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# Machine Translation: Friend or Foe in the Language Classroom?

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Machine translation (MT) provides a seemingly accelerated alternative way to communicate in the target language (L2). A convenient service to the public, MT renders a potential disservice to language learners. In this pedagogically focused article, we show concrete and detailed examples of how language instructors can turn MT and other electronic tools such as translation memories, grammar- and spell-checkers, or mapping tools into virtual assistants to empower students to use them responsibly. Two classroom interventions, one at a large public research university on the West coast and the second one at a medium-sized public university in the Midwest, aimed to develop students' awareness of the language learning process, while introducing them to various online tools that can help them communicate better in L2 without blindly using MT. The interventions were designed for intermediate level students. The first group of students were part of an advanced composition course who were shown limitations of MT and alternative editorial tools in L2, while the second group was part of an introductory literature course in which students were introduced to reasoning maps, such as mind, concept, and argument maps, to assist them with L2 communication. The main takeaways from these interventions were the need to readjust the students' attitudes as much as the instructors' mindsets if we want to make MT an ally. Shifting focus from accuracy to comprehensibility changes the stakes in L2 communication as the production of meaning becomes an exercise in student agency and leads to the satisfaction of being able to communicate spontaneously in the target language.

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## INTRODUCTION

Computer-assisted language learning (CALL) has existed since the second half of the 20<sup>th</sup> century (Levy, 1997). A subset of CALL known as Intelligent CALL or ICALL has incorporated tools powered by artificial intelligence (AI) as early as the 1980s (Underwood, 1989). Machine translation (MT) is an integral part of ICALL tools, which “brought a substantial change in the quality of student-computer interaction” (Kannan & Munday, 2018, as cited in Pokrivcakova, 2019, p. 139). As AI technologies improve, ICALL holds more and more appeal to language learners. MT is no exception. It provides a seemingly accelerated alternative way to communicate in the target language (L2). Free, easy to use, versatile with an impressively long list of language pairs, ubiquitous on the Internet, and included in popular applications such as Microsoft Office products, MT is here to stay. A convenient service to the public, for instance in the tourism sector or health-related fields, to name just a few, MT

renders a potential disservice to language learners. Most L2 instructors forbid its use and warn students on their syllabi that using MT constitutes a form of academic cheating.

However, shortly after the Google Neural Machine Translation system was released in the fall of 2016 (Le & Schuster, 2016), our students' final papers in intermediate French courses were written in sophisticated French, with complex grammatical structures students did not even learn in class. We became alarmed because we suspected that the improved version of Google Translate or some sophisticated form of MT was involved. After making individual reprimands and requiring rewrites, we knew that the surfacing problem needed deeper scrutiny. Although not the first educators to question if Google Translate is a friend or foe in a language classroom (Ducar & Schocket, 2018; Groves & Mundt, 2015), we decided to take the time to talk to our students to understand their motives. We realized that to counter the temptation of this powerful tool, we needed to imagine more effective ways to promote responsible student-computer interactions.

This article centers on two classroom interventions that took place at a large public research university on the West coast and a medium-sized public university in the Midwest between 2017 and 2019. Both learning activities aimed to develop student awareness of the language learning process. At the same time, the classroom interventions introduced students to various online tools that can help them communicate better in L2 instead of blindly using MT. The interventions were designed for intermediate level students. The first group of students were part of an advanced composition course who were shown the limitations of MT and alternative editorial tools in L2, while the second group of students were part of an introductory literature course who were introduced to reasoning maps, such as mind, concept, and argument maps, to assist them with L2 communication. The main takeaways from our pedagogical interventions were the need to readjust the students' attitudes as much as the instructors' mindsets if we want to make MT an ally. In both cases, shifting focus from accuracy to comprehensibility changed the stakes in L2 communication as the production of meaning became an exercise in students' actively practicing their agency, which in turn led them to feel satisfaction at being able to communicate spontaneously in the target language.

As we explored the complexity of linguistic, cognitive, and psychological dilemmas triggered by MT for today's language learners, we adjusted our own perceptions of MT. We hope that the classroom interventions we describe in this article will demonstrate how developing scaffolded learning activities can turn MT from a hindrance into a virtual assistant for other instructors as well. These interventions took place in face-to-face courses in the pre-COVID-19 pandemic teaching environment. Nevertheless, it is possible to adapt them to other teaching modalities, such as synchronous virtual classrooms or hybrid courses. Finally, the Appendices section of our study includes potential classroom activities and tools that instructors can use in any language, be it rubrics for writing assignments or syntactical and grammatical exercises. These activities align with what Ducar and Schocket called "Google-proof" assignments in their study (2018, p. 782). Departing from the fact that an effective communicative act occurs when a message can be understood regardless of its full accuracy, we have been able to turn the tables on MT. If we, as language instructors, accept the premise that the comprehensibility of the message surpasses its structural accuracy in the L2 classroom, then we can help students refocus their attention on a sustained and spontaneous oral and written communication. Speaking freely, despite some phonetical, lexical, or syntactical errors, can alleviate students' fear of performing in front of their peers and further develop their linguistic competence.

