Approaching Sustainable Linguistic Development via Addressing Digital Natives' L1 Dominance in EFL Writing

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ABSTRACT

Proficient knowledge of English in the modern age gives access to learning, upscaling social class, and even upgrading income. Quality education, UN sustainable development goal 4, is a key to achieving this. One way of getting closer to that end is by promoting inclusiveness, equitable chances, and lifelong learning as the UN advises. This paper reports on a study that made use of a digital plugged classroom, allowing learners to apply DDL on concordances of an online corpus to gain authentic knowledge of colligation and get far from having marked language. EFL writing tends to render problems deeper than the usual grammar, spelling, and tense. The way EFL learners put together words to form meaning seems to be affected with their preestablished knowledge of L1. The study at hand takes its focus to unnatural colligations. Participants managed not only to self-correct their faulty colligations but also to retain all of them; the thing that makes sustainable linguistic development and sustainable learning possible.

Keywords: corpus linguistics, DDL, sustainable development, EFL writing, L1 Dominance.

Introduction

The word *sustainability* is defined by the *Oxford Learners Dictionary* in two different contexts, of which the second is the concern of this paper. It reads as "The capacity of being continued for long". In this sense, an adaptation of such an interpretation to be in line with the context of learning and acquisition, judged by retention of newly learned items, can predict an indication of a step forward toward actualizing sustainable quality education and further subsequent SDGs as part of the 2030 vision of Egypt. This vision comes as a sort of localization and adaption of the United Nations (UN) agenda for sustainable development. At the heart of this global plan is a call for implementing 17 goals of sustainable development (SDGs) and translating them into action.

Egypt as a member state of the United Nations took the UN-2015 call and adopted the agenda with the 17 SDGs at its heart. In this context, the website of the Egyptian presidency sets the

vision as being "principally relying on knowledge, science and innovation by which Egypt will have … a social system identified by … participation and justice" (Presidency of Egypt, 2020).

The study the present paper reports is an attempt to answer the call for action in 4 of the UN's 17 SDGs (see Figure 1) and put EFL learning to their service. Sustainable development is sought - through these four SDGs - to: "terminate not just poverty, SDG 1, but also any further arrays of deprivations", SDG 4; to "boost full hiring and decent work for all", SDG 8; and to "minimize inequality within and among nations", SDG 10 (United Nations, 2022).

Figure 1

UN Sustainable Development Goals the present paper attempts to serve

Background

The English language to a globalized digital age cannot be seen dispensable. It hard to think of a job with a generous salary (SDG 1 & 8) without decent knowledge of the age's lingua franca. Memorizing lists of new vocabulary and relying on dictionaries and textbooks alone do not seem to make the language as naturally used as it is among its native and competent users; new resources are calling to be reckoned up and the special nature of the digital-native learners are waiting to be endorsed.

Statement of the Problem

To begin with, writing generally is a task that takes great skill. Writers may struggle to shape their thoughts the way they want to and put them into words with ease. More specifically, EFL writing in Egypt's pre-university education system is a skill dared to be called unwanted and almost abandoned. Students are not well trained for writing, particularly in a foreign language. High proficiency and naturalness of English is predominantly allowed to upscale social classes where K-12 (all school years prior to college) native-speaking language teachers are affordable. As we go down the social class pyramid, less

natural English language can be detected where Arabic interferes with and affect the production of putting meaning into English. The idea has been discussed in the book *In How People Learn* where the authors attested that "… all new learning involves transfer based on preceding experience" (Bransford, Brown, & Cocking, 2000, p.53). EFL learners are hereby highly expected to apply their knowledge of "L1 rules and lexicology and transfer it to L2 production" (AlNagheya, 2018). A pilot study has revealed samples of such L1 caused unnaturalness like: *drink a cigarettes*, *he wanted to suicide*, *A smoker is more exposed to be ill than a non-smoker, In the first time..,*). The present study seeks to go further than just addressing grammatical errors obviously detected in the previous constructions and examine the collocational issues found there. Using the verb *drink* for example to colligate with the noun *cigarette* can be traced to the vernacular Arabic equivalent يشرب سيجارة yshrab sigarah. This structure is misleading to a native speaker of English; liquifying a cigarette into a drink can be consequently visualized. The second example, *he wanted to suicide*, shows a misusage of the word *suicide* as a verb as the case is in Arabic. Verifying such usage against concordances of the online COCA corpus reveals that the word is naturally used as either a **noun** (*e.g., … linking bullying to suicide & they drive*

