Ars Artium: An International Refereed Research Journal of English Studies and Culture
ISSN (Print) : 2319-7889 • ISSN (Online) : 2395-2423
Vol. 9, January 2021
Pp. 70-85
https://www.arsartium.org

An Investigation into Ecolinguistics Representation in Iranian High School English Textbooks

*Alireza Faramarzi**
*Kamran Janfeshan***

Abstract

At first glance, ecology and linguistics can appear as two completely different unrelated topics, but despite appearances, they are profoundly interlinked. This study helps to shape and mold the way we relate to the world and our environment to increase our ecological awareness and what impact this has upon our students and how we can implement this environmental ideology in our schools. One of the primary functions of schools is to reinforce students with adequate knowledge to appreciate the environment. Incorporating environmental words and expressions or ecolinguistics into the curriculum in general and English textbooks in particular facilitates a meaningful understanding of nature. The present study intended to investigate six English textbooks used in Iranian high schools from an ecolinguistic perspective. To do so, the content analysis of textbooks utilized to teach English in Iranian high schools was done. The results of the study revealed that the representation of ecolinguistics in English textbooks in Iran was low and limited to three ecolinguistic themes. The results also confirmed that the textbooks developers did not pay enough consideration to ecolinguistic issues in developing the English textbooks for Iranian EFL learners. Furthermore, the findings of the study indicate that only a few problems are considered, and inadequate representation of ecolinguistics is being followed in these textbooks. The findings can lead to pedagogical implications for the presentation of topics related to ecology and the environment in ELT textbooks.

Keywords: Ecolinguistics, Iranian EFL learners, Textbooks evaluation, English textbooks, Environmental education

* *English Language Teaching Department, Kermanshah Branch, Islamic Azad University, Kermanshah, Iran. Email: alirezafr376@gmail.com*

** *Assistant Professor, English Language Teaching Department, Kermanshah Branch, Islamic Azad University, Kermanshah, Iran. Email: dr.kjanfeshan@gmail.com*

Introduction

Nowadays, the themes of the environment and its dilemmas have been converted into a significant matter in society. If the pressure on the environment increases, it will affect other social aspects as well. This means that even climate change on earth will also affect the social change of society. Hence, the ecological issues and problems on earth affect the perspective of people about their life and how they have to live. Ecolinguistics as a new branch in linguistics investigates the interrelation of language, ecology, and society. Stibbe (2015) asserted that ecolinguistics is about assessing patterns of language that contribute to ecological annihilation and aiding in the search for new forms of language that influence people to preserve the natural world. One approach for dealing with introducing and teaching ecolinguistics very clearly is that students should be able to make a connection with what they are learning in the classroom and the nature or environment of where they are in contact with their daily life. In other words, ecolinguistics can help the students to have information about the environment. Furthermore, Luardiniand Sujiyani (2018) asserted that ecolinguistics can be practiced as an approach to teaching English as a foreign language (EFL). Thus, they maintained that by practicing ecolinguistics terms students know English as well as ecology simultaneously. Consequently, students gain two perspectives in this EFL classroom. The former view is a language viewpoint and the latter is from the ecological perspective. They learn a language and also find insight into the inseparable relationship between humans and nature. Similarly, Zahoorand Janjua (2019) believed that the English language teaching (ELT), should not only consider developing learners' language skills but also on raising the learners'awareness about current important world issues such as environmental crisis and reflecting this concern into ELT textbooks.