## LITERATURE REVIEW: MACHINE TRANSLATION DILEMMAS

During our informal in-class conversations or while reading students' feedback from short surveys and discussion groups, we became acutely aware of the ambivalent relationship students have with MT during their L2 acquisition process. Almost all agreed that their instructors prohibited the use of MT. The most committed students spoke against MT and claimed using alternative tools to improve their language skills, such as dictionaries and grammar manuals. When asked how they would use MT, students explained that they looked up words, checked grammatical correctness, and practiced pronunciation. Few admitted having recourse to MT to write full paragraphs. Yet the clear disparity between some of our students' oral speech versus the quality of their written discourse prepared at home signaled to us their usage of MT to enhance their papers, at least partially if not entirely. Many admitted having translated discrete sentences with MT. Only a few mentioned ethical qualms of claiming MT language as their production in L2 because they felt reassured that they used their ideas and since they wrote the original text in English themselves, the MT version of this text was not plagiarized. Others mentioned using MT to help with reading comprehension. In sum, most viewed MT as a great legitimate tool, easily available to them.

Taking time to listen to our students confirmed our suspicions. Regardless of what we want to believe, students use MT: not to cheat, but to get help; if not to learn, at least to understand and produce some L2 language. Current research in language learning and applied linguistics confirms our students' perceptions and usages of MT. Online MT is an easily available language learning resource open to all users and its performance improves in real time (Ducar & Schocket, 2018; Niño, 2020). What stood out in our students' feedback was their insistence on accuracy as the main motive to turn to MT: to get the correct spelling or the correct gender (in the case of French, for instance) or to correctly phrase a sentence. As we contemplated the feedback, questions arose: What do students want to accomplish with accuracy? Do they want to learn the language or get good grades? Why are they so obsessed with accuracy, in the first place? Could it be that they are mirroring our preoccupation with correctness? Indeed, for L2 instructors, accuracy is one of the main ways to assess learning. As instructors, we are trained to equate grammatical accuracy with language acquisition. If a student writes a sentence, conjugates a verb, or makes an agreement correctly, they must have understood and internalized the studied concepts. For students, accuracy means a good grade, and a good grade is how they measure their learning progress. MT has drastically changed this equation. Linguistic accuracy can no longer be viewed as a synonym of learning and excellence in L2 if it is achieved with the help of a machine. In the following sections, we explore a series of predicaments that MT poses to L2 learners and educators. As we discuss administrative, linguistic, cognitive, and psychological dilemmas, we aim to understand how they can be used as learning opportunities to change MT's impact on L2 learning.

### Administrative Dilemmas

It is fair to say that MT is changing the learning environment for all players—students, instructors, administrators. Fear grows as instructors and administrators question how to give credit to students, if they suspect the university entrance or final exams were taken with the help of MT. They debate which assignments can be performed with MT usage or when it becomes a form of academic cheating. As international mobility increases and more students choose to study abroad, ethical concerns about the integrity of academic degrees stem from a tendency

of some foreign students to obtain their diplomas while still lacking proficiency in the language of the degree-granting institution (Groves & Mundt, 2015; Loyet, 2018; Tsai, 2019). Administrators wonder which jobs will potentially disappear if MT and other AI-powered language learning and teaching programs go unchecked. For instance, educators in the field of translation question the very basis of their profession as continually improving neural machine translation replaces the practice of translation by post-editing (Mellinger, 2017; Pym, 2013). They know their graduates will not enjoy the job security they once had as they grapple with changes in how to teach new skill sets and redefine expectations for their profession. Language teachers worry about becoming obsolete, replaced by shiny machines capable of gamification and instantaneous feedback, or mobile applications such as Duolingo or Falou, filled with entertaining emojis, prerecorded positive feedback, and progress-keeping AI algorithms.

## Linguistic Dilemmas

From the language educators' point of view, linguistic dilemmas of using MT for L2 acquisition center on discrepancies between the gains in productivity, fluency, and accuracy that MT seems to provide versus the time and effort required for language acquisition. Many instructors raise red flags about irresponsible usage of MT in a language classroom and several among them find themselves compelled to create innovative learning activities to tease out the benefits of MT as an effective pedagogical tool (Clifford et al., 2013; Ducar & Schocket, 2018; Garcia & Pena, 2011; Lee, 2019; Niño 2008, 2009, 2020; Stapleton & Kin, 2019; Tsai, 2019).