him to suicide) or a **noun adjunct** remodifying another noun phrase (*e.g., … connected to suicide prevention*). Using a search syntax to induce collocations frequently preceding the word *suicide* advises using the verb *commit* to represent the intended meaning found in the original pilot sample. Thinking in the native language gave way to producing the other two examples as well. The structure in the first time used to imply the first of two consecutive actions is also unnatural. Dropping the preposition *in* results in a higher frequency of native usage on the corpus making *the first time* a better and more authentic way of delivering such meaning.

Applying this to the context of university level students, confronts us with the issue Harmer raised in 2001 stating that intermediate learners at this stage are not very attentive to how their language needs to improve and that the teachers find themselves overwhelmed to find a way that is "disheartening" to draw their attention to what is really needed. Other complications may find their root in the lack of English proficiency and naturalness: difficulty of upgrading skills for most knowledge is available in English, less probability of getting hired for a well-paying job, widening gap between social classes for marked language is not accepted by some.

Rationale of the study

The present study attempts to target a snag persisting in the EFL learning class *i.e.,* the lack of native and natural context of the language resulting in unauthentic and marked language output affected by L1. This rift is attempted to be healed through two strategies: attracting digital natives into the learning process; furthermore, achieving sustainable linguistic development through applying DDL to concordances of an online corpus. The use of colligation in writing is used as an indicator of achieving these ends for two reasons. First, natural use of colligation is less likely to be corrected in EFL writing. Moreover, fixing linguistic issues in writing can lead to subsequent fixation of the same issues in all language productive skills for writing "commits language to memory" as prescribed by Harmer in

2001.

Review of literature

Introducing sustainable development together with its goals to linguistic research is more likely to be on the rise to be of assistance to the UN and all its member states 2030 agenda. Provision of novice tools to help attain remarkable SDGs has gain interest of contemporary research. The main interest of the present study is the 4th SDG which is Quality Education. It is also believed that through that goal more goals can subsequently be accomplished *i.e., No Poverty,* SDG 1; *Decent Work and Economic Growth,* SDG 8; and *Reduced Inequality,* SDG 10, for education can cater for them all. The concept of developing sustainable competence is of service to these SDGs and has been subject to different linguistic studies in the last two years. These studies targeted different types of linguistic competence like *email pragmatic competence* (Chen & Wu, 2022) and *stance-taking* (Zhang & Zhang, 2021). Educational strategies towards sustainable development of learning English were also examined like *motivation* (Jia et. al., 2022), *support measures* (Foung et. al., 2022), *test utilization* (Pan & Tao, 2022), *class ecology*, *corrective feedback strategies* (Chen & Wu, 2022) and *pedagogical translanguaging* (Zhou et. al., 2021), and *online language teaching* (Choi & Chung, 2021). The available literature on SD allows this research the chance to adopt the proposed treatment i.e., applying DDL to concordances of an online corpus to authenticate and naturalize the use of colligation in writing to be adopted.

DDL has been found to be employed by corpus-based studies targeting linguistics items other than the focus of the present study like legal terminology (Marin & Fernandez 2015) where two corpora were contrasted for the best acquisition. The study concluded that general corpora (what is used in the study at hand) work better.

Collocation was proved as an indispensable element of language proficiency in different

linguistic studies like Attar (2013), Gitsaki (1999), and Hsu & Chiu (2008) and was proven missing a natural usage as evidenced by the pilot study. Colligations were distorted by L1 interference *i.e.*, Arabic (e.g., *Pollution **decreases the age of life** on earth Culture **comprises of** race, Today we **become suffer** from many problems, 35 language, **the Internet losts** our time, the Internet gives a lot of information and **no one can leave it** for one day, at the last …, a smoker is **more exposed** to be ill than a non-smoker*). This situation was earlier described by Lewis in 2005, differentiating classroom learners engrossed with vocabulary and grammar and natural learners occupying themselves with creation of meaning. Accordingly, Lewis prescribed a lexical approach to learning where texts are examined away from grammar and vocabulary (p.7).