Thus, the use of ecolinguistics in the EFL classroom leads teachers to invoke students to have more feelings on ecological knowledge. Therefore, the students appreciate their environment by reading topics closely related to some issues related to ecology and environment such as endangered animals, climate changes, pollution, environmental degradation, and resource depletion. Understanding the problems of nature, the students try to think about ways to observe it. On the contrary, some curriculum planners hardly use ecolinguistics representation in textbooks to support their students' learning. Therefore, finding a way to introduce environmental issues through contextual learning is one of the mainconcerns which educators try to delve with. Consequently, the study is significant to find out to what extent Iranian textbooks developers, educational policy-makers, and curriculum designers are successful in presenting the ecolinguistics concept in Iranian high school EFL textbooks. Altogether during the last decades, many studies try to investigate the effectiveness of presenting ecolinguistics issues in textbooks. However, to the authors' knowledge, no research in this area has been done in Iran for EFL textbooks. Despite the significance of giving awareness toward ecology problems and ecolinguistic topics in education, little studies have been performed. Therefore,

the significance of this study is two-fold. First of all, it is hoped that the findings of this study might give a clear understanding to the importance of presentencing ecolinguistic issues in Iranian EFL textbooks. Secondly, the insights gained from this study can provide EFL textbooks developers with a better idea on what ecolinguistic issues and topics to be included in textbooks.

The main purpose of this study was to investigate to what extent the concept of ecolinguistics is considered in high school English textbooks in Iran.

Research Questions

Following this purpose, these questions were sought:

1. Is there any significant difference between expected and observed frequency regarding the topic of each lesson related to ecolinguistics in Iranian EFL high school textbooks?
2. Is there any significant difference between expected and observed frequency regarding the words related to ecolinguistics in Iranian EFL high school textbooks?
3. Is there any significant difference between expected and observed frequency regarding the sentences related to ecolinguistics in Iranian EFL high school textbooks?

English Textbooks Development

According to Mahmood (2011), textbooks play a very consequential role in teaching and learning. Considering different aspects of language skills, many textbooks were developed by placing the available supply of the emphasized resources on increasing the ability of students on particular language skills such as reading or speaking (Daoud & Celce-Murcia 1979). Furthermore, some textbooks writers tried to focus on other components of language such as vocabulary or grammar (Cunnings worth, 1995; Cortazzi & Jin, 1999). Later on, other aspects were included in textbooks such as cultural issues (Sheldon, 1988).

With the emergence of environmental education and its focus on ecological issues, many textbooks authors tried to improve the views of young and adult generations towards the improvement of the environment. According to Mühlhausler (2003), the basic goal of ecological language preparation is to produce about an ecological insight which no longer demands supervision. Similarly, Brand and Wissen (2018) asserted that by raising awareness in bio-ecology, students' attitudes toward 'magnificent ways of living' would change.

Textbook evaluation is broadly recognized as a powerful means for developing textbooks. To Tomlinson (2003), textbook evaluation is an applied linguistic task through which the influence of contents on people using it is considered carefully by all people in the field of education such as teachers, supervisors, administrators, and material developers. Considering the significance of EFL textbooks in teaching a

foreign language, many authors tried to evaluate the textbooks from different perspectives to determine their efficiency. Therefore, many checklists were developed for textbooks evaluation (e.g., Hutchinson & Torres, 1994; Miekley, 2005; Mukundan & Ahour, 2010; Tucker, 1975; Williams, 1983). A few studies have been conducted to investigate the representation of ecolinguistics in developing materials for teaching English (e.g., Ben Brahim, 2002; El-Moussaouy et al., 2014; Ghouati, 2012; Gürsoy, 2010; Nkwetisama, 2011; Zerrouqi et al., 2016). For instance, Nkwetisama (2011) was interested in discovering the EFL/ESL teachers' perception of environmental education (EE) and the combination of environmental education in language teaching. He enlisted a comprehensive list of environmental topics such as global warming, greenhouse gas, ozone depletion, species extinction, deforestation, and so forth to be integrated into textbooks. The results of these studies confirmed that the presentation of ecolinguistics should not be limited to language textbooks but in all content courses. Additionally, few studies have examined the representation of ecolinguistics in developing textbooks for teaching English in the context of Iran.