Only a few years ago, Google Translate (GT) generated chuckle-worthy translations and language instructors recognized a GT-produced paper because it bordered on gibberish. Today, GT's accuracy has been positively affected by many innovations. Thanks to deep learning principles and neural machine translation algorithms used by Google Brain, now known as Google AI, GT has access to training data of computer-assisted translations performed daily all around the world. GT is also improved by real-time crowdsourced corrections (Le & Schuster, 2016). It is time to show our students that MT provides short-term gains: Even if an assignment can be finished in no time, with rich vocabulary and with more accurate grammar than what they can produce on their own, it does not mean that L2 acquisition and retention of this impressive content is assured. On the contrary, fluency in communication skills cannot be harvested by quick shortcuts because it requires time and effort to develop. We tell our students that to truly make L2 their own, they must be capable of spontaneous production, written and especially oral. A richer text produced by MT does not automatically equate with L2 acquisition because most MT users cannot remember the same vocabulary and/or sentence structures at future moments, if they do not intentionally try to memorize them (Tsai, 2019).

## Cognitive Dilemmas

For some of our students, relying on MT is a way to calm their worries about their cognitive abilities. Informal discussions with our students point out a high level of insecurity associated with speaking a new language. Students often complain of not being able to sound as intelligent in L2 as they know themselves to be in L1. Feeling inferior and out of their comfort zone in L2, they seek refuge in MT. As more information and tools become available every day, cognitive abilities shift in focus: the emphasis on knowledge is replaced by the demand for cognitive agility since "*knowing how to find knowledge*" becomes more important than internalizing

the knowledge itself” (Pym, 2013, p. 496, emphasis in the original). Thus, self-awareness of the learning process becomes paramount and “transversal skills (learning-to-learn, teamwork, negotiating with clients, etc.)” need to be cultivated in future translators (Pym, 2013, p. 499). We can extend the same line of thought to all language learners because transversal skills are transferable and can apply to a variety of roles, occupations, and settings. Today we all know that practice makes better (rather than perfect), and that it applies as much to physical skills as to cognitive abilities. Hence, we remind our language students that they need to become independent learners who can adapt quickly to a changing environment and who can self-monitor their progress to build up their confidence level.

## Psychological Dilemmas

However, the relentlessly changing landscape is bound to trigger fear of underperformance, if not incompetence. Using MT to lessen the stress of learning and exerting one’s cognitive abilities brings about psychological downfalls that stem from weakening the learning process. Although heightened stress and the slow speed of translating one’s text in L2 may deter students from doing it ‘the old-fashioned way’—with a dictionary and a grammar manual—and push them to have recourse to an easy and speedy solution of using MT and then post-editing (Niño, 2008, p. 33), students and instructors need to keep in mind the psychological and linguistic gains of this process. If students are reluctant to attempt cognitively taxing activities at home, instructors need to feature them as in-class activities. Besides, even if fears of errors seem to be alleviated in an AI-powered L2 learning environment, students do not build confidence. Failing to work through the apparent humiliation of not fully possessing a skill or knowledge is failing to grow. As we now repeat to our students at every level of their L2 acquisition: The price of convenience is the loss of resilience and motivation.

## From MT Dilemmas to Learning Opportunities

Students who persist in viewing MT as a panacea for their immediate needs often lack the understanding that communicating in the target language requires more than a mere translation of English words into their L2 counterparts. Linguistic skills necessary for autonomous, spontaneous, and meaningful communication in the target language take time and effort to develop. Shortcuts can easily undermine this complex process. Hence, we reiterate and model to our students that MT is not the only ‘virtual assistant’ a language learner can call upon. Among ICALL tools, there are editorial tools, such as online dictionaries (WordReference), machine-conjugation (Reverso Conjugation or Le Conjugueur), translation memories (Linguee) (see Niño, 2020 for students’ perceptions of these tools), grammar- and spell-checkers (BonPatron or LanguageTool). Many of these programs allow students to receive immediate feedback as they try to formulate L2 sentences. The role of language instructors is to constantly adapt to the changing world. Nowadays, it seems to be more important for us to guide our students in their usage of the many ICALL tools available to them in the AI-powered learning environment and to educate them not only in L2 but also in the matters of growth mindset and perseverance. Working in concert with Dweck’s research on growth mindset (2006) and Duckworth’s investigations on grit and neuroplasticity (2013, 2018), more language instructors explore the influence of students’ mindsets on second language acquisition (see Lou & Noels (2019, 2020)). Additionally, current studies on comprehensibility, or ease of understanding, concentrates on how near-native-like pronun-

ciation or better fluency favorably affects the comprehensibility of the L2 discourse rather than its grammatical accuracy (Crowther et al., 2015; Saito et al., 2019). Conversely, Nagle et al. (2021) demonstrated that L2 speakers who show signs of anxiety or engage reluctantly in dialogues are perceived as less comprehensible.

