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Comparative Analysis of Digital Translation Tools

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Abstract: As technology progresses, educators become essential in effectively integrating and guiding the application of digital tools to enhance students' learning experience. This paper focuses on the dynamic use of three distinct digital tools—Google Translate, ChatGPT, and My AI on Snapchat—by Bachelor's Degree students while translating and comparing economy-related texts. The study employs a hands-on methodology, encouraging students to explore the functionalities of each tool and propose alternative translations in instances of any identified errors or any inappropriately translated version. Through detailed analysis of the students' contributions, it is sought to reveal patterns and preferences in the usage of the above-mentioned tools, providing a better understanding of their impact on English language learning. Beyond the immediate context, the study sheds light on the broader implications of technology integration in the field of education. Gaining insights into students' interactions with digital tools not only shapes pedagogical methods but also contributes to the ongoing dialogue on incorporating digital tools in foreign language acquisition in higher education. In conclusion, besides highlighting the transformative impact of digital translation tools in the field of education, further benefits such as enhanced contextual comprehension, immediate feedback, and personalized learning experiences will be pointed out.

Keywords: Artificial intelligence, Digital translation tools, Machine learning

Introduction

The multi-arrayed influence that technology exercises on students' performance is nowadays acknowledged and accepted by many educators from all over the world. While the hesitance of whether to embrace its use in their classes, to promote a conventional teaching practice, or to allow limited-technology use has come to an end, trying to find fruitful and engaging ways of purposely incorporating technology into practice seems to be the purpose of research for many educators. In particular, the relationship between artificial intelligence and education is becoming increasingly important (Genc & Kocak, 2024).

This study focuses on the use of digital translation tools in English for Special Purposes (ESP) classes with 1st year Bachelor's Degree students studying 'Finance' in "Fan S Noli" University. It aims to identify patterns and preferences in students' use of digital tools like: "Google Translate", and the translation services offered by Chatbots like: "ChatGPT", and "MY AI" (recently integrated in 'SnapChat') during their completion of tasks in the class or remotely. Even though the primary focus of the two later tools isn't text translation, they both offer such a service and are widely utilized for this purpose.

It is worth noting that despite the existence of a number of machine translation tools, the main reason for selecting these specific tools for student work are their free accessibility and user-friendly qualities. In addition, due to their frequent use in daily activities, students didn't require detailed instructions on how to use these tools, resulting in less ambiguous tasks and more involvement on students' behalf.

Another important point to be mentioned is the fact that a significant number of students in this group did full-time and/or part-time jobs, so the times they had to miss our onsite classes were considerable. Deciding to

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implement a Blended-Learning approach was seen as appropriate due to its flexibility (Lin, 2018), high-engaging qualities (Halverson & Graham, 2019) and the positive impact it has on improving students' language acquisition (Mulyadi et.al., 2020; Kurucova et al., 2018) hence, allowing all of them to participate actively and express their views on thought-provoking issues regarding transition variances. As Meng (2022) notes, the incorporation of various forms of teaching greatly improves teachers' and students' experiences of knowledge acquisition. As such, it can be assumed that both parties will have better teaching and learning perspectives. However, implementing this teaching approach required careful planning and selection of materials, a point supported even by other researchers like Luo and Garner (2017).

The role of Machine Translation in ESP Teaching

Machine translation technologies are playing their constructive (and when left unsupervised) destructive role in foreign language acquisition. Offering immediate access to authentic texts, these technologies facilitate the process of practicing a foreign language in many aspects (Lee & Briggs, 2021). They provide their users (and in our case the students) with the possibility to choose from a number of synonyms and encounter relatively simple sentences thus, motivating them to explore more content-related material, fostering their critical thinking (Young, 2023), inspiring collaborative learning, and also enriching their vocabulary repertoire.

Several researchers (O'Neill, 2013; Clifford et al., 2013; Lee, 2023; Yang, 2024) have explored the benefits and drawbacks of utilizing machine translation in foreign language teaching, generally agreeing on its positive influence on the learning process. Sujarwo (2020) highlights that students' learning performance is highly boosted by the use of these tools.

However, Young (2023) stresses the importance for careful planning of appropriate writing tasks and other activities that employ these tools to enrich students' linguistic competence rather than purely avoiding engagement in expressing their own capacities. While acknowledging the wide specter of benefits that machine translation offers in the process of foreign language acquisition, Urlaub and Dessein (2022) draw attention towards the risk of students (and all regular users of these tools) losing their ability to naturally utilize foreign languages for communication. This would mean that they would lose that 'personal touch' which is possessed by every individual. In this aspect, we agree with Clifford et al. (2013) and Young (2023) regarding the importance that teachers' instructions have in properly incorporating machine translation in foreign language learning practices.