The Review of the Related Literature

Long ago, linguistics was limited to the study of the language per se. In this regard, Verhaar (2001) argued that linguistics is depicted as a science and language as an object. Diverse linguistic schools such as structural linguistics, generative transformational linguistics, and cognitive linguistics mainly focused on limited aspects of languages such as phonology, morphology, syntax, semantics, pragmatics, first language acquisition, and second language learning. Meanwhile, some linguists focus on the historical development of language and historical linguistics has emerged. However, linguistics has been drastically changed because of the impact and contribution of the new advancement of other disciplines. The integration of other disciplines with linguistics paved the way for the new field of study such as the combination of psychology and linguistics which end up psycholinguistics, the combination of sociology and linguistics leads to sociolinguistics, and computational linguistics should be collaboration among computer science and linguistics (McGuigan, 2006).

Ecolinguistics as one of the new branches of linguistics draws the attention of linguistics and educational researchers. Ecolinguistics was initially defined in 1972 by Haugen "as the study of interactions among any given language and its environment" (Haugen 1972: 57). Similarly, Wendel (2005) described ecolinguistics as a complex network of relationships between languages, environment, and native speakers of these languages. He considered the environment as the biological, physical and social environment. Thus, ecolinguistics is the study of language according to the environment it is used and is mostly based on environments, conversation, communication, and system in the language. With regard to Haugen's definition of ecolinguistics, Steffensen and Fill (2014) argued that in addition to the description of circumstantial factors of language, Haugen considered how social and psychological factors of language influence language. Along the same line of

thought, Blackledge (2008) believed that Haugen considered the worth of the language ecology model within the requirement to explain not only the social and psychological situation of a language but also the impacts of this case on the language itself''. Moreover, to Alexander and Stibbe (2011) ecolinguistics is basically the 'ecological analysis of discourse'. To clarify the point, Stibbe (2015) explained that the link between ecology and language is how our thoughts influenced the way we treat humans and the natural world, concepts, opinions, ideologies, and worldviews, and these, in turn, are formed through language. To put it in nutshell, Stibbe (2015) argued that ecolinguistics relates to environmental studies of how words in a language connect to objects in the local environment. Many scholars tried to build important conceptual bridges between the original vision of the ecology of language and the contemporary movement of ecolinguistics (Döring et al., 2008; Fill, 1993, 1996; Fill & Mühlhäusler, 2001; Kettemann & Penz, 2000).

Talebi-Dastenaei and Poshtvan (2018) had presented a critical review of ecolinguistic studies in Iran. They came to this conclusion that in comparison to international studies, Iranian ecolinguistic studies are still in its infancy. Moreover, they maintained that these few studies were limited to morphological and discourse studies. Unfortunately, the representation of ecolinguistics in textbooks was given less attention and a few Persian papers have been published. Thus, some new studies should be done to fill the research gaps in this area.

Participants

This research scrutinized two series of Iranian EFL textbooks to examine the representation of ecolinguistics.Therefore, there were no participants in this study.

Instruments

The main instrument used for analyzing textbooks is an evaluation checklist. However, no checklist has been developed for ecolinguistics representation. The other instruments of the study were six newly-published EFL Textbooks. The particulars of the books are presented in Table 1.

Table 1

Different analyzed EFL textbooks corresponding to junior and senior high school education

Level of education	Name of the Textbook	Year of publication	The textbook is taught
Junior high school education	Prospect 1	2013	First year
	Prospect 2	2014	Second year
	Prospect 3	2015	Third year
Senior high school education	Vision 1	2016	First year
	Vision 2	2017	Second year
	Vision 3	2018	Third year

The *Prospect* series were introduced from 2014 to 2015. They were designed for students at junior high schools. Consequently, for senior high schools, the *Vision* books were introduced from 2016 to 2018. The old EFL textbooks have been taught for more than 25 years.