The aim of our study is not to continue empirical research on student motivation or factors facilitating L2 comprehensibility *per se*, but rather to show how in our L2 classrooms, we were able to change our students' and our own mindsets regarding the usage of MT as we reframed some of the MT pitfalls into learning opportunities for students as much as for ourselves.

## LAURENCE DENIÉ-HIGNEY'S CLASS INTERVENTION

With the pervading use of MT in my students' essays becoming increasingly evident, I decided to conduct an intervention in my upper-level writing course. Over the years, I modified the course content to better sustain my students' learning, but now, MT was undermining my teaching and giving my students a false sense of accomplishment. To impart techniques of description and narration in French, I model to them how to read closely and analyze literary texts to examine how writers construct their stories, and how they imagine their characters. I want to instill in my students the importance of writing style and how ideas are directly connected to it. This course, designed to be a bridge between lower- and upper-level courses, includes the review of complex grammar structures. The grammar lessons are conceived as writing style workshops since a good command of grammar helps students develop their style. Their at-home assignment is to write a short story, applying what we discuss in class.

With years, I noticed that to complete their papers, more and more students succumb to the lure of MT. To them, it is no different than trading a broom for a vacuum cleaner, to use an analogy. They do not comprehend that MT is a device that makes choices for them, and that, consequently, they give away some of their agency and become passive consumers of content.

To demonstrate MT's limitations and unreliability, while giving my students their agency back, I planned a 50-minute intervention: a three-step class activity to teach my students how to assess an MT translation followed by an introduction to other electronic tools and how to use them effectively. At the center of my demonstration is the use of *back-translation*, an activity that consists of translating an English version of L2 texts back to their original language. It has been successfully used to develop students' critical abilities (Blyth, 2018). As early as in the 1980s, instructors applied this technique to reveal "exuberances—those things present in the translation but not in the original—and the deficiencies—those things in the original but not in the translation" (Becker, 1984, p. 426). In other words, back-translation exposes the choices made by the translators who interpret the original texts according to their linguistic and cultural knowledge. In the era of MT, back-translation illustrates how translating algorithms are now making these choices for us. MT is not a neutral tool, 'magically' capable of linguistic equivalency between L1 and L2.

### Google Translate Class Demonstration

First, to evaluate the quality of a machine translation from French into English, I selected a passage from Marcel Proust's *In Search of Lost Time*. Proust is the ideal candidate for my demon-

stration since his style is known for its long and convoluted sentences, which undoubtedly cause problems for MT. Students were invited to read the French version to give them a sense of the difficulty of the Proustian text. After asking them to describe his style, I opened a new tab to Google Translate announcing (in French) to my students' surprise, "Let's see what Google Translate can do for us!" One of my students who took several courses with me raised her hand and told me with a twinkle in her eye and a big smile, "But Madame, I thought we were not allowed to use Google Translate." To which I answered, "Well, let's see if I'm right or wrong." Once the translation was completed, we carefully compared it with the original text. Students generally felt good about the English translation. If some parts were a bit odd, the end result looked helpful. However, students seemed to feel uneasy, and I could almost read the questions going through their minds: Is their professor demonstrating the power of MT to encourage them to use it? Should they worry about her sanity?

With these questions in mind, we moved on to the second part of the intervention. I copied the English version created by Google Translate, and pasted it into Google Translate, this time, to translate the English text back into French. Once we had the new French text (the translation of the English translation of the Proustian text), we checked both texts, the original French and the French translation, side by side considering the following questions: Is the MT French translation close enough to the original text? Which sentences still convey the meaning of the original text? Which part of the text is completely different from the original text, and why?

To investigate the discrepancies, we went back to the English translation to check the words chosen to translate the original French text. We then tried to establish how MT got lost in its translation and to find other words that might best convey the meaning of the original text. At this point, students began to realize to what extent MT makes choices for them when they use it to translate their writing. They lose their agency if they blindly accept an MT translation. When students repeated the activity with a text of their choosing at home (see the assignment's directions in Appendix A), they engaged actively and critically with technology; they no longer passively accepted the MT text as the 'correct' version.

