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Translanguaging options for note-taking in EAP and EMI

Joseph Siegel

Taking notes while simultaneously listening to academic content in a second language is a daunting task for many students. While doing so, the note-taker is faced with a number of choices, including when, where, and how to take notes. Choices that students make are related to the overall format and system of notes as well as how to record specific pieces of information. The option of translanguaging, or making use of their multilingual resource, in note-taking is often overlooked by students and teachers in English for academic purposes (EAP) settings. The present article reports results of an international survey of EAP students with respect to their translanguaging habits and preferences when taking notes and presents a range of related pedagogic implications with the intent of preparing students for English medium instruction (EMI) in higher education.

Key words: note-taking, translanguaging, academic listening, cognitive processing

Introduction

As more and more institutions of higher education around the world offer subject-specific English medium instruction (EMI) courses, the need for L2 English academic skills to succeed within these contexts is clear. Students in many contexts rely on English for academic purposes (EAP) classes at the secondary/high-school level to prepare them for EMI at colleges and universities. Many such classes include components that target the challenging areas of academic listening and note-taking.

Previous research on L2 note-taking instruction has demonstrated that periods of focused note-taking work can lead to improvements in the quantity and quality of notes students produce (see Siegel 2020 for a recent overview of the field). These studies tend to focus on use of overall note-taking formats (the outline, mind-mapping, etc.), the recording of individual pieces of information (paraphrasing, abbreviating, etc.), or a combination of both. While the concept of translanguaging has also been discussed at the theoretical level in relation to note-taking (e.g. Siegel 2021), pedagogic options for capitalizing on the potentials of
translanguaging while note-taking in EAP and EMI contexts have yet to be expressly addressed in the literature.

Therefore, the purpose of the present paper is to expand on and explore student preferences regarding translanguaging (i.e. the use of their multilingual resource (García 2009)) when taking notes while listening to L2 academic content and to provide explicit pedagogic possibilities in relation to these student voices. The paper begins with a brief overview of the key concepts of note-taking and translanguaging and explains how the two are interrelated. Next, it describes survey data collected from three groups of EAP students (studying in Indonesia, Spain, and the United States, respectively). As EAP and EMI are growing global phenomena, collecting student voices from a variety of contexts aims to present a more comprehensive view of the issue than a description of any single context. Students responded to questions regarding the language they preferred to take notes in when listening to L2 academic English and the reasons for these preferences. Findings from the survey are shared to inform EAP and EMI teachers of how students view note-taking through the lens of translanguaging. These findings are then elaborated on in the form of pedagogic implications tailored to various L2 English proficiency levels and purposes for note-taking.

Note-taking offers two crucial learning opportunities for listeners (e.g. DiVesta and Gray 1972). The first is the encoding effect, where, in theory, learning is facilitated and strengthened by the physical action of writing. Encoding takes place ‘in the moment’ as the listener writes the information they have recognized to be of importance. The second benefit relates to later use of notes. Since notes represent an external storage of information from the listening event, this repository can be revisited for review and/or to assist in related tasks.

Listening to academic discourse in an L2 can be challenging, as the listener often needs to deal with, among other elements: new and unfamiliar content, differing rates of speech, unknown cultural references, and varying notions of how spoken academic discourse (e.g. lectures) is organized (e.g. Sheppard et al. 2015). Even when successful listening comprehension is attained, transferring the content of input into a student’s notes presents further challenges. Once an item of information has been recognized and prioritized for note-taking, the listener must hold that item in their working memory long enough to transfer it to paper (or in digital format). While keeping the information in their mind, the student must decide when and how to take notes.