Procedure

The present study examined six high school English compulsory language textbooks from an ecolinguistic view. For this purpose, words, sentences, and topics related to environmental issues were chosen. Accordingly, every page of the books was carefully scrutinized and the researchers obtained full knowledge over the whole content to carefully evaluate the textbooks. In this study, to conduct Iranian high school EFL compulsory textbooks evaluation, we have measured the frequency and percentage of words, sentences, and topics related to environmental issues. Then, the chi-square was calculated for each category.

Data Analysis

Data collected for this study were based on textual content analysis of six compulsory English language textbooks in Iranian high school. The researchers tried to analyze and evaluate the textbooks based on qualitative descriptive analysis with simple descriptive statistics. Thus, the data were first analyzed descriptively. For inferential statistics, chi-square statistical analysis was used and the level of significance was taken at $p < .05$. Finally, the obtained results were used as the basis for the qualitative evaluation of the textbooks by the researchers.

Findings

As a first step, it was necessary to determine frequency distributions of ecolinguistics representations through analysis of the textbooks. These analyses focused on three

levels. First, the textbooks were analyzed based on topics and issues related to ecolinguistics concepts. Second, analysis of those words of the text corpus was made where ecolinguistics concepts exist. Third, the sentences devoted to ecolinguistics concepts were analyzed. The frequency and percentage of ecolinguistics concepts in Iranian EFL high school textbooks were calculated. At a second stage, some frequency tests were run utilizing the SPSS programme. To do so, some chi-square tests were run to identify any potential significant difference in the dispersion of ecolinguistics representation for each category. The results are shown in the following tables.

Table 2

Description of Iranian junior high school TEFL textbooks

Textbooks	No. of pages	No. of lessons	No. of lessons related to Ecolinguistics theme	Percentage of the lessons related to Ecolinguistics
Prospect 1	76	8	0	0
Prospect 2	93	7	1	14.28
Prospect 3	133	6	0	0
Total	302	21	1	4.78

There are three books for junior high school level. As indicated in Table 2, the number of each lesson in *Prospect* books decreases while the number of pages for each lesson increases. There are total 21 lessons at this level; however, only one ecolinguistics theme that is the weather was observed to occur at this level. Related theme and percentage are illustrated in Table 2. Based on the information presented in Table 2, it can be said that only 4.78% of the topics were related to ecolinguistics in these books for junior high school level.

Table 3

Description of Iranian senior high school TEFL textbooks

Textbooks	No. of pages	No. of lessons	No. of lessons related to Ecolinguistics theme	Title related to Ecolinguistics theme
Vision 1	124	4	1	25
Vision 2	110	3	0	0
Vision 3	98	3	1	33.33
Total	332	10	2	20

According to Table 3, there are three books for senior high school. For the *Vision* series the number of pages, as well as the number of each lesson, decreases. There are ten lessons in these books; however, only two lessons introduce ecolinguistics topics. Therefore, only 20% of the topics are related to ecolinguistics themes in these books. By running a chi-square test, the distributions of ecolinguistics representation in topics of *Prospect* and *Vision* textbooks have been investigated, respectively. The results appear in Tables 4 and 5 below.

Table 4

Chi-Square test for the ecolinguistics topics in *Prospect*

Test statistics	
Book	Prospect
Chi-Square	29.762
df	2
Asymp. Sig. (2-sided)	.00

Table 5

Chi-Square test for the ecolinguistics topics in *Vision*

Test statistics	
Book	Vision
Chi-Square	40.042
df	2
Asymp. Sig. (2-sided)	.00

Tables 4 and 5 show that the results of these chi-squares are significant. In Table 4 the chi-square statistic is ($\chi 2$ = 29.762,) with the result being significant at $p < .05$. The larger the value of $\chi 2$, the more likely it is that the distributions are significantly different. These results indicate that there were substantially fewer topics related to ecolinguistics in *Prospect* textbooks than expected by chance since the P-value is less than .05. The same situation occurs for *Vision* textbooks. Table 5 displays that the chi-square statistic is ($\chi 2$ = 40.042). Then most of the contents of both

series of textbooks do not include topics related to ecolinguistics issues. Therefore, the first research null hypothesis was rejected.

