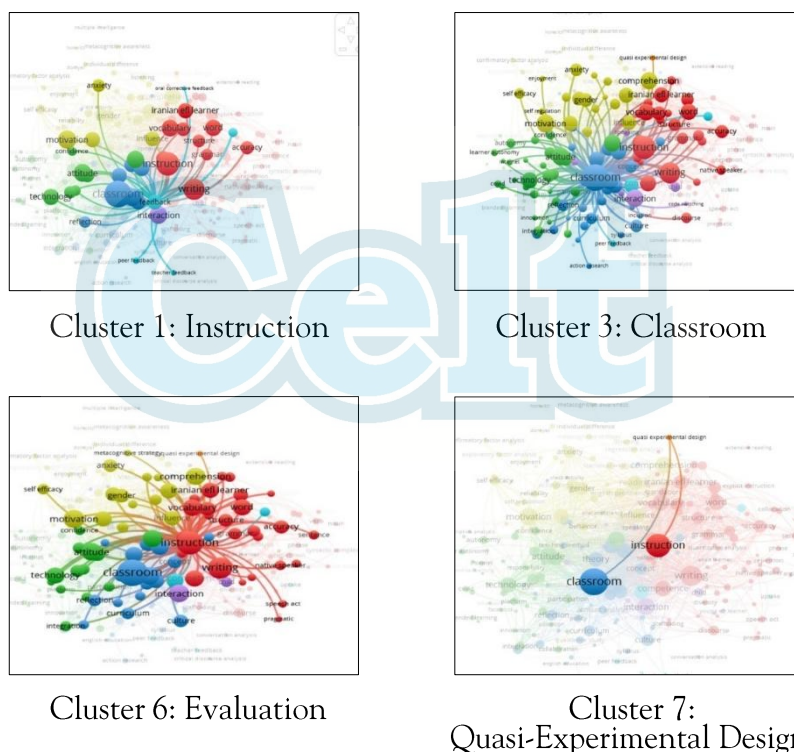


Figure 4:
The clusters of terms co-occurrence with pedagogy as the major theme

Based on the figure above, there are four clusters in the scope of pedagogy. The term pedagogy refers to the principles or beliefs that govern the teaching and learning process (Shah, 2021). In the first cluster, the main topic is Instruction with 76 terms related to it. It has 227 links and 4609

total link strengths. The terms related to this topic are instruction (n=970), academic writing (n=92), advance learner (n=23), comparative study (n=65), experimental study (n=111). The third cluster contains terms related to course design aspects. Terms such as authentic material (n=31), culture (n=270), and curriculum (n=217) are included in this cluster. The terms communication (n=365) and communicative language teaching (n=47) included in this cluster might reflect the area of speaking skills. The sixth cluster represents the evaluation aspect. The terms included in this cluster are feedback (n=378), corrective feedback (n=139), peer feedback (n=68), teacher feedback (n=44), uptake (n=33), oral corrective feedback (n=23), and peer assessment (n=26). In the meantime, the seventh cluster represents the term quasi-experimental design with 42 occurrences. This term is a research context related to both classroom and instruction terms. The number of occurrences or frequency of occurrence is represented by the letter (n)

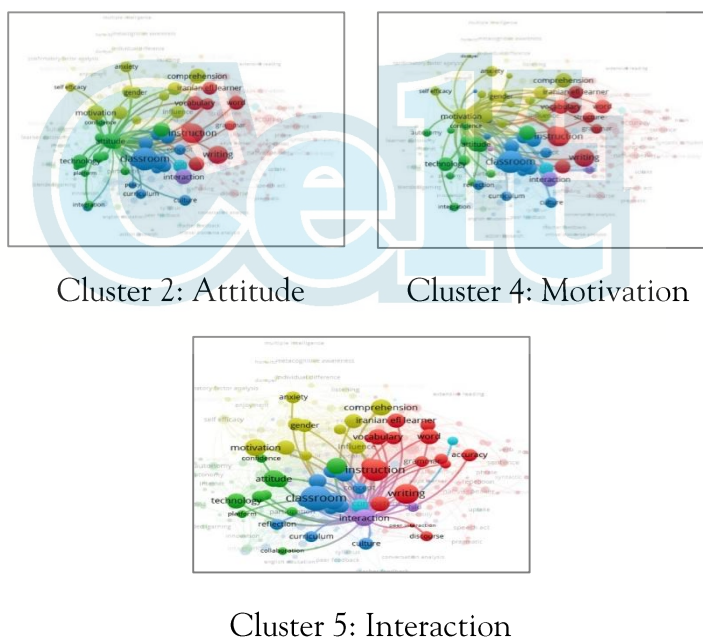


Figure 5:
The clusters of terms co-occurrence with affective factors in learning as the major theme