## L2 Editorial Tools

The second part of the lesson plan was dedicated to introducing or reintroducing other electronic tools, which can help improve students' writing, such as WordReference.com and Linguee.com. Many of my students are already familiar with one if not both websites, but they often do not utilize all the information available to them. In both demonstrations, I offered to check the verb 'to get' because it has many different meanings that can be translated into different words in French. Also, when paired with a preposition, the verb changes meaning, for example, 'to get out' (*sortir* in French) versus 'to get up' (*se lever* in French).

By searching for a verb as simple as 'to get' during class time, I can demonstrate how the websites help choose the proper translation. Both websites also provide key information often overlooked by students. Indeed, they rarely inquire about abbreviations such as *vtr* or *vti*. If they wondered before the class demonstration, they did not come to office hours to inquire about it. However, telling students what these abbreviations stand for—*verbe transitif* (transitive verb) and *verbe intransitif* (intransitive verb)—does not help either, because they rarely know what these mean in English, let alone how to make use of this information in French. Yet, explaining *vtr* and *vti* is essential to support students' learning, for this information indicates which auxiliary to use in the past tense (transitive verbs use *avoir* and intransitive, *être*). The

abbreviation *utr* also signals a direct object, which helps students choose the correct pronoun in a sentence. I usually plan to spend time reviewing what direct and indirect objects are, and how to use object pronouns in French. Most students are not familiar with grammar terminology and often remark in class how intimidated and confused they feel by words that sound too technical to them. It is an opportunity to remind students that grammar is not about exercises with right or wrong answers, but it is about writing sentences that efficiently communicate an idea.

The website [Linguee.com](http://Linguee.com), a traditional dictionary and a depository of translation memories, offers other useful information as it searches “words and phrases in comprehensive, reliable bilingual dictionaries ... through billions of online translations” (Linguee). This rich depository of translated memories allows students to read the words they are looking for in context, in English and French side by side. By discovering additional information, beyond the words they look up, students can also enrich their lexicon. For example, students learn new expressions such as ‘to get the job done’ translated into French by *mener à bien ses tâches*, which literally translates as ‘to lead well one’s tasks.’ It reinforces the fact that a word-to-word translation seldomly works.

At the end of this section of the class, I encouraged my students to replicate the exercise at home with a different verb, to get them involved with technology independently. I showed them how to navigate the website and other abbreviations they might encounter, thus helping them develop the self-confidence necessary to use the websites on their own. If need be, this activity can be repeated throughout the semester. But this time, students themselves selected the vocabulary word and walked the class through the process. Being in charge of the activity reinforced their agency.

I concluded my intervention by showcasing the website [BonPatron.com](http://BonPatron.com). This website was designed to help L2 learners proofread their text by Nadaclair Language Technologies, which was co-founded by Dr. Terry Nadasdi and Dr. Stéfan Sinclair, professors of linguistics and digital humanities, respectively. It is somewhat similar in design to Grammarly, another AI-powered editorial platform that checks grammar, style, and punctuation. The website is very simple to use. Students paste their French text into BonPatron, run a check, and the program flags mistakes. Students are given clues to help them correct their mistakes. Then, they manually enter the corrections. For grammar mistakes, they are also provided with a summary of the grammar rules.

To teach my students how to effectively use [BonPatron.com](http://BonPatron.com), I first have them work as a group to write a short paragraph. As they share their writing with the rest of the class on the classroom discussion board, I ask for a volunteer to show their text so that I can demonstrate [BonPatron.com](http://BonPatron.com), or I use an anonymous text from one of my previous quarters. There is, however, a caveat—the website is really useful for students who know their grammar well. Indeed, a simple reminder of the grammar rule helps them fix their mistakes. But students who do not know the difference between a noun or an adverb, for example, cannot successfully use the website. In that case, it becomes a tool in class to show students the importance of proofreading and to initiate a grammar lesson based on a student’s writing. [BonPatron.com](http://BonPatron.com) does not claim to catch all the mistakes, but 82% of them. This is the best way to conclude the intervention, reinforcing the fact that technology does not replace the human mind. My students have to write their essays, and I, their professor, not a machine, will read and evaluate them based on their structure and content, grammar, and style.

## Accuracy versus Creativity

This intervention takes place the first week of class, which gives me the opportunity to explain to my students that I value their creativity and writing, and not just the accuracy of their sentences in French. Throughout the quarter, I remain focused on their creativity, and help them develop their own writing style in French. I especially aim at demonstrating how grammar is not an end in and of itself, but a tool to develop their own writing style and find their unique voice.