Deciding when may involve attending to speaker intonation and/or pausing patterns or understanding when the speaker is repeating an idea or making an aside; thus, the listener has a brief moment to jot down the information before they need to refocus and search for the next potential item. How to take notes also presents a decision point, as the note-taker can choose between, among other options, writing verbatim, paraphrasing, and/or abbreviating. The way(s) in which students draw on their multifaceted, multilingual resource to take notes represents a further decision, one that has received little research attention. All of these decisions occur under strict time pressure because the listener needs to continue listening.
Furthermore, lecture content can be high-stakes, as it may be needed to attain good grades and satisfy course requirements. This is especially the case in EMI courses, where students are responsible for learning the subject content as well as language, as these two are integrated. Such a characterization is distinct from EAP, where students typically need to demonstrate their L2 abilities and development. Thus, whereas in EAP classes, students may be expected to display their ability to listen and take notes in L2 English, in practice in EMI classes, students are likely left to their own devices as to how to record notes in ways most effective, efficient, and meaningful for them. They do not need to display their L2 ability as they might in EAP; instead, they need to record lecture content for learning and later use.

When taking notes, students are faced with a range of options for both macrolevel organization notes (outlines, mind maps, etc.) (e.g. Song 2012; Bui and Myerson 2014) and the recording of individual items of information (e.g. writing verbatim, paraphrasing, or using abbreviations) (e.g. Sakurai 2018; Siegel 2021). However, the ways in which they take notes and the extent to which they draw on aspects of their multilingual resource are areas that have been underdeveloped. In other words, the language(s) in which students choose to write their notes while listening to L2 English represents yet another decision note-takers make. They may make this linguistic decision in a predetermined way before the note-taking act (i.e. I am listening to English, so I will take notes in English, not in my L1). Another option would be a predetermined decision to listen to L2 English but take notes solely in the L1. Alternatively, use of the multilingual resource may change spontaneously and pragmatically depending on the how the input proceeds (i.e. I will try to take notes in English but may switch to my L1 at certain times, or vice versa).

Studying on EAP courses, teachers and students may expect to operate in English at all times (e.g. an English-only policy) (e.g. Sahan and Rose 2021). While such an approach may be conducive to simulating an EMI environment, when it comes to an individual’s notes, such a strict policy is arguably inappropriate, as it may deprive students of part of their multilingual resource. One might assume that in an L2 English class, while listening to academic English, students should take notes in English. Teachers may even grade or review student notes, rewarding those who have taken ‘good’ notes in English and encouraging those who have not. However, the assumption that notes should be produced in English excludes the possibility that students may comprehend the L2 input accurately but may choose to record notes in a variety of ways: completely in the L2; completely in the L1; or in ways that demonstrate use of the entire linguistic repertoire (i.e. both the L2 and the L1 and possibly other languages).

As such, translanguaging represents one option within the generative type of notetaking. If a student chooses to paraphrase content and/or translate it (or parts of it) to the L1 when writing in notes, a new version of the message is ‘generated’. If a student were to stick to the L2 when writing notes, and were to copy verbatim what the speaker says, this would be non-generative note-taking (in the sense that the student is not generating
a new version of the information but rather copying the information) (e.g. Mueller and Oppenhiemer 2014).

García (2009) describes translanguaging as the ‘multiple discursive practices’ that bilinguals use to make sense of their bilingual worlds (García 2009: 45) and suggests that individuals use these practices in strategic ways. Bi- or multilingual students, such as those studying on EAP and EMI courses, have a linguistic repertoire that is composed of aspects of all their languages. In the case of the present investigation, these repertoires probably consist of the L1s of the participants, L2 English, and possibly other languages. Conteh (2018) points out that translanguaging occurs in both spoken and written production, and Canagarajah (2011) focuses specifically on translanguaging within academic writing. The idea of strategic use within a translanguaging framework is relevant to help the listener accomplish note-taking, viewed here as an informal type of academic writing, in the easiest way possible. By employing English (the input language) and/or their L1(s) at various times depending on factors such as the content, word choice, and/or rate of speech of the speaker, as well as listener characteristics such as fatigue, multilingual students can arguably make effective use of their entire linguistic resource.

Translanguaging becomes evident in both the encoding and storage functions of note-taking. Regarding the former, second-by-second decisions that go into encoding involve many layers, one of which is the use of the multilingual resource. Languaging decisions might be influenced by factors such as word length of certain target words in the L1 versus an L2 equivalent; the note-taker’s confidence in spelling different target items; particularly well-worded and clear expressions by the speaker, etc. When it comes to the storage function, one or the other of their linguistic options (i.e. the L1 and/or L2) may help stimulate later recall of certain items. The possibility also exists that notes encoded in a certain way may succeed or struggle to stimulate the precise recall at a later time.