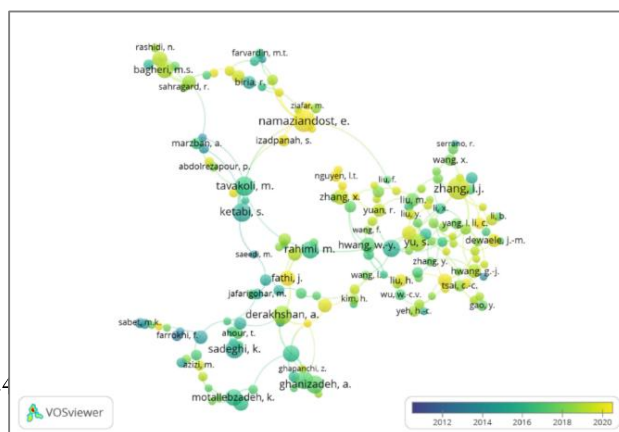
The next major theme of the clusters is affective factors in learning. In language learning, affective factors involve various factors related to emotion, feeling, mood, manner, and attitude (Ni, 2012). In this research, there are three clusters included in the major theme of affective factors in

learning, which are cluster two, cluster four, and cluster five. The terms associated with attitude can be found in the second cluster. The key terms included are attitude (n=540), confidence (n=130), positive attitude (n=211), and responsibility (n=63). Social skill is also identified in this term, such as participation (n = 155). The fourth cluster involves terms related to motivation. The highlighted terms in this cluster are motivation (n=594), anxiety (n=277), and behavior (n=173). Terms such as affective factor (n=23), cognitive (n=85), gender (n=328), English proficiency (n=177), and learning style (n=47) were also found in this cluster. The fifth cluster consists of several terms related to interaction. Terms such as interaction (n=536), speaking (n=82), collaboration (n=108), and culture (n=270) indicate that interaction aspects are one of the most important topics for EFL researchers for the last decade. There are also some terms related to the research context in this cluster, such as child (n=160), primary school (n=56), and exploratory study (n=56).

2. Co-authorship analysis

Collaboration in research or scientific collaboration is a common occurrence in any research area. The collaboration among the authors or the researchers in a certain research project is called co-authorship. In this research, co-authorship analysis is conducted to analyze the collaborations between the authors. Through VOSviewer, the co-authorship of 315 authors who have published a minimum of 5 publications is analyzed. From the generated network visualization, the color of the circle or the label represents the average publication year of the respective authors. The lines represent the links between the authors and their collaborators (Jan van Eck & Waltman, 2018). The weight of the line represents the total link strength which signifies how many publications the authors have collaborated with others. Figure 6 presents the authors' co-authorship in EFL research.

<https://doi.org/10.24>



ccredited; DOAJ

Figure 6:
The network visualization of co-authorship in EFL
during 2011-2021



Based on the result of the co-authorship analysis, the most collaborative authors are Namaziandost, E. who has 10 links, 35 publications, and 28 total link strengths. Next, Zhang, L.J. has 9 links, 36 publications, and 18 total link strengths. Following both authors is Tavakoli, M. who has 8 links, 28 publications, and 23 total link strengths. There are also other authors based on the total link strength in every cluster such as Hwang, G. -J. (11), Li, c. (9), Zhang, L. (11), Jafarigohar, M. (5), Lee, I. (9), Soleimani, H. (5), Zhaleh, K. (8), Chalak, A. (8) Esfahani, F.R. (6), Hashemifardnia, A. (8), Yu, S. (24), Yuan, R. (9), Motallebzadeh, K. (16), Chen, J. (7), Zheng, Y. (9), Derakhshan, A. (10), Rahimi, M. (10), Hwang, W.-Y. (15), Ahour, T. (6), Ghonsooly, B. (22), Pishghadam, R. (14), Salimi, A. (4), Bagheri, M.S. (23), and Sadighi, F. (21).

CONCLUSION

There are three findings on the publication trends in the EFL. First, over the past eleven years, the publication growths on EFL research published in the Scopus database are generally in an uptrend, while the citation growths are generally in a downtrend. Second, the researchers' productivity reveals that Karim Sadeghi with 10 publications become the most productive author, and the most productive affiliation is Islamic Azad University with 35 publications. On the other hand, *Theory and Practice in Language Studies* which has 35 publications become the journal with the most publications. Finally, the most impactful publication is an article titled "English achievement and student motivation in CLIL and EFL settings" which is written by David Lasagabaster (2011) and has been cited 134 times.