The Relationship between Translation and ESP

When considering the relationship between translation and ESP, many would argue that the former plays an auxiliary role, contributing to the process of foreign language acquisition by facilitating meaning transmission and establishing connections between the terminology in source and target languages (Koteva, 2020). Hence, translation contributes significantly to students' communication skills (Mažeikienė, 2019), especially in cases of collaborative translation tasks which emphasize and develop various skills.

By exposing students to different language structures and idiomatic expressions within their field of study, translation supports the objectives of ESP by enhancing students' language proficiency (especially in terms of terminology), facilitating content understanding, and drawing cultural maps (Zhang, 2016) with relevant phenomena in the target language. The integration of both these elements considerably contributes to building students' analytical and critical thinking skills, fostering a well-rounded language proficiency.

Due to the prevalence of economic-related terminology and its specific contextual usage, instructing students to rely on Functional Translation Method was deemed appropriate. As highlighted by Leonardi (2009), utilizing translation in ESP teaching fosters students' engagement in the acquisition and refinement of various linguistic aspects, while also stimulating their critical thinking skills in addressing cultural-related issues. These skills enable students to make informed decisions in selecting appropriate equivalent terminology and to avoid content-related mistranslations.

Although translation was not the primary focus of their studies, equipping them with certain translation skills was considered beneficial for polishing their performance, enhancing the quality of their research, and increasing prospects for successful projects upon when starting a job. Students were introduced to Weschler's (1997) model through simplified examples, with the expectation that they would identify inappropriate or

ambiguous translations rather than engaging in detailed linguistic analysis. As such, translation was mainly utilized in reading sections to translate texts from English to Albanian, even though this approach was not the only methodology employed during the ESP course. Similarly, while considering various tools, the study exclusively concentrates on the three digital translation tools in question for the purpose of the investigation.

Methodology

This paper aims to assess the effectiveness of Google translate, ChatGPT, and MY AI on Snapchat in translating texts related to economy. Additionally, it examines students' interactions and preferences with different digital translation tools, assessing their impact on foreign language acquisition and proficiency. Students of the first year studying "Finance" are expected to have a B2 level of English proficiency upon entering university, enabling them to identify grammatical and terminological discrepancies. A hands-on methodology was employed, allowing students to explore the functionalities of each tool, identify errors, propose alternative translations, and demonstrate patterns and preferences in tools usage.

In order to achieve better results, the types of texts they worked with were chosen in accordance with the topics covered in other formative subjects, drawn from Leonard Danglli's "Business English" book. This approach allows students to engage with terminology they have previously met in the source language, facilitating the process of drawing parallel connections (Koteva, 2020) between variants in both languages (English and Albanian). At the beginning of each class, students were divided in different groups, with each group assigned a specific text and digital translation tool for completing their initial task. Working with assigned texts improves students' focus and exposes them to a range of specific contexts, each with relevant linguistic, stylistic and cultural features (Danilina, 2020). After translating the text, students conduct comparative translation analyses to identify discrepancies and suggest alternative variants which they consider more appropriate. Subsequently, they compare their versions with other group members (when working individually) and later with groups using the remaining translation tools for the same texts.

In many cases, students were instructed to collaborate on their tasks in order to save time, particularly when the task was carried out in the classroom. In other instances, they discussed their findings on the discussion board in Microsoft Teams. Following these activities, a comprehensive analysis of students' findings was conducted. The 'mistakes' made by the digital translation tools were subsequently categorized based on this analysis, providing insights into the performance and limitations of each tool.

Findings

As mentioned above, this study explores students' experiences with digital translation tools in translating and comparing and contrasting economy-related texts and focuses on their utility in translating complex texts and promoting linguistic proficiency.

Problems with the Tool's Translation

Below are selected a group of examples which reflect mistranslations, problems with naturalness and adaptation encountered during our analysis of the texts worked by the students via the digital tools. The examples in the source language are found in the "Did you know?" section (pp. 18-19).

"The bank sets national interest rates and is responsible for issuing banknotes."

ChatGPT: "Banka përcakton normat kombëtare të interesit dhe është përgjegjëse për emetimin e **banknotave**."

Google Translate: "Banka përcakton normat kombëtare të interesit dhe është përgjegjëse për emetimin e **kartmonedhave**."