The available literature leads the present study to taking the chance to find the impact of digitalizing the learning process via employing a plugged classroom that gives way to EFL learners in Egypt to examine online concordances through DDL to sustainably develop their use of English colligation.

Scope of the study

The present study limits itself to applying DDL to concordances of an online corpus, COCA, to authenticate EFL university-level learners' use of three types of colligations: verb-preposition, verb-noun, and noun-noun. This is done as an attempt to achieve four 2030 SDGs.

Methodology

This paper reports a study conducted in a national university in Egypt *i.e.*, a UN member (see AlNagheya, 2018). Participants of the study were 109 EFL students in a writing class; all of them were juniors majoring in English language. Age of the subjects ranged from 20 to 21; the fact that allowed the study the merit of dealing with what Prensky's called *digital natives* (2001). They all had their formative years in the prime age of the Internet to whom regular lecturing and offline classes are alienating.

The study, then, set to observe the impact, if any, of taking the writing sessions to a digital and *plugged* classrooms (*i.e.,* connected to the Internet) that allowed for the employment of an online corpus, putting its concordances (*i.e.,* the proposed tool of treatment) to analysis. This was done to simply check if such treatment could have an impact on the linguistic development of the use of colligation and then their retention making their learning *sustainable*.

Before the outset of the treatment the study is experimenting, colligation data was collected through a **pretest** to gain knowledge of how these language items were used by the participant. Pretest, moreover, was indispensable for future measure of improvement, if any. Writing samples were collected and examined to detect all uses of colligation and pinpoint those seen as marked and less natural (see Figure 2).

Figure 2

Examples of Faulty Constructions in Participants' Writing Sample

1. Today, we ***become suffer*** from many problems.
2. Why do you still ***drink a cigarette***?
3. Do you ***play any sports***?
4. One day, I ***joined in*** a swimming competition.
5. It is ***now received*** and ***condition must be*** while individuals for admission to any ***function*** is mastering English.
6. There are many ***countries speak*** English language such as London, American, German and others a lot.
7. If their command over English is poor, then they may face difficulty in adjusting with the ***alien environment.***

The detected unnatural colligations were tested against the online Corpus of Contemporary American English (COCA) to authenticate the collocating items and were used to design two tests. Analysis of concordances underwent three stages. First, different search syntaxes were given trial to arrive at the syntax that returns the most revealing results. Second, results were filtered in terms of semantics of the collocates that deliver the same meaning intended by the EFL participant but was marked faulty (*e.g.*, if the collocation requiring authentication is *throw rubbish*, top occurring verb collocates like *is*, *talk*, *fill*, *think*, *collect*, *burn* and *clear* had to be overruled for they fail to translate the L1 transferred meaning presented in *throw rubbish*). Third step was to put resulting verb collocates into a descending order according to their frequency of occurrence. Last step was to run an analysis of top hundred concordance of each generated COCA concordances to arrive at the most frequent verb collocate to go with the given noun in align with the intended meaning. After that two different tests were prepared following Nitko and Bookhart guidelines (2010). All distractors in MCQs are in the same part of speech i.e., verb collocates. For extended writing questions, only the use of colligation was evaluated for assessment to be most informative and focused.