One of my favorite activities is to teach students how a sentence can be modified to reflect different emotions, to create suspense, or to bring the reader's attention to a specific part of the sentence. I use a rather old-school syntactical exercise on '*compléments circonstanciels*,' the elements in a sentence that describe the circumstances of the action—where, when, how, why. These are the only elements that can be placed anywhere the writer chooses, with only one condition: to use the proper punctuation, namely the comma. We start with a sentence from Albert Camus' novel, *The Plague*, that I color-code to highlight the various elements of the sentence (see Appendix B). The fun begins because we play with the sentence, moving around the *compléments circonstanciels*, trying to find as many variations as possible. Students take turns to offer a new arrangement for Camus' sentence. After, I invite them to expand a simple phrase—Subject Verb Object, one that a novice French learner could have written—into a more sophisticated sentence. In groups of three, they play with the sentence, adding as many *compléments circonstanciels* they want and wherever they want. Finally, the new sentences are posted on the discussion board for the class to examine. We compare their sentences: Which one is the longest? What are the emotions expressed? This exercise reinforces the importance of word choices to convey one's thoughts.

To reinforce the importance of creativity in writing, I revised my grading rubrics. I now include points for the sentence structure and its length. I also encourage my students to imitate a sentence structure from the texts we study in class. If they underline the sentence to alert me of their attempt, they will receive extra points. This new rubric was so successful that I revised my grading system for other intermediate French courses (see Appendix C). The rubric promotes recycling the whole range of material learned in class. This may appear rather self-evident but being as prescriptive as possible does yield better written assignments. For instance, students know how many vocabulary words they must use and underline them to receive full credit. At the same time, the rubric effectively discourages MT usage. Even if some students use MT to write parts of their essays, they will not fulfill the assignment requirements until they verify that the vocabulary studied in class is incorporated into their essays. In other words, they still must engage with the text produced by the MT to complete the assignment. To sum up, I find that such class interventions and activities teach students to exercise their agency, work on their creativity and writing style in French, and be responsible users rather than mindless consumers of electronic tools.

## VERA KLEKOVKINA'S CLASS INTERVENTION

To help my students create comprehensible output in their target language, I find the use of visual organizers the most effective for a pre-writing stage as a facilitating activity for the ideation process. Maamujav et al. (2019) demonstrated similar effectiveness of infographics to improve L2 writing by focusing on production of ideas in the pre-writing stage. In addition,

visual organizers facilitate reading comprehension and retention not only in L1 but also in L2 (Albufalasa, 2019; Jiang, 2012). Since 2015, my institution launched a campus-wide initiative to bring critical thinking to the forefront of skill-building activities. Critical thinking instruction is infused throughout our General Education Program and upper-division seminars. Instructors model to students how to deliberately practice critical thinking skills and strengthen their critical thinking dispositions, such as inquisitiveness, reflection, open-mindedness, clarity, self-efficacy, etc. One of the implications of this initiative is to use reasoning maps in humanities, sciences, and the arts. Proud of the French heritage stemming from exemplary thinkers such as René Descartes or Nicolas Boileau, I explain to my students that if one has a method and if one can clearly conceive what they want to communicate, words will come easily. Even if their French sentences may not be perfectly accurate, their output will be comprehensible as long as it is logical. Although there is a plethora of visual organizers language instructors can call upon, in all my courses, I prefer using reasoning maps because they assist students on multiple levels such as generating ideas; building and recycling L2 vocabulary; recognizing and internalizing a reasoning schema that includes different types of claims; structuring and ordering knowledge; as well as activating students' creativity and allowing them to explore and appreciate nonlinear thinking patterns.

### **Functions of Reasoning Maps**

Reasoning maps include mind, concept, and argument maps and can be extended to incorporate any traditional visual organizers such as tables, outlines, Venn diagrams, etc., if they focus on collection and structuring of information necessary for future reporting, be it in oral, visual, or written format. Santiago (2011) points out that there are multiple tools and visual maps to capture different types of thinking processes. For instance, instructors may use these tools for the following functions: for “picturing the thinking process (mind mapping), exploring the structure of knowledge (concept mapping), developing premises, counter arguments and conclusions around a contention (argument maps), exploring the learner’s own thinking process (®Thinking Maps)” (p. 125). Eppler (2006) also confirms that “the different visualization formats can be used in complementary ways to enhance motivation, attention, understanding and recall” (p. 202). Davies (2011) studied the differences between reasoning maps and their pedagogical advantages and disadvantages. Mind mapping facilitates spontaneous associations of ideas and memory retention. This free-flowing process promotes creative thinking; yet its unconstrained structure may result in simple associations that lack relational hierarchy. Concept mapping outlines relationships between ideas and is much more structured. It is widely used in academic and professional disciplines such as accounting, engineering, or health fields. Concept mapping requires an in-depth understanding of the subject matter, thus necessitating more time, effort, and often assistance to complete. Argument mapping, on the other hand, captures logical connections between statements. Its inferential structure is ideal for delineating one’s position on a chosen subject and is frequently used in philosophy, literature, and other humanities courses.