Even though both translations can be considered as clear and grammatically correct, the choice of the parallel term "kartmonedha" for "banknotes" aligns better with the Albanian lexicon, rendering the translated variant more natural. We agree with Mulyanah's (2020) statement that the choice of terminology can significantly influence the clarity and naturalness of a translation.

Below are additional examples highlighting similar problems:

“The main commercial banks, called clearing banks or high-street banks, are Nat West, Barclays, Lloyds, and HSBC.”

Google Translate: “Bankat kryesore **komerciale**, të quajtura **banka të kleringut** ose banka të rrugës së lartë janë Nat West, Barclays, Lloyds dhe HSBC.”

ChatGPT: “Bankat kryesore **tregtare**, të quajtura **banka të pastrimit** ose banka të rrugëve kryesore, janë NatWest, Barclays, Lloyds dhe HSBC.”

Students’ suggestion: “Bankat kryesore **tregtare**, të njohura si **bankat e pastrimit** ose bankat e rajoneve kryesore, janë NatWest, Barclays, Lloyds dhe HSBC.”

While all translations effectively convey the main idea to some extent, the second and third translations offer more idiomatic and commonly used terms for "clearing banks" and "high-street banks" in Albanian. The term “kleringut” is not found in Albanian lexicon. As such, it is not recognizable by the reader, making the translated variant not only ambiguous and confusing, but even misleading, as it resembles the term “klerikut” (religious figure), which is irrelevant in this context. Moreover, the way the phrase “high-street banks” is adapted and brought in a more naturalized language in Albanian language through its equivalent “bankat e rajoneve kryesore” demonstrates the importance of human interpretation in translation. It ensures that all linguistic and stylistic nuances of the source text are preserved and faithfully conveyed in the target language.

“These are known as the big four and have branches in most towns.”

MY AI: “Këto quhen **katër të mëdha** dhe kanë degë në shumicën e qyteteve.”

ChatGPT: “Këto njihen si **katër më të mëdhatë** dhe kanë degë në shumicën e qyteteve.”

Students’ suggestion: “Këto njihen si **katërshja e madhe** dhe kanë degë në shumicën e qyteteve.”

While SnapChat’s translation is literal and lacks idiomatic expression, the translation from Chat GPT doesn’t go very far from it either. Both tools adhere closely to literal translation and fail to convey the intended meaning clearly, resulting in loss of naturalness and clarity. Though less conventional, the translation suggested by students effectively communicates the message in a natural and understandable way.

“Many people now bank online, and ...”

Google Translate: “Shumë njerëz tani **bëjnë bankë online** dhe ...”

ChatGPT: “Shumë njerëz tani **bankojnë** online dhe ...”

Students suggested the phrase “**kryejne aktivitete bankare online**” as a corresponding phrase for the Albanian version. It reflects a more appropriate and linguistically accurate translation, which uses existing terminology that is familiar to Albanian speakers. In contrast, the other two variants employ terms that do not exist in the Albanian language and could potentially lead to confusion or unclear information. It is important to note that the term “bankoj” has started to be utilized informally among teenagers and young adults, but it is not widely accepted and remains very informal for formal or professional contexts.

“**Banking** is dominated by large money center banks, such as Chase, which raise money by dealing in the international money markets and lend it to businesses and other banks.”

Chat GPT: “**Biznesi bankar** është i dominuar nga bankat kryesore të qendrave të parave, siç është Chase ... dhe i japin ato në kredi ndërmarrjeve dhe bankave të tjera.”

My AI: **Bankimi** është dominuar nga bankat e mëdha qendrore të parave, siç janë Chase ... dhe i dhurojnë ato bizneseve

Google translate: “Bankat dominohen nga banka të mëdha të qendrës së parasë si Chase ... dhe i japin ato në kredi ndërmarrjeve”

The provided translation appears to be a literal translation from English to Albanian. However, to enhance the accuracy and clarity of the Albanian translation, particularly for specialized terms like "banking" and "lending" it is crucial to use language that effectively conveys the intended meaning in the target language. Here is a refined version of the translation:

"**Sistemi bankar** rregullohet nga bankat e mëdha që operojnë në qendrat e financimit të parave, siç është Chase, të cilat grumbullojnë para duke operuar në tregjet ndërkombëtare të parave dhe ua japin në formë kredie bizneseve dhe bankave të tjera."

It should be noted that Snapchat's service poses many challenges when translating specific terminology and as such, in many cases students had to reconsider the entire version translated by this tool.