Now the pretest and posttest are ready, the body of participants were split in half through random sampling (*i.e.*, MS Excel RAND function). They were branched into two groups: *experimental* and *control*. Prior to the pursuance of the treatment, a pilot session was conducted in the plugged language lab for which nine nonparticipant students were recruited. This session enlightened the treatment with the following guiding points: a) access to email is a must; b) test time needed to be longer for the pilot participants were found familiar with texting using their smartphones but not the PC keyboard. c) writing task prompt needed to be more restrictive for having individual words in the prompt (*e.g.*, awareness, standard living, pollution) did not control the output as they avoided using them in the desired structure. Prompts were changed to structural (*e.g.*, give+preposition+any given topic, verb+standard of living, verb+experience, buy+preposition+name of a shop, verb+work force, verb+garbage+preposition+street, verb+the environment, verb+laws, verb+awareness). The pre- and posttests were adjusted to fit requirements the pilot session revealed then the treatment was launched (see Table 1).

Table 1
The Study's Scheme of Work

Time-table		Language Content	Activities		Objectives
Week 1	2 hrs	Introducing prewriting techniques used for collecting and organizing ideas that will be used in writing.	C. Group First writing assignment.	Expr. Group	To diagnose and detect the existing problems in collocation usage.
Week 2		Discussing the detected errors in the former session writing assignment with informative negative feedback provided to all participants.	Hand-outs: 1.　Proofreading manual (Appendix A) 2.　Rubric for writing assignments (Appendix B) Second writing assignment		To help achieve a common ground of knowledge of all codes used to mark errors persisting in the upcoming written assignments.

Week 3	Informative negative feedback. (errors are marked with the codes handed to them in the proofreading manual in the second session)	1. Third writing assignment 2. Questionnaire posting on the class Facebook group		To facilitate gathering of qualitative data on the tools they reside to upon phrasing meaning and correcting marked errors.
Week 4	Informative negative feedback.	Pilot-test		To test the test, the usability of all the tools to be used.
Week 5	Colligations	Pre-test		To later allow for improvement measure.
Week 6	Colligations	Plugged classroom session to: -Sign up for a working email and register for COCA. -Get a brief training on the essential tools of corpus search.	Non-corrective feedback. Learners were asked to find corrections for their errors the same way they are usually used to.	To gain the know-how of COCA search mechanism.
Week 7	Colligations	-Corpus consultation and concordance lines analysis (DDL activity 1) (see Appendix C)	Feedback	To statistically measure score gain and test validity of the tool used for error correction. Corrective feedback was provided to the control group to allow then equal right of knowledge given to the treatment group.
Week 8		DDL activity 2 (see Appendix L).	Feedback	
Week 9		DDL activity 3 (see Appendix L).	Feedback	
Week 10		Post-test 1	Post-test 1	To calculate improvement
Week 12		Delayed Test		Measure retention

An orientation session was given to get participants familiar with the online corpus interface (see Figure 3) followed by three 2-hour session for the data driven learning (DDL) work (see Appendix C).

DDL work was performed following the principles of Carter & McCarthy (1995). It was performed in three stages (see Figure 4)

In the **illustration** stage, instructions on how to use COCA search engine, how to read concordances, how to find frequencies, and how to arrive at the most informative results. Colligation worksheet (see Appendix C) was used to let them dive deeper into the data made available by the corpus and find the natural and native-like colligate that would best fit into the items in the worksheet. An example is the interaction they had to go through with the concordance to arrive at a preposition that would naturally collocate with the verb *buy* in the 10th item on the DDL Worksheet and fits in the buy preposition shopping place syntax. The COCA search engine was set to collect all prepositions that followed this verb on the available concordance lines (see Figure 5).

This search string returned 100 prepositions frequenting in total of 10411. Theses prepositions were then shortlisted advised by the intended meaning (see Figure 6)

Figure 3
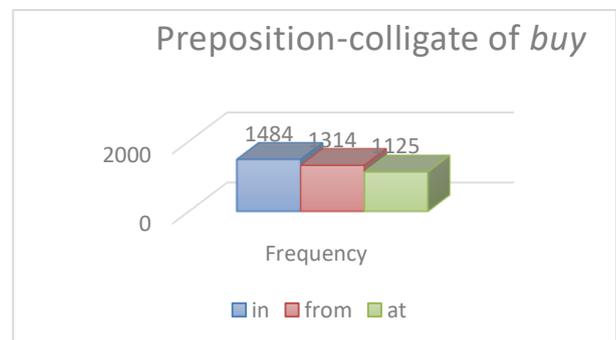*COCA Search Strings Input Field and Search Tools*