Next, there are two findings on the network visualizations, namely the terms co-occurrence visualization and co-authorship visualization. In terms co-occurrence visualization, the researchers concluded that there are two major research themes in EFL in 2011-2021. The first major theme is the pedagogy theme which is consisted of four clusters (i.e., Instruction, Course Design, Evaluation, and Quasi-Experimental Design). The next theme is the affective factors in learning theme which is consisted of three clusters: Attitude, Motivation, and Interaction. It is also discovered that the term "classroom" is the central focus of EFL research from 2011 to 2021 with 1273 occurrences. Besides that, it is found that the most collaborative author based on the co-authorship analysis are Namaziandost, E.

With the importance of the knowledge on the quo of the targeted research area, this study delivers an overview that hoped to be able to help EFL researchers to get more information on EFL as a research area before conducting their research. The findings show that the current publication in EFL is on an uptrend. Predictably, it will keep growing as many factors, like technological advancement, can bring changes to how English is learned. This shows that EFL still has potential as a research area to be studied. Next, the findings of this research can serve as a reference to EFL researchers when doing their literature review and planning their future research. Lastly, it can also be a reference for the researcher when choosing the most influential journal to publish their research article.

REFERENCES

- Abrar, M. (2016). Teaching English Problems: An Analysis of EFL Primary School Teachers in Kuala Tungkal. *The Proceedings of ISIC 2016 Academic Conference*, 94–101.
- Adara, R. A. (2020). Enhancing EFL Learners' Motivation through Songs. *IJEE (Indonesian Journal of English Education)*, 7(2), 189–200. <https://doi.org/10.15408/ijee.v7i2.17321>
- Agarwal, A., Durairajanayagam, D., Tatagari, S., Esteves, S., Harlev, A., Henkel, R., ... Bashiri, A. (2016). Bibliometrics: Tracking research impact by selecting the appropriate metrics. *Asian Journal of Andrology*, 18(2), 296–309. <https://doi.org/10.4103/1008-682X.171582>
- Ahmadian, M. J., & Tavakoli, M. (2011). The effects of simultaneous use of careful online planning and task repetition on accuracy, complexity, and fluency in EFL learners' oral production. *Language Teaching Research*, 15(1), 35–59. <https://doi.org/10.1177/1362168810383329>
- Akbari, Z. (2015). Current Challenges in Teaching/Learning English for EFL Learners: The Case of Junior High School and High School. *Procedia - Social and Behavioral Sciences*, 199, 394–401. <https://doi.org/10.1016/j.sbspro.2015.07.524>
- Al-Zoubi, S. M. (2018). The Impact of Exposure to English Language on Language Acquisition. *Journal of Applied Linguistics and Language Research*, 5(4), 151–162.

- Arfiandhani, P. (2020). Utilizing Facebook Groups in Teaching English as Foreign Language: Indonesian EFL Teachers' Voices. *International Journal of Language Teaching and Education*, 4(1), 53–60. <https://doi.org/10.22437/ijolte.v4i1.10197>
- Chen, X., Chen, J., Wu, D., Xie, Y., & Li, J. (2016). Mapping the Research Trends by Co-word Analysis Based on Keywords from Funded Project. *Procedia Computer Science*, 91, 547–555. <https://doi.org/10.1016/j.procs.2016.07.140>
- Chui Lam, C. N., & Habil, H. (2021). Bibliometric analysis of research on peer feedback in teaching and learning. In *Pertanika Journal of Social Sciences and Humanities* (Vol. 29, Issue 3, pp. 1957–1980). Universiti Putra Malaysia. <https://doi.org/10.47836/pjssh.29.3.25>
- Bancong, H., Nurazmi, N., Fiskawarni, T. H., & Park, J. (2021). Trending research topics in the field of physics education from 2017 to 2019 in highly reputable international journals. *Jurnal Ilmiah Pendidikan Fisika Al-Biruni*, 10(1), 29–36. <https://doi.org/10.24042/jipfalbiruni.v10i1.8341>
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to Conduct a Bibliometric Analysis: An Overview and Guidelines. *Journal of Business Research*, 133, 285–296. <https://doi.org/10.1016/j.jbusres.2021.04.070>
- Gutiérrez-Salcedo, M., Martínez, M. Á., Moral-Munoz, J. A., Herrera-Viedma, E., & Cobo, M. J. (2017). Some bibliometric procedures for analyzing and evaluating research fields. *Applied Intelligence*. <https://doi.org/10.1007/s10489-017-1105-y>
- Hallinger, P., & Kovačević, J. (2019). A bibliometric review of research on educational administration: Science mapping the literature, 1960 to 2018. *Review of Educational Research*, 89(3), 335–369. <https://doi.org/10.3102/0034654319830380>
- Haustein, S., & Larivière, V. (2015). The use of bibliometrics for assessing research: Possibilities, limitations and adverse effects. In I. M. Welp, J. Wollersheim, S. Ringelhan, & M. Osterloh (Eds.), *Incentives and Performance* (pp. 121–139). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-09785-5_8
- Hibatullah, O. F. (2019). The Challenges of International EFL Students to Learn English in a Non-English Speaking Country. *Journal of Foreign*