The cases mentioned below are found in the text: Mark Zuckerberg on p. 70 of the book.

"**By September 2006** anyone with an e-mail address could join a regional network based on where he or she lived."

Google Translate: "**Deri në shtator 2006**, çdokush me një adresë e-mail mund të *bashkohej* me një rrjet rajonal bazuar në vendin ku ai ose ajo jetonte."

My AI: "**Deri në shtator 2006**, kushdo me një adresë e-mail mund të *bashkangjitej* me një rrjet rajonal bazuar në vendin ku ai ose ajo jetonte."

ChatGPT: "**Deri në shtator të vitit 2006**, çdokush me një adresë e-mail mund të *anëtarësohej* në një rrjet rajonal bazuar në vendin ku ai ose ajo jetonte."

As illustrated in the above examples, the time phrase "By September 2006" was translated as "Deri në shtator 2006" by the three digital tools, whereas more appropriate versions would be "Prej shtatorit të vitit 2006" or "Që prej muajit shtator të vitit 2006". The initial translation "Deri në shtator 2006" does not fully capture the intended meaning of the English phrase. In contrast, the alternative suggestions using "Prej" or "Që prej" provide a more accurate and contextually appropriate translation for expressing the intended time frame.

Moreover, regarding the verb choice used in the translations, the first version uses the verb "bashkohej" (could join), which is in the past tense and subjunctive mood ("bashkohej"), implying a conditional action. The second version uses the verb "bashkangjitej" (could attach/join), which is also in the past tense and subjunctive mood ("bashkangjitej"), but this verb choice does not accurately convey the meaning of "join" in the context of joining a network. The third version, "anëtarësohej" is the most appropriate one as it specifically conveys the action of becoming a member of a network that aligns better with the intended meaning of the phrase.

The examples in question are taken from Stock Exchange (pp. 47-48).

"Depending on the type of brokerage account you have, you may be able to view this flow of price action."

ChatGPT: "Në varësi të llojit të llogarisë së brokerimit që keni, mund të jeni në gjendje të shikoni këtë rrjedhë të veprimtimit të çmimeve.suggestion."

Google Translate: "Bazuar në llojin e llogarisë së ndërmjetësimit, mund të shihni këtë lëvizje të çmimeve."

MY AI: "Sipas llojit të llogarisë së brokerimit, mund të kuptoni se si çmimet po ndryshojnë."

In the above examples we can see that the phrase "brokerage account" was translated correctly only once with the appropriate financial correspondents in Albanian language. It can be noticed that the version provided by Google Translate is formal and accurate, using appropriate terminology. However, contextualization has been difficult, particularly in the case of the noun "flow" which was conveyed as "rrjedhë", "lëvizje", or implied in the last version. Furthermore, it needs to be noted that the version provided by MY AI is more informal and the phrase "çmimet po ndryshojnë" carries a slightly different connotation compared to "price action", which encompasses broader market dynamics beyond simple price fluctuations.

“At the same time, you might see that the “ask price” is \$31, which means somebody else is willing to sell the stock for \$31. The difference between the two is the bid-ask spread.”

ChatGPT: "Në të njëjtën kohë, mund të vini re se 'çmimi i ofertës' është \$31, çka do të thotë që dikush tjetër është i gatshëm të shesë aksionin për \$31. Diferenca midis tyre quhet **'bid-ask spread'**".

MY AI: "Po në të njëjtën kohë, ndoshta do ta shihni që çmimi i "ofertës" është \$31, që do të thotë dikush tjetër po e shet aksionin për \$31. Dallimi midis tyre është ajo që quhet përhapja **'bid-ask'**".

Google Translate: "Në të njëjtën kohë, mund të shihni se 'çmimi i ofertës' është \$31, çka do të thotë që dikush tjetër është i gatshëm të shesë aksionin për \$31. Diferenca midis tyre quhet **"ofertë-kërkoj përhapje"**".

The above examples highlight issues with translating specific financial terms. Although ChatGPT has maintained the style, the expression “bid-ask spread” is left untranslated. The same problem is met with the translation provided by MY AI which has literally translated the noun “spread” as “përhapja”. Similarly, Google Translate’s version “ofertë-kërkoj përhapje” does not accurately convey the intended meaning. In this case, naturalization of the expression seemed as the right form of addressing it, so in collaboration with the students, it was agreed on the version “dallimi kërkesë-ofertë”. Additionally, problems with the register are observed with the version translated by MY AI, indicating a need for improvements in the linguistic appropriateness and style of the translations.