Table 6

The Number of words related to environmental topics in EFL textbooks

Name of the book	Ecolinguistics topics	Total number of words related to ecolinguistics topic	Total number of words in the book	Percentage of words related to the ecolinguistics topic
Prospect 1	0	0	3338	0
Prospect 2	The weather	18	3756	0.5
Prospect 3	0	0	4624	0
Vision 1	Saving nature wonders of creation	24	4332	0.55
Vision 2	0	0	3340	0
Vision 3	Renewable energy	6	4026	0.06
Total	3	48	23416	0.50

The next step was to count the frequency of words related to ecolinguistics concepts in the textbooks. Based on Table 6, the total numbers of words in all six books were 23416 words. Surprisingly, there were only 48 words (0.5%) in all six textbooks related to ecolinguistics concepts.

Table 7

Chi-Square test for the ecolinguistics words in Iranian EFL textbooks

Test statistics	
Books	Vision and Prospect series
Chi-Square	19.791
df	5
Asymp. Sig. (2-sided)	.00

The chi-square results revealed that $\chi 2 = 19.791$. There is a great difference in expected frequency and observed frequency of words presented in these books. As a result, this means that the second null hypothesis of no difference can be rejected at the 0.05 level of significance.

Table 8

Number of sentences related to environmental topics in EFL textbooks.

Name of the book	Ecolinguistis topics	Total number of sentences related to ecolinguistics topic	Total number of sentences in the book	Percentage of sentences related to the ecolinguistics topic
Prospect 1	0	0	2517	0
Prospect 2	The weather	4	3165	% 0.12
Prospect 3	0	0	3695	0
Vision 1	Saving nature	21	3538	% 0.59
Vision 2	0	0	3340	0
Vision 3	Renewable energy	15	3343	% 0.44
Total	3	40	19598	% 0.20

Table 9

Chi-Square test for the ecolinguistics sentences in Iranian EFL textbooks

Test statistics	
Books	Vision and Prospect series
Chi-Square	12959.006
df	5
Asymp. Sig. (2-sided)	.00

The Chi-Square test carried out shows that there is significant difference between the two categorical variables, namely the sentences related to ecolinguistics concepts and other sentences in the books. As can be seen in Table 9, $\chi 2 = 12959.006$. This

means that there is sufficient evidence to reject the third null hypothesis at the 0.05 level of significance.

Discussion

The present research aimed at probing ecolinguistics representation in Iranian EFL high school textbooks. Consequently, the content analysis presented in this study investigates the ecolinguistics. Stibbe (2015) presented the relationship between ecology and linguistics:

> The term 'ecolinguistics' has been used to describe studies of language interaction and diversity, studies of texts such as signposts which are outdoors; analysis of texts which happen to be about the environment; studies of how words in a language relate to objects in the local environment; studies of the mix of languages surrounding pupils in multicultural schools; studies of dialects in particular geographical locations, and many other diverse areas. The multiplicity of approaches arises from different understandings of the concept of 'ecology', from a very broad concept of 'the interaction of some things with other things' to narrow concepts such as 'related to environmentalism' (2015: 8).

This issue considers the social context in which language is embedded as well as the ecological context including other species and the physical environment in which languages are embedded.

Few course book evaluation studies were conducted to understand whether Iranian EFL high school course books contain ecolinguistics representation. The results demonstrate that ecolinguistics, with its concern to the interaction between language and the environment, has received little attention within EFL textbooks in Iran. Only a few topics regarding ecolinguistics and language ecology are presented in the content of Iranian EFL high school books. This shows a weak reflection of ecolinguistics in environmental education.