At the theoretical level, Siegel (2021) described three possible paths in which translanguaging may take place during the notetaking act (Figure 1). Each of the three routes (paths A, B, and C) displayed in Figure 1 include some interaction of specific components of the multilinguistic resource. All of these routes begin with the same source input (L2 English academic texts). However, the paths from this consistent input to various forms of output (i.e. the notes) vary. It should be emphasized that an ideal situation is represented in path D (an addition to Siegel’s 2021 original model), where students’ L2 English listening and writing proficiency, along with their parsing skills, aural vocabulary, and so on are high enough they do not need to draw on any addition linguistic resources: they are proficient enough to maintain all operations in the L2. For students not operating at this level yet, paths A, B, and/or C may present viable options, generating notes relative to their L2 level while drawing on the multilingual resource.

For those who need to draw on additional elements from the multilingual resource, Figure 1 describes speculative ways in which this
may happen. Path A suggests that some students may perform translation from the L2 (the source input) to the L1 (for comprehension) and then back to the L2 in order to produce the notes. This route represents an intangible form of translanguaging, as both the input and the output notes are in the L2. Path B provides a more direct, visible form of translanguaging in that the L2 input is transformed into notes written solely in the L1. As such, this version of translanguaging also involves a mixing of language skills (from L2 listening to L1 writing). Path C likewise concludes with tangible evidence of translanguaging, this time through producing written notes in a combination of the L1 and the L2.

To better understand how these theoretical models might play out in real-life note-taking, the present project drew on student perspectives to ascertain which of these routes is more commonly reported. Moreover, the study explored students’ reasons for adopting certain approaches to note-taking.

In order to determine how and why students might employ translanguaging while notetaking, 175 L2 EAP students studying in three countries (Indonesia, \(n = 43\); Spain, \(n = 87\); and the United States, \(n = 45\)) responded to an online survey. Despite studying in different contexts, with different teachers, and using different methods and materials, the students had the following characteristics in common: all were in their late teens and were taking EAP classes in preparation for EMI university classes; and most were approximately at CEFR B1 general proficiency, per their teachers, although some were slightly higher (e.g. B2) or lower (e.g. A2). These students completed an online survey, part of a broader study, related to their note-taking habits and preferences when listening to L2 English.

One question focused on translanguaging and use of the multilingual repertoire, making it particularly relevant for the present paper: ‘If you were listening to English, in which language(s) do you prefer to take notes? Please explain.’ As such, the responses were divided into two
categories: preferred language(s) for note production; and reasons for preferences. Preferred language(s) reported were categorized as follows: English, the L1, or both English and the L1. Reasons listed in the open-response portion were placed in a variety of categories, including: match language of speaker, avoid translation, time/speed, enhance language skill development, and ease. A total of 175 responses were collected; however, four responses were irrelevant to the topic and were excluded. When coding the responses, it was clear that some responses contained multiple reasons; therefore, some responses were dual coded (e.g. avoid translation and time/speed).

Findings

As evident in Table 1, a majority of the students reported that they prefer to take notes in English when listening to English (127/171 = 74%). Approximately 15% (25/171) stated that they prefer to take notes in their respective L1 (i.e. path B in Figure 1), and just over 10% stated they actively and consciously use both English and their L1 (i.e. path C in Figure 1).

In examining reasons why students adopt the approach they do, several categories were evident in the data, among them: match language of speaker, avoid translation, time/speed, enhance language skill development, and ease. The largest group was those who reported taking notes in English when listening to English (n = 127). When interpreted in relation to the routes in Figure 1, this group would likely either utilize path A (i.e. translating between the L2, the L1, and then back to the L2 for written production) or path D (operating solely in the L2). Not all students in the group provided reasons for their note-taking preferences. Table 2 presents a break-down of the reasons expressed by this group for doing so.