Other Issues with MY AI

In addition to the informal style present in most of the translated versions discussed above, a number of other linguistic issues arose while using MY AI in SnapChat. Students suggested their own variants and refined the language for better conciseness and naturalness. The following examples are taken from the text entitled: *Customer Service* (pp. 55-56).

The first example below is a case of a mistranslation which renders the meaning of the translated variant ambiguous and misleading.

“Sometimes customer service means the act of **taking care of the customer's needs**”

“Ndonjëherë shërbimi ndaj klientëve do të thotë **marrja e kujdesit të nevojave të klientit**”.

Students have suggested substituting the phrase “marrja e kujdesit të nevojave të klientit” with “përbushja e nevojave të klientit” and expanding the translation to include the broader context of the phrase: “Ndonjëherë shërbimi ndaj klientëve do të thotë që të jeni të gatshëm për të përbushur nevojat e tyre në një mënyrë të efektshme dhe miqësore.”

The natural flow of the language is missed even in the following example:

“**Professionalism**: All customers should be treated professionally. Using this characteristic of good customer service shows the customer that you really care about them.”

“**Profesionalizmi**: Të gjithë klientët duhet të trajtohen me profesionalizëm. Duke përdorur këtë cilësi të shërbimit të mirë ndaj klientëve tregon se ju vërtet kujdeseni.”

As observed in the example, the above translated version requires some adjustments in order to achieve a balance between accuracy, clarity, and natural language flow. A revised version suggested by the students that aims to address the above issues is:

“**Profesionalizmi**: Të gjithë klientët duhet të trajtohen në mënyrë profesionale. Kjo cilësi e shërbimit të mirë ndaj klientëve tregon se ju i kushtoni vëmendje të veçantë klientit.”

Here is another example worth considering.

“Politeness: Saying 'hello', good afternoon', sir', and thank you very much' are a part of good customer service. For any business, a thank you' is appropriate whether the customer makes a purchase or not.”

“**Politesia: Thënë** 'përshëndetje', 'mbrëmje të mirë', 'zotëri', dhe 'faleminderit shumë' janë pjesë e shërbimit të mirë ndaj klientëve. Për çdo biznes, një 'faleminderit' është i përshtatshëm, qofshin klienti bën një blerje apo jo.” This is one of the many cases of mistranslations observed in the output students have got from MY AI. The following improvements were suggested: “**Mirësjellja: Të thënit ... mirëmbërma ... edhe nëse klienti ...**” Another case is:

“Customers like the idea that who they do business with knows them on a personal level.”

“Klientët e duan idenë që ata që bëjnë biznes me ta i njohin ata në një nivel personal.”

Focusing on using a more natural language, simplifying the wording, and ensuring clarity and conciseness, students have suggested the following version: “Klientët pëlqejnë të ndihen të njohur personalisht.”

The same steps to address issues with clarity and accuracy were followed in the example below:

“A large business will often devote an entire **department to taking** calls from customers who have needs or concerns about the service or product.”

“Një biznes i madh shpesh i kushton një **departament të tërë për të pranuar** thirrje nga klientët që kanë nevoja ose shqetësime në lidhje me shërbimin ose produktin.”

Another version was suggested: “Një biznes i madh shpesh ka **një departament të posaçëm** që pret thirrje telefonike nga klientët për nevoja apo shqetësime rreth shërbimit ose produktit.” This version aims to maintain accuracy while improving clarity and naturalness of expression in Albanian. As seen, the key adjustments include using more concise wording and smoother phrasing to enhance readability.

Below is another example which reflects the inability of digital translation tools to naturalize specific language.

“Technicians and **repair people** are often **face-to-face** representatives of their companies, ...”

“Teknikët dhe **persona të riparimeve** shpesh janë përfaqësues **të fytyrës** të kompanive të tyre, ...”

The adaptation of the expression “repair people” with “specialistët e riparimeve/riparuesit” and of “face-to-face” with “të drejtpërdrejtë” contributes to the naturalization of the sentence, conveying a clear overall meaning. We agree with Makhachashvili (2023, p. 9) who argues that while improving inappropriate translated versions may be demanding for students, it positively influences their translation competence, resulting in “*an increase in human translation quality*”.

In the examples provided above, students utilized various translation procedures to address issues such as naturalization, adaptation, and choice of terminology. This experience sharpened the students’ skills in identifying translation issues, grasping the intended meaning based on the content of the text, creating parallel equivalents in the target language, and negotiating meaning and form of terms/phrases, particularly in cases where naturalization and lack of relevant terminology was involved.