The finding of the current study is in line with Nkwetisama's (2011) study. After investigating the Cameroonian EFL/ESL teachers'perspectives toward the application of ecolinguistics in the teaching classroom, he came to this conclusion that EFL/ESL teaching should both improve learners' language proficiency as well as enhance environmentally friendly behaviours to activating ecolinguistics awareness among teachers and students.

The present findings seem to be consistent with the study of Zahoor and Janjua (2019). They investigated the environmental texts in English language textbooks used in Pakistan schools at the primary level. They found the selected textbooks lack ecopedagogical representation. Similarly, the results of the current study were in line with the studies conducted by Luardini and Sujiyani (2018). Emphasizing the lack of environmental topics and expressions on the materials being used to teach English in the Indonesia educational curriculum, Luardini and Sujiyani (2018) introduced some materials related toecolinguistics in EFL classrooms of Junior High

School level in Indonesia. After the execution of the materials in teaching classes, they concluded that introducing teaching sources relating to environmental linguistic expressions leads to meaningful teaching and learning process. Zerrouqi et al. (2016) studied textbooks in Moroccan middle schools and argued that the textbooks did not include ecolinguistics topics to provide learners understanding about the dangers of pollution and to boost students' awareness about nature and environmental issues.

Despite the growing interest in research in the theoretical aspect of ecolinguistics, a few studies have been conducted to investigate the representation of ecolinguistics in language teaching or in developing materials for teaching English (e.g., Ben Brahim, 2002; El-Moussaouy et al., 2014; Ghouati, 2012; Gürsoy, 2010). Rajendra Kumar Dash (2019) concluded that ecolinguistics is an ever-emerging field of study. When ecolinguistic practices are found to have enhanced the quality of living, this new branch of linguistics has fulfilled the long-felt need for a discipline that can study the pivotal role of linguistics to affect or safeguard the ecology and ensure environmental justice (Dash 2019: 383).

However, to date, very few environmental content analyses have effectively scrutinized the role of ecolinguistics in Iranian EFL textbooks.

Conclusion

Ecolinguistics is an essential tool that should be used to supplement the EFL textbooks. It includes various issues and resources that if presented to the students and explained by the teachers could raise the students' awareness towards nature and ecology. As the world is under the influence of destructive factors such as the greenhouse effect, climate change, and different types of pollutions, educators need to utilize ecolinguistics in the educational system and to synchronize ourselves with it.The analysis of the book evaluation data allows us to draw some important conclusions regarding the reflection of environmental problems in English textbooks in Iran. The findings of the current study revealed that only a few topics are discussed in all six English textbooks. Therefore, environmental problems are not adequately included in Iranian English textbooks to support the pedagogical purposes of EE in the educational system to help students realize the authenticity of the connection that maintains human to nature. The topics of English high school textbooks are limited to three issues of the weather, saving nature, and renewable energy. Thus, ELT textbooks planners in command of combining EE in Iran English textbooks give not much consideration to the textbooks. It could be concluded that an exclusive revision needs to be done to improve EE in the books and increase consciousness rising regarding the appreciation of global, national, and regional ecological concerns. Iranian students have to know different types of environmental hazards which endanger not only their lives but also the whole globe. Being focused on historical or fictional topics to learn the English language, Iranian students may neglect to acknowledge the value of life and overlook the challenging environmental issues which may challenge their lives in the future.

Pedagogical Implications

The results of the present study in the Iranian context shows that high school EFL textbooks are available tools for the improvement of ecolinguistics, the employment of which requires a suitable education in all schooling grades to permit children, adolescents, and adults belief towards environmental problems and to develop their behaviours and lifestyle decisions towards the environment. In light of the findings of the present study, it was understood that some principles have to inspire Iranian decision-makers to adapt EE to the international pedagogical standards: a) to set the stage of EE based on environmental education, learners, and educators, b) to establish specific guidelines for the content to be combined in EE learning, and c) to implement professional growth for teachers to become competent environmental educators. Authors and publishers should employ the advantage of academic inquiries of ecolinguistics representation for collecting materials in their books. Consequently, the findings of this study will also have practical implications in the verification of continual national arrangements to complete EE. Moreover, educators should pay more attention to an English language teaching curriculum that incorporates demonstration of structured and discrete ecolinguistics programmes based on a logical methodology, pedagogical material, the ecolinguistics preparation programme for teachers, and teaching aids. Furthermore, it is recommended to examine students' workbooks and teacher's guides.