Figure 5
The Used COCA Search Syntax to Collect All Preposition Collocating after the Verb Buy
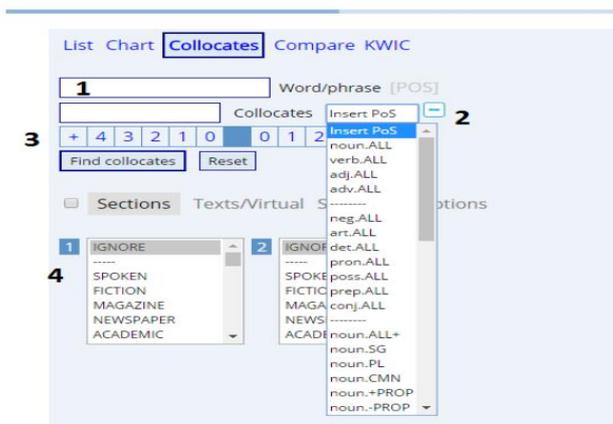
Figure 4
DDL Stages that Guided the Treatment

Figure 6
Top Frequent Prepositions Collocating with the Verb Buy and Delivering the Intended Meaning

The top frequently collocating preposition *in* cannot be our choice here, for concordance analysis revealed the fact that it is commonly followed by either a **time** (e.g., recent years, 1990, …etc.), a big **place** (e.g., Africa, France, Orange County, …etc.), or a descriptive **state** (e.g., extra-large, the cold state,…etc.). The preposition *from* is almost always followed by a *person* what left us with only the *at*. Now this leads us to the final DDL stage, **induction**, arrived at after analyzing the top 100 concordance lines for each possible colligate. At this stage, participants discussed results to arrive at the authentic collocate to get worksheet items answered.

A posttest was conducted right after the treatment (five weeks from the pretest) to measure improvement and a delayed posttest (a month after the posttest) to check for retention, thus sustainable development.

Result and discussion

Two types of t-test scores were used to verify results as asubsequent to the used treatment not to chance. Test scores were analyzed using paired samples and independent samples. Following that, Cohen's d was then applied to measure how strong was the effect size of the treatment. All test scores were analyzed by use of the Statistical Package for the Social Sciences (SPSS) program V.21. Paired-samples test showed a linear progress as impact of concordance use: t = -30.159 (p < .05). The amount of t calculated (-30.159) is indicative of having statistically significant result after the use of concordance (see Table 2).

Table 2

T-test results

DDL from COCA concordances	Experimental Group (n =57)				df	*t* value	Significance at alpha α level (*P* value) [0.05]
	Mean		Standard deviation				*P* < .05
	Pre	Post	Pre	Post			0.001
	7.7368	23.543	3.28702	2.60542	56	-30.159	Significant

Based on the table, significance at α level (P value) as shown in the last column of Table 2 (<.05) relates the difference in the mean scores to the experimented intervention not to pure chance (Knapp, 2017). A significant increase among the experimental group is detected by more than three times as much. There was also a competitive progress for the experimental group outperformed the control group as judged by the mean scores ((experimental group 'μ = 23.5439' which is greater than control group 'μ = 13.9236'). A two independent-samples t-test proves a superiority of using concordances through DDL (see Table 3)

Table 3

Two Independent-Sample T-test Results

	Group						df	t	Significance at alpha α level [.05]
	Experimental Group			Control Group					P < .05
	n	Mean	Std Deviation	n	Mean	Std Deviation			.0001
Post-test	57	23.543	2.60542	52	13.923	4.25577	83.001	14.072	Significant

the effect strength attributed to applying a DDL approach to concordance lines (independent variable) on using native-like colligations in EFL writing (dependent variable) was then measured by taking the square root of the t value obtained from the two independent-samples t-test divided by the total sum of degrees of freedom (df) plus squared t value (t^2).

$$r = \sqrt{\frac{t^2}{t^2 + df}}$$

Using the above formula, it was statistically established that the proposed treatment has a strong effect on linguistically developing the proficiency of the EFL sample learners in using colligations as naturally phrased by American

users exhibited on the COCA concordance lines. The r was reported to be 0.7046486004 meaning that only 30 % of the total score improvement was not attributed to using concordances but 70 % are (see Figure 7).