Discussion

Having been established earlier and continuously improving its service for a longer period of time, Google Translate demonstrated relatively better translation quality compared to the other two digital tools. Despite being easily accessible (including via mobile phones, which was a ‘must’ for students who didn’t own a laptop/desktop to participate in asynchronous classes) and most of the time providing accurate translations related to terminology, this tool showed that it struggles with lexical nuances and idiomatic expressions. Several cases were presented above to illustrate these challenges. In addition, the study reaffirmed what O’Neill (2013) highlighted: that this translation tool is highly favored by students. This reliance was further evidenced by the study’s findings that students heavily depend on this tool for their translation needs.

On the other hand, by acting as a virtual conversational friend, ChatGPT can be helpful in understanding short specific texts and generating quick responses, making its presence useful when time is a constraint. Nevertheless, the study has revealed that the translations generated by this tool have problems with accuracy, naturalness and adaptation. In addition, it is worth noting that while Google Translate leads students rely on it

for all translation purposes, ChatGPT discourages the development and exhibition of their critical thinking skills.

Regarding MY AI on Snap Chat, it can be stated that beyond all the positive and attractive features this tool offers as a social media platform, students had reservations about using its translating service, especially when dealing with specific terminology and formal style, particularly for educational purposes. Moreover, concerns were raised regarding privacy and security, which led students to choose one of the other two when they were given the option to select the tool for translating an assigned text. While there are possible solutions to address several security issues prevalent in social media (Albulayhi & Khediri, 2022), their implementation is often insecure, and under the pressure of the emergence of new threats.

Another important drawback identified by them was the low quality of translation yielded by the tools in question when the text was entered as a whole. In most of the cases, students preferred translating texts in short paragraphs to ensure a more acceptable version in the target language. This approach to translation is supported even by two well-known researchers, Jolley and Maimone (2015), who have studied various aspects of digital translation tools.

According to Urlaub and Dessein (2022), it is important to expose students to learning environments where they confront the necessity for human editing of materials which have been translated by means of digital translation tools. This exposure helps students incorporate natural nuances suitable for the context and, when applicable, the cultural aspects of target country.

Additionally, even though there were instances when students had difficulties with internet access, the flexibility of asynchronous communication using Microsoft Teams as the primary virtual learning platform enabled them to submit their assignments on time. In the same context, this familiar environment minimized confusion and delays, ensuring their effective communication and task completion. Students' final results and their formative assessments indicated that the incorporation of translation as a teaching approach in ESP education positively influenced their language proficiency, critical thinking skills, and overall understanding of specialized content in finance-related topics.

Moreover, despite the effectiveness of virtual platforms, on-site classes, proved to remained a beloved learning environment for students. The sessions provided a physical space where students synthesized their knowledge, clarified any questions/misunderstandings regarding tasks and/or assignments, and collaboratively addressed challenging terms and phrases, ensuring comprehensive understanding of respective contents.

Conclusion

This paper explores the use of digital translation tools like Google Translate, ChatGPT, and MY AI on Snapchat by Finance students in their English for Specific Purposes classes. It highlights that while Google Translate is widely accessible and preferred by students, it struggles with idiomatic expressions and nuanced language. Meanwhile, ChatGPT, although convenient for quick responses, lacks accuracy and may hinder students' critical thinking skills. Similarly, MY AI on Snapchat reflected difficulties with certain terminology and formal language, making it less suitable for educational contexts. Students demonstrated resourcefulness by analyzing and refining translations, which enhanced their critical thinking and linguistic skills. In various cases, the unconventional translations they suggested, effectively communicated the message in a natural and understandable manner. Two important conclusions were drawn from this study: first, that translation serves as a pedagogical tool for enhancing language proficiency and intercultural competence; and second, that accurate and meaningful translations require human interpretation and creativity beyond mere literal conveyance.

Recommendations

This study focuses on a specific group of students studying Finance, at a particular university, so conducting research with a more diverse sample of students from various universities would help in generalizing the findings. Additionally, exploring the long-term effects of translation approaches or technologies in ESP education and comparing different types of translation approaches or technologies could provide deeper insights into their educational benefits and limitations.

Scientific Ethics Declaration

The author, Alma Karasaliu declares that the scientific, ethical, and legal responsibility of this article published in EPSTEM Journal belongs to the author.

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