Works Cited

- Alexander, Richard and Arran Stibbe. "*From the Analysis of Ecological Discourse to the Ecological Analysis of Discourse.*" *Language Sciences*, vol. 41, Jan. 2014, pp. 104-110.
- Blackledge, Adrian. "Language Ecology and Language Ideology." *Encyclopedia of Language and Education*, vol. 9, 2nd ed. edited by Nancy H. Hornberger, et al. Springer, 2008, pp. 27-40.
- Brand, Ulrich, and Markus Wissen. "What Kind of Great Transformation? The Imperial Mode of Living as a Major Obstacle to Sustainability Politics." *Ecological Perspectives for Science and Society*, vol. 27, no. 3, 2018, pp. 287-292.
- Cortazzi, Martin, and Lixian Jin. "Cultural Mirrors: Materials and Methods in the EFL Classroom." *Culture in Second Language Teaching and Learning*, edited by Eli Hinkel, Cambridge UP, 1999, pp. 196-219.
- Cunningsworth, Alan. *Choosing Your Coursebook*. McMillan Heinemann, 1995.
- Daoud, Anderson, and Marianne Celce-Murcia. "Selecting and Evaluating a Textbook." *Teaching English as a Second or Foreign Language*, edited

by Marianne Celce-Murcia and Lois McIntosh, Newbury House Publishers, 1979, pp. 302-307.

- Dash, Rajendra Kumar. "What is Ecolinguistics?" *Language in India*, vol. 19, no. 5, May 2019, pp. 379-384
- Doring, Martin, et al., editors. *Language, Signs, and Nature: Ecolinguistic Dimensions of Environmental Discourse*: *Essays in Honour of Alwin Fill*. Stauffenburg Verlag, 2008.
- El-Moussaouy, Abdelaziz, et al. "Environmental Education in the Teaching and the Learning of Scientific Disciplines in Moroccan High Schools." *International Educational Studies*, vol. 7, no. 4, 2014, pp. 33-46.
- Fill, Alwin, and Peter Mühlhausler, editors. *Ecolinguistics Reader*: *Language, Ecology and Environment.* Continuum, 2001.
- Fill, Alwin. *Sprachökologie und Ökolinguistik*. Stauffenburg Verlag, 1996.
- Ghouati, Ahmed. "Environnement et éducation: analyse d'une stratégied' introduction d'une éducation à l'environnement en Algérie." ("Environment and education: analysis of a strategy for introducing environmental education in Algeria.") *Vertig O- la revue électronique en sciences de l'environnement*, vol. 12, no. 2, Sept. 2012, https://journals.openedition.org/vertigo/12613?lang=en. Accessed 20 June 2020.
- Gürsoy, Esim. "Implementing Environmental Education to Foreign Language Teaching to Young Learners." *Educational Research*, vol. 1, no. 8, Sept. 2010, pp. 232-238.
- Hafsa, Ben Brahim. *L'Education relative à lenvironnement dans le système éducatif Marocain.* (Education Related to Environment in the Moroccan Educational System). Master's Thesis, Institut de Gestion de L' Environnement et d'Aménagement du Territoire (IGEAT), Brussels, Belgium, 2002.
- Haugen, Einar. *The Ecology of Language*: *Essays*. Stanford UP, 1972.
- Hutchinson, Tom, and Eunice Torres. "The Textbook as Agent of Change." *ELT Journal*, vol. 48, no. 4, Oct. 1994, pp. 315–328.
- Kettemann, Bernhard, and Hermine Penz, editors. *ECOnstructing Language, Nature and Society*: *The Ecolinguistic Project Revisited: Essays in Honour of Alwin Fill*. Stauffenburg, 2000.
- Luardini, Maria Arina, and Erma Sujiyani. "Introducing Ecolinguistics in EFL Classroom." *Advances in Social Science, Education and Humanities Research*, vol. 262, 2018.
- Mahmood, Khalid. "Conformity to Quality Characteristics of Textbooks: The Illusion of Textbook Evaluation in Pakistan." *Journal of Research and Reflections in Education*, vol. 5, no. 2, Dec. 2011, pp. 170 -190.