Language Teaching and Learning, 4(2).
<https://doi.org/10.18196/ftl.4240>

Lam, C. N. C., & Habil, H. (2021). Bibliometric analysis of research on peer feedback in teaching and learning. *Pertanika Journal of Social Sciences and Humanities*, 29(3), 1957–1980.
<https://doi.org/10.47836/pjssh.29.3.25>

Lasagabaster, D. (2011). English achievement and student motivation in CLIL and EFL settings. *Innovation in Language Learning and Teaching*, 5(1), 3–18. <https://doi.org/10.1080/17501229.2010.519030>

Ni, H. (2012). The Effects of Affective Factors in SLA and Pedagogical Implications. *Theory and Practice in Language Studies*, 2(7), 1508–1513. <https://doi.org/10.4304/tpls.2.7.1508-1513>

Peng, J.-E. (2012). Towards an ecological understanding of willingness to communicate in EFL classrooms in China. *System*, 40(2), 203–213. <https://doi.org/10.1016/j.system.2012.02.002>

Rahayu, T., Mudofir, I., & Sutantohadi, A. (2019). Flipped Instruction for Speaking Class: A Classroom Action Research A for Enhancing Students' Engagement. *Humaniora Scientia: Online Journal on Linguistics, Literature, and Translation*, 05(01), 9.

Shah, D. R. K. (2021). Conceptualizing and Defining Pedagogy. *IOSR Journal of Research & Method in Education*, 11(1), 6–29. <https://doi.org/10.9790/7388-1101020629>

Si, P. (2019). A Study of the Differences between EFL and ESL for English Classroom Teaching in China. *IRA International Journal of Education and Multidisciplinary Studies*, 15(1), 32. <https://doi.org/10.21013/jems.v15.n1.p4>

Sinkovics, N. (2016). Enhancing the Foundations for Theorising through Bibliometric Mapping. *International Marketing Review*, 33(3), 327–350. <https://doi.org/10.1108/IMR-10-2014-0341>

Sun, Y., Wang, G., & Feng, H. (2021). Linguistic studies on social media: A bibliometric analysis. *SAGE Open*, 11(3), 1–12. <https://doi.org/10.1177/21582440211047572>

- Sweileh, W. M., Al-Jabi, S. W., AbuTaha, A. S., Zyoud, S. H., Anayah, F. M. A., & Sawalha, A. F. (2017). Bibliometric Analysis of Worldwide Scientific Literature in Mobile - Health: 2006–2016. *BMC Medical Informatics and Decision Making*, 17(1), 72. <https://doi.org/10.1186/s12911-017-0476-7>
- Syahrozi, H., Rochsantiningasih, D., & Handayani, E. I. P. (2019). Improving Students' Motivation in Learning English Using Movie Clip. *English Education*, 7(1), 53. <https://doi.org/10.20961/eed.v7i1.35835>
- Tian, X., Geng, Y., Sarkis, J., & Zhong, S. (2018). Trends and features of embodied flows associated with international trade based on bibliometric analysis. *Resources, Conservation and Recycling*, 131, 148–157. <https://doi.org/https://doi.org/10.1016/j.resconrec.2018.01.002>
- Ulfa, K. (2021). Challenges of Online Learning Faced by Efl Students During Covid 19 Pandemic. *TIN: Terapan Informatika Nusantara*, 2(04), 222–225.
- Jan van Eck, N., & Waltman, L. (2018). *VOSviewer Manual*.
- Zhang, X. (2020). A Bibliometric Analysis of Second Language Acquisition Between 1997 and 2018. *Studies in Second Language Acquisition*, 42(1), 199–222. <https://doi.org/10.1017/S02722263119000573>
- Zupic, I., & Čater, T. (2015). Bibliometric methods in management and organization. *Organizational Research Methods*, 18(3), 429–472. <https://doi.org/10.1177/1094428114562629>