Descriptive statistics were run one more time to evaluate the retention of the learned colligation, thus sustainable learning.

The mean scores of the experimental group in both posttests showed an absence of any statistically significant difference; the thing that would bring evidence that derived colligations are retained. Another paired samples t-test was run via SPSS to measure the significance between the means of the post-test 1 and 2 (see Table 5). Results confirmed retention (see Figure 8).

Figure 7
*The Effect Size of the Proposed Treatment*
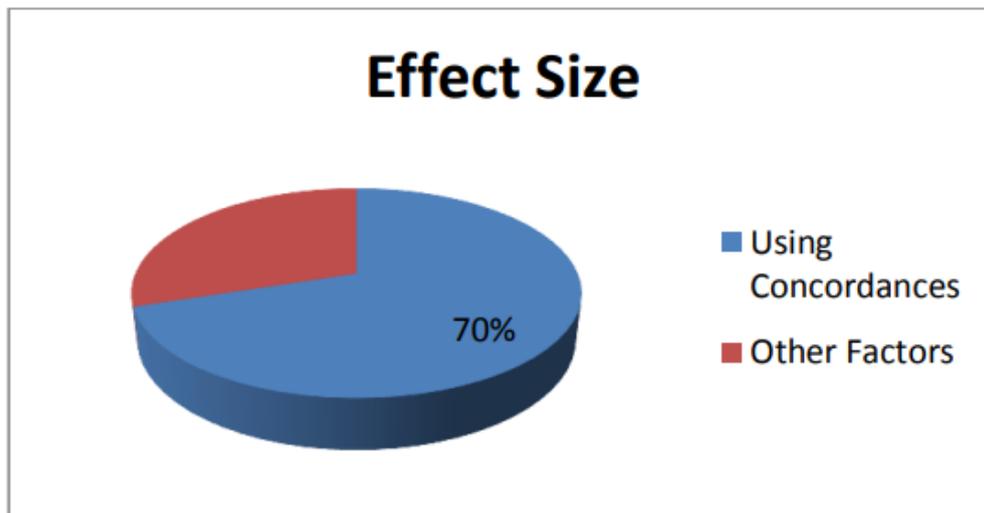
Table 4
Descriptive Statistics for Retention of Colligation i.e., Sustainable Learning

Collocation Post-	Group	n	Mean	Median	Mode	Std Deviation	Variance	Range	Min.	Max.
	Exp. G	30	24.000	24.500	26	1.91905	4.690	8	18	26

Table 5
Post-Tests Paired-Sample T-test for the Experimental Group.

Test	Exp. G. (30)				df	t	Significance at alpha α level [.05]
	Post-test		Delayed post-test				0.455
	M	Std Deviation	M	Std Deviation			P >.05
	23.8667	2.54251	24.000	1.91905	29	.757	Non-Significant

Figure 8
Experimental Group Progress Throughout the Course of the Study
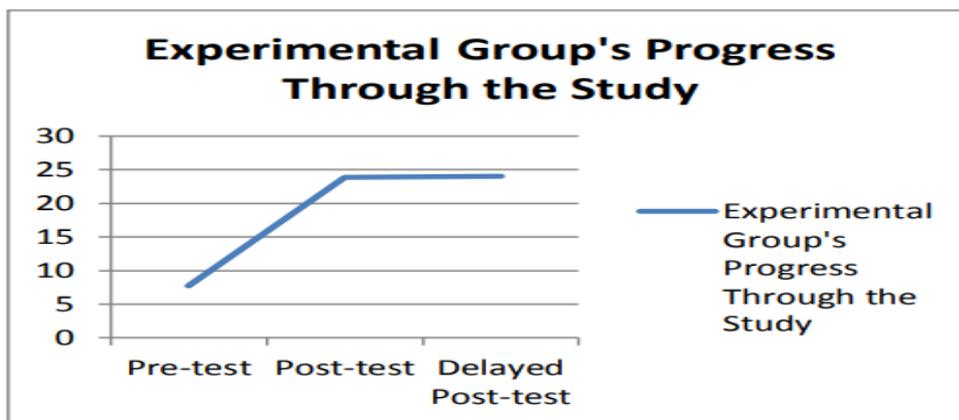
Conclusion