- McGuigan, Brendan. "What is Computational Linguistics. "http://www.wisegeek.com/what-is-computational-linguistics.htm, 2006.
- Miekley, Joshua. "ESL Textbook Evaluation Checklist." *The Reading Matrix*, vol. 5, no. 2, Sept. 2005, pp. 9-17.
- Mühlhausler, Peter. *Language of Environment, Environment of Language: A Course in Ecolinguistics.* Battlebridge Publications, 2003.
- Mukundan, Jayakaran, and Touran Ahour. "A Review of Textbook Evaluation Checklists Across Four Decades (1970-2008)". *Research for Materials Development in Language Learning: Evidence for Best Practice*, edited by Brian Tomlinson and Hitomi Masuhara, Bloomsbury Academic, 2010, pp. 336-352.
- Nkwetisama, Carlous Muluh. "EFL/ESL and Environmental Education: Towards an Eco-Applied Linguistic Awareness in Cameroon." *World Journal of Education*, vol.1, no.1, April 2011, pp. 110-118, doi: 10.5430/wje.v1n1p110.
- Sheldon, Leslie E. "Evaluating ELT Textbooks and Materials." *ELT Journal*, vol. 42, no. 4, Oct. 1988, pp. 237-246.
- Steffensen, Sune Vork, and Alwin Fill. "Ecolinguistics: The State of the Art and Future Horizons." *Language Sciences*, vol. 41, Jan. 2014, pp. 6-25.
- Stibbe, Arran. *Ecolinguistics: Language, Ecology and the Stories We Live By*. Routledge, 2015.
- Talebi-Dastenaei, Mahnaz, and Hamideh Poshtvan. "A Critical Review of Ecolinguistic Studies in Iran." Language & Ecology. Dec. 2018. http://ecolinguistics-association.org/journal. Also https://www.researchgate.netpublication337716441_A_Critical_Review_of_Ecolinguistic_Studies_in_Iran. Accessed 8 Oct. 2020.
- Tomlinson, Brian, editor. *Developing Materials for Language Teaching*. Continuum, 2003.
- Verhaar, J. W. M. *Asas-asas Linguistik Umum*. Gadjah Mada UP, 2004.
- Wendel, John N. "Notes on the Ecology of Language." *Bunkyo Gakuin University Academic Journal*, vol. 5, 2005, pp. 51-76.
- Williams, David. "Developing Criteria for Textbook Evaluation." *ELT Journal*, vol. 37, no. 3, July 1983, pp. 251-255.
- Zahoor, Mehwish, and Fauzia Janjua. "Green Contents in English Language Textbooks in Pakistan: An Ecolinguistic and Ecopedagogical appraisal." *British Educational Research Journal*, vol. 46, no. 2, Oct. 2019, pp. 321-338, https://doi.org/10.1002/berj.3579.

- Zerrouqi, Zahra, et al. "Education on Environment and its Pollution Using Life and Earth Sciences Textbooks in Moroccan Middle Schools." *International Journal of Innovation and Applied Studies*, vol. 17, no. 2, July 2016, pp. 707-717, http://www.ijias.issr-journals.org/issue.php?issue=64. Accessed 20 Sept. 2020.

❑❑❑