In the L2 classroom in particular, mind maps serve well any brainstorming or vocabulary building activities because they facilitate associative play and summon creativity to enable the learning process. Of low cognitive stakes, mind maps are often used in class or as an easy homework assignment that allows students to enjoy the freedom of associations and encourages them to play with colors, shapes, and/or visuals (images, icons, emojis) to activate simultaneously creative and critical thinking.

Concept maps allow students to organize knowledge based on a topic. These maps are effective for high-level vocabulary building activities. Of higher cognitive stakes, concept maps require students to structure the knowledge based on logical connectors. Their presence is imperative because causation and/or categorization are the main organizational requirements. For instance, a concept map of food in L2 would break it down into different categories such as vegetables or meats, which may include the sequential element of breakfast, lunch, or dinner foods. Assigning concept maps as homework to be checked later in class is the most advantageous.

Argument maps, on the other hand, are excellent for constructing arguments because they allow students to identify claims as confirming or refuting other claims. Argument maps aim to distinguish between supporting claims, counterarguments, and evidentiary claims while making visible inferences between the claims. Necessitating the highest cognitive skills, argument maps are time-consuming and work effectively as scaffolding activities for a larger project such as essay writing or preparation for class debates, among other learning activities.

There are many web-based applications available to students and instructors to build reasoning maps such as WordClouds.com, MindMup, Lucidchart, or Rationale to name just a few. I ask my students to use a free version of Rationale, or they can use Lucidchart, included in our campus applications. Still, some students prefer to use a pen and paper or draw boxes and arrows in Microsoft Word. I accept any technical formats because students' ideas and how they structure their reasoning are more important for me than the visual execution of their maps.

### **Scaffolded Unit in a Literary Seminar**

Closely analyzing and reading lengthy texts may no longer be as popular with today's students as they were in the past. To enhance the learning process and increase student motivation and engagement, language instructors have been including instead gamification aspects in L2 classrooms (Allen et al., 2014). In concert with students' preferences in learning and our campus critical thinking initiative, I resort to a scaffolded sequence of learning activities employing reasoning maps and role-playing elements to help students read a French play, *The Bourgeois Gentleman* by Molière (see Appendix D for a detailed plan of this unit).

In Stage 1, students are required to construct two reasoning maps on two major play themes—money and happiness. Students are introduced to different kinds of reasoning maps in a 75-minute lecture prior to reading the play. I explain the different functions each type of reasoning map can perform and show examples of maps in the target language, some aesthetically pleasing, while others as plain as a black and white text can be. Most students have no previous experience of reasoning maps. As they prepare the first two maps at home, many usually construct mind maps rather than concept maps, because the assignment gives them free choice of maps to create. I know that cognitively mind maps are the easiest maps to construct and am not surprised when most students opt to create mind maps. Many students do them by hand and use colors and drawings. The use of MT is not detected in these maps because students do not perceive this assignment as a high-stakes activity but rather as a creative outlet. As the maps are presented in class, I guide the general discussion to help students connect their personal statements, often prevalent in the maps, to Molière's play as I ask them to think about the play's major characters and their relationship to money and happiness.

In Stage 2, the revised maps are used as helping materials for a class debate, which takes place after the play is thoroughly discussed over the period of five lessons to cover each of the play's five acts. The reasoning maps effectively assist students with their oral production because they contain not only the necessary vocabulary words but also logical connections and examples from the text as well as from the students' personal experiences. During the class debate, students are assigned to be part of one of three groups, representing the three major characters from the play. As the warm-up activity for the debate, I give students a blank argument map template (see Appendix E), which they are encouraged to fill out to prepare themselves to defend their character as having the most chances to be happy. The use of MT is not detected in this stage for several reasons: the controlled environment of the classroom, the immediacy of the task, and its relative improvisation requires students to activate their critical thinking and produce spontaneous L2 speech on the spot. They have no time to seek the help of MT. However, having prepared their maps at home, having discussed them in Stage 1 with their classmates, and having been prompted to think about the play's characters' relationships to money and happiness prior to the debate assure that students are adequately prepared for success. What could be a stressful situation of a spontaneous oral production in L2 turns into a playful scenario of students debating and defending a character whose actions may not represent their own beliefs.