The 16 errors of collocations targeted (see Appendix D) in the study the present paper reports fell into three grammatical patterns: noun-noun, verb-noun, verb-preposition thus are called colligations as advised by Seretan (2011). They were all fixed due to the use of the proposed treatment (see Appendix E).

Working with authentic data had led participants to become linguistic detectives who can bring to light facts about the language that were not in the first-place part of any task. An example of this was realizing the misuse of the preposition *in* in their original writing as they were searching for a collocate with the noun *rubbish*. This finding fit with Johns (2002) publication on the same point when he discovered that verb *offer* not *present* is

the natural collocate with the noun *insight* after engaging in a 131-concordance search.

The DDL work on online corpus like the COCA made writing class ***inclusive*** and gave ***equitable*** chance to less advantaged students learning a foreign language with no access to either authentic data or natural users to interact with. By achieving retention, a ***promotion of opportunities of a lifelong learning for all*** is achieved for now learners are given a tool not a lesson. This sums the United Nations (2022) definition of the SDG 4 *i.e.,* **quality education**. It also makes a better-paying job possible (i.e., SDG 8) for now they are eligible for acquiring a lingua franca and use it in the way its users naturally do with no marked colligations. A good job can make possible to eradicate poverty (i.e., SDG 1) by gaining the tool needed to have an international freelancing side hustle.

Appendices

Appendix A: Written Assignments Rubric

Error	Frequency				
1. Mechanics	1	2	3	4	5
Spelling					
Punctuation					
Capitalization					
Legibility of handwriting					
2. Grammar					
Run-on sentences					
Comma splice					
Choppy sentence					
Preposition use					
Subject-verb agreement					
Parallelism					
Pronoun-antecedent agreement					
Use of parts of speech					
3. Style					
Word choice					
Diction					
Arabic interference					
Wrong collocation					
Use of slang					
Repetition					
4. Content					
Unoriginality of content					
Lack of supportive quotations where relevant					
Off point.					
5. Organization					
Thesis statement missing					
Absence of transitions for flow of writing					
No topic sentences at the level of paragraphs					
Non-attendance of introduction-body-conclusion format					

Appendix B: Proofreading Manual

Code	Decode
≡	Capitalize
∧	Insert
/	Set in lower case
‖	Parallelism problem
○	Punctuation error
⌒	Close up this space
CS	Choppy sentences
EF	Effective order
T	Tense problem
L1 T	Language transfer
PoS	Wrong choice of the part of speech
Frag	Fragment
Awk	Awkward expression or construction
CS	Comma splice
RO	Run on sentence
Sp	Spell out
S/V	Subject-verb agreement
Wdy	Wordy
WW	Wrong word choice
Prep	Wrong preposition
P/A	Pronoun-antecedent agreement
Rep	Unnecessary repetition (tautologies)
WO	Word order
Varying the sentence	Avoid starting consecutive sentences in the same way
Jargon/pompous	Avoid jargon, aim for simplicity
Cliché	Avoid clichés, be original
PV	Make use of passive voice
DN	Double negative
NS	The sentence makes no sense

Appendix C: Hands-on DDL Worksheet

(DDL Activity 1)
▪ **Choose a collocate that best completes the following sentences and write it in the space provided.**

1. John had to take on a second job to …... his **standard of living**.

a. improve

b. raise

c. increase

d. boost

2. Students need to sharpen their skills within their field of interest and …… actual work **experience** to prepare themselves for life and work.