As demonstrated in Table 2, matching the language of the speaker was the most common reason for these students to take notes in English. Avoiding translation, with the potential implication that translation can lead to cognitive overload, was mentioned by seventeen students. Saving time as well as increasing speed and efficiency were reasons stated by fourteen students. Enhancing language skill development was also acknowledged; in addition to improving general L2 proficiency, students

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Results of language preference when taking notes in EAP classes</th>
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<tr>
<td></td>
<td>Indonesia</td>
</tr>
<tr>
<td>English</td>
<td>27</td>
</tr>
<tr>
<td>L1</td>
<td>10</td>
</tr>
<tr>
<td>Both English and L1</td>
<td>3</td>
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<tr>
<td>Totals by country</td>
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<tr>
<th>Table 2</th>
<th>Reasons for taking notes in English</th>
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<tbody>
<tr>
<td></td>
<td>Indonesia</td>
</tr>
<tr>
<td>Match language of speaker</td>
<td>9</td>
</tr>
<tr>
<td>Avoid translation</td>
<td>2</td>
</tr>
<tr>
<td>Time/speed</td>
<td>1</td>
</tr>
<tr>
<td>Enhance language skill development</td>
<td>2</td>
</tr>
<tr>
<td>Ease</td>
<td>3</td>
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</table>
mentioned opportunities for L2 vocabulary development, increasing L2 listening skills, and strengthening memory capacity. Students (n = 13) also expressed that taking notes solely in English was easier than other options.

While some overlap between categories exists (e.g. that matching the language of the speaker makes it easier to take notes; or that avoiding translation increases speed and thus makes note-taking easier), these categories were created based on the actual words students used when reporting their reasons. As such, possibly implied meanings and connections were overlooked with a strong focus on the literal expressions used by students (‘same language as the speaker’, ‘translation is unnecessary’, ‘more quickly’, etc.). It is also interesting to note that with the exception of ‘ease’, which did not appear in responses from those students studying in the United States, all categories are evident in responses from each of the student subgroups.

When examining reasons expressed by those who write notes solely in their L1 (n = 25), the following categories were identified: native language (nine comments), comprehension/memory (six), vocabulary (three), ease of using L1 (three), skill-based reasons (one), and quality of notes (one). As with the categories discussed above, some potential overlap between categories may be evident through implication. Native language implies the category ease of using L1 as well as quality, even though various students listed these points discretely. In the single skill-based comment, the respondent stressed their lack of confidence in L2 English writing and felt more secure in producing notes in the L1.

Fewer students in the ‘both English and L1’ group provided reasons for their choices. One student mentioned that they adopt a pragmatic approach, using English when possible and their L1 when listening comprehension and/or note-taking in the L2 become difficult. Another student pointed out that they choose whichever language has a shorter option for a given word or concept; by using the shorter version, the student can retain relevant meaning but save time and space.

To summarize these findings, it is clear that a majority of students prefer to take notes in the same language the speaker is using. Reasons for this include to facilitate comprehension, to accurately record information, and a desire to avoid potential cognitive and time-related burdens of translation between the L2 and the L1. At the same time, the much smaller number of students who take notes in their L1 reported similar justifications; namely, those related to comprehension, ease with which the L1 can be used, and having a larger L1 vocabulary to draw on. Those who actively use both languages when taking notes pointed to the pragmatic options they have when it comes to note-taking issues such as spelling and word length; in other words, they can shift between aspects of the linguistic resource based on when easier words come up, thereby optimizing the benefits of translanugaging.

Based on the survey findings, students, to varying degrees, report that they take notes either in L2 English, their L1, or a combination of the two. The latter two categories represent tangible forms of translanguaging in notes.
based on the visible representations provided by the notes themselves. Even those notes produced completely in L2 English may be the result of some interaction of components of the multilingual resource, as suggested by path A in Figure 1. With these observations in mind, a range of pedagogic implications for classroom practice is offered.