a. acquire

b. gain

c. take

d. make

3. People turn their cities into wastelands when they …… their **garbage** on the streets.

a. throw

b. toss

c. dump

d. litter

4. The movie can help …… public **awareness** and give it that touch of Hollywood glamour that makes it not just a job we have to do, but makes us very proud of doing it.

a. improve

b. increase

c. raise

d. promote

5. The **pollution** …… by the burning of coal for electricity leads to some 20,000 excess deaths per year in the U.S. alone.

a. done

b. created

c. produced

d. caused

(DDL Activity 2)
▪ **Complete with a word (as shown between brackets) that best collocates with the word in bold.**

6. Parliament had the power to ⬚ **law**.   (verb)

7. A genuine effort is being made to ⬚ ⬚ the long-term stadium **problem**.

(verb)

8. Ricky Martin's **mother** ⬚ is Spanish, but he has been on and off living in the U.S. since he was twelve-years-old, so for him language is not an issue.

(noun)

9. The respondent was also asked for his or her **opinion** ⬚ the quality of these resources and the library's limitations. (preposition)

10. This is pumpkin butter that you **buy** ⬚ ⬚ the store.   (preposition)

(DDL Activity 3)

▪ <u>**Substitute the underline Arabic transferred word with the best authentic English collocate.**</u>

11. There are many steps that need to be taken to preserve the **environment**.

12. Car **fumes** and smoke from factories are important causes of air pollution.

13. On our prom, we had a **dish party**.

14. If any of them really cared about this city, they wouldn't throw trash cans in the street.

15. Career academies offer specialized training to help students join the **work force** after graduation**.**

Appendix D: Examples of the Errors Found in Participants' Assignment

▪ *English **dominates over** all the language in the world.*
▪ *The business world is also **conducted by** this language.*
▪ *English is necessary to people **traveling abroad***.
▪ *It is now received and condition must be while individuals for **admission** to any **function** is mastering English.*
▪ *… so we should be very serious and sincere about learning English as an **emergency basis***.
In the *Pollution* assignment, the following odd combinations persisted:
▪ *… **dropping dirts and waste** into the Nile. (dumping)*
▪ *… **car fumes** and smoke from factories.*
▪ *… **smoking** of **cars** …*
▪ *Why do you still **drink a cigarettes** (L1 transfer)*
▪ *A smoker is more **exposed to be ill** than a non-smoker. (vulnerable to g*
▪ *This leads to the **deterioration of the Ozone layer**. (depletion)*
▪ *… **spread awareness** (spread knowledge or increase awareness) among ordinary people.*
▪ *… the **damaged of air pollution**.*
▪ *We can avoid the danger of pollution by making **special areas** for factories and increasing the awareness of people to **throw the rubbish in the street**.*
▪ *… the thing that **decreases the age** of life on earth.*
▪ *Water **pollution done** by ….*
▪ *Many people pollute our environment **by different ways**. (in different ways/by different means)*
▪ *To fight and **conquer pollution**, we have to know the symptoms and resolve them once and for all.*
▪ *… as a result of the bad use to the environment from its **immense population**.*
▪ *The states must **put laws**.*
▪ *Today, we **become suffer** from many problems. (L1 transfer)*
▪ *People can **find out** the world's customs, traditions, and even visit each other.*
▪ *At the last, … (L1 transfer)*

Appendix E: List of Target Collocations

	Before Concordance	After Concordance
1+2	*throw-rubbish-in*-streets	*dump-garbage-on*-streets
3	give-opinion-*in*	give-opinion-*on*
4	*buy*-from	*buy*-at
5	*increase*-awareness	*raise*-awareness
6	*car*-fumes	*exhaust*-fumes
7	*put*-law	*make*-law
8	*acquire*-experience	*gain*-experience
9	*preserve*-environment	*protect*-environment
10	*face*-pollution	*solve*-pollution problem / *prevent*-pollution
11	*do*-pollution	*cause*-pollution
12	*finish*-problem	*solve*-problem
13	*increase*-standard of living	*improve*-standard of living
14	*enter*-work force	*enter*-work force
15	*dish*-party	*pot-luck*
16	*mother-language*	*mother-tongue*

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