The majority of students in this study indicated they prefer to match the language they use to take notes with the language of the speaker. This view aligns with research by Tsai and Wu (2010), who conducted a study in Taiwan in which two groups listened to the same L2 academic English text. One group was assigned to take notes in L2 English and the other in L1 Chinese. On post-lecture tests, those who took notes in the same language as the speaker (i.e. L2 English) performed better than their counterparts in the L1 group, suggesting that more comprehension and retention of information is possible when matching the speaker’s language. These results were similar to those found by Wang (2021), who compared L1 Chinese, L2 English, and translanguaging groups. Those who took notes in English only outperformed the other two groups on a retention test. Avoiding translation in this sense probably reduces the cognitive demands of the note-taker, although doing so assumes that the L2 component of the linguistic resource is advanced enough to do so. Furthermore, matching the language can help to extend L2 listening, writing, and vocabulary.

Related to path B in Figure 1, students who adopt this procedure for note-taking probably find benefits and confidence that come from producing notes in the L1. Familiarity with spelling and access to a broader range of lexicon can facilitate more accurate and higher-quality notes. At the same time, cognitive challenges may occur at the translation stage: if cognitive processing of the input stalls, or if the listener needs extended time to search for L1 words, note-taking may be negatively affected. In comparison to students who took notes in the same language used by a speaker, those who take notes in a different language (i.e. their L1) may be at a disadvantage (e.g. Tsai and Wu 2010; Wang 2021).

This option, represented by path C in Figure 1, allows note-takers to incorporate benefits of the two previous options mentioned above. Listeners can access the full capacity of their multilingual resource to take notes as efficiently and accurately as possible while doing so using the most comfortable and convenient translanguaging tool that suits the immediate notetaking need and context.

Teachers of students in EAP courses at different proficiency levels might draw on these three options for note-taking (i.e. L2 input → L2 notes; L2 input → L1 notes; and L2 input → L1/L2 notes) in various ways. At lower proficiency levels, students and teachers might consider the potential benefits of having students listen to the L2 and take notes in the L1. Doing so could allow them to focus more attention on the listening skill and reduce anxiety for the task by acknowledging that writing notes in the L1 may be easier. Furthermore, as mentioned in the survey data, the L1 offers a larger and more refined vocabulary resource than the L2, especially for lower-proficiency learners. Combined with less pressure related to spelling, the L1 presents a viable option that can increase confidence. Taking notes
in a combination of the L1 and L2 can be seen as an intermediary step. For students with higher proficiency or those in need of a challenge, taking notes solely in the L2 can force students to combine both receptive and productive L2 skills, specifically, listening and writing (including various resources such as L2 vocabulary, spelling, and grammar).

Different ways of activating the multilingual resource for note-taking can also be adapted depending on the purpose for and/or tasks connected with taking notes. In EAP classes where notes are monitored and/or graded by teachers, expectations that notes are taken only in English should be made explicit. In this sense, the notes display the student’s L2 proficiency, with the notes typically viewed as an artefact of listening comprehension (i.e. as opposed to a multiple-choice test score about the content or a summary task).

Such approaches are distinct from the note-taking expectations within EMI, where L2 listening ability may already be assumed in many contexts but where the language(s) used to take notes may be less relevant to the teacher and/or course grades. The way notes are taken in EMI may be linked to a range of connected tasks; for example, if students are expected to produce a summary and/or integrate lecture content in a larger paper or project, the notes might be taken in the productive language needed for that work (e.g. if the work to be produced must be in the L1, despite the aural input being in the L2, students might want to take notes in the L1 and/or in a combination of the L1 and L2). Individual differences in students’ L2 listening ability, handwriting speed, short-term memory, and social skills (e.g. Reddington, Peverly, and Block 2015) are all factors that should also be accounted for when teaching note-taking in EAP with a view to preparing students to succeed in EMI.

To sum up, this survey study has demonstrated students’ views on their self-reported use of translanguaging while taking notes. Pedagogic considerations stemming from these perspectives have been described with a view that translanguaging can play a key role in note-taking success and that strict English-only policies for note-taking should be reconsidered.

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