As students communicate with each other during a 45-minute debate and hear different ideas, they receive two types of linguistic reinforcement. First, they can see that their L2 output is comprehensible because their classmates can understand their ideas. Secondly, they can hear comprehensible output from others, therefore increasing their bank of ideas to be drawn from in the future. While students debate in class without my assistance, I am at liberty to assess their oral performance according to an oral debate rubric which closely follows the structure of an argument map: I observe if and how students state their positions, advance arguments for their positions, support them with evidentiary claims based on the text or their personal experiences, and respond to counter arguments with rebuttals (see Appendix F). Hearing my students converse in French during the majority of class period without my assistance fills me with pride and joy. The level of confidence and motivation they experience at such moments is a valuable lesson for them and me: the invigorating effect of a spontaneous oral production in L2 can withstand threats of irresponsible MT usage. Every semester, after the debate, students enthusiastically comment that they wish they knew more L2 words to express their ideas more eloquently. At these moments I know that language learning has effectively taken place in the classroom and hopefully will motivate further learning.

In Stage 3, the culminating learning activity centers on L2 written production: Students are required to write an essay on the theme of happiness as it is illustrated in the play. After the debate, students report feeling better equipped to write an essay, which revisits and expands on some of the ideas previously discussed in class. However, it is during this stage that I detected the use of MT the first time I taught this sequence because it was a take-home assignment. I noticed that students, who did not produce substantial oral contributions in Stage 2, seemed to turn to MT to construct a more cohesive and lengthier text. The accuracy imperative for the L2 written production brought to the surface old habits and fears. The promise of MT to alleviate these difficulties was too strong to ignore. To remedy the situation, I now require that students write their essays in class so that I can monitor their usage of electronic tools. Due to the time constraints of a class period, 75 minutes, students also understand that I do not expect them to write longer essays (see Appendix G for the written

assignment rubric). Furthermore, I reassure them that the ideas they have already rehearsed or heard during the class debate represent an acceptable demonstration of their L2 learning.

### **Accuracy versus Modeling**

Modeling to my students how they can call on logic and reasoning schema to structure their ideas so that they can communicate better in L2 makes them refocus their attention from the inaccuracy of some of the L2 utterances to a free and flowing exchange of ideas. The advantages of using the reasoning maps in this course manifest in varied recycling activities that provide students with different ways to learn how to express and defend their ideas. In my experience, the return to a controlled environment in the writing stage (Stage 3) prevents students from falling into the trap of an irresponsible usage of MT. Since I have adjusted my instructions for this sequence, I explicitly allow my students to use MT for Stage 1 to help them formulate discrete sentences which they need to learn by heart and use in class debate (Stage 2) so that they can make these sentences their own. They must remember them to easily retrieve them during their writing. Throughout the semester we also work on parts of speech and how sentence structure is formed. I ask students to use colors to highlight the different parts of speech and to sign a contract acknowledging that they have checked the conjugation of all verbs, spelling and gender of all nouns, and agreement of all adjectives (see Appendix H). I encourage students to focus on comprehensibility and clarity as they formulate each sentence. Seeing sentences with color-coded parts of speech reinforces their understanding of the building blocks of each sentence. In class, discussing their color-coded sentences gives me an opportunity to contrast and compare L1 and L2 linguistic systems, correct students' mistakes, and revise their grammar knowledge. At the same time, I demonstrate the Read Aloud function in Microsoft Word to urge students to listen to their sentences, enunciated to them by a different voice rather than their own. Language learners often forget that their passive knowledge of L2 is more substantial than their active knowledge and that they can hear what sounds 'right' in the target language, as long as they try to reuse the same sentence structures and vocabulary we study in class and for which they have developed oral familiarity. In summary, reasoning maps and in-class modeling activities allow students to exercise their critical thinking skills, work on their logic, hone the comprehensibility of their L2 via oral and written communication, and use MT only for occasional assistance.

### **CONCLUSION**

The language industry launches one app after the other, promising to turn us into polyglots by practicing a few minutes a day with Duolingo, FluentU, Babbel, MosaLingua, or Falou. These apps appeal to our playful nature and overbooked schedules. However, linguistic acquisition and translation are complex processes, and it is up to us, the language instructors, to show students what important roles "context, connotation, denotation, register, and culture play in language production and comprehension" (Ducar & Schocket, 2018, p. 785). An increased awareness of the L2 learning process can help students value what an AI-powered world leaves under human purview—interpersonal communications, increasingly becoming intercultural as the global village expands and the language borders permeate. Intercultural competence combined with fluid communication will remain in high demand for the foreseeable future.

Accepting MT as an instructional aid for language learning requires changing instructors' attitudes so that we can adapt our in-class activities to meet the MT challenges. Even if students are ultimately responsible for their learning, we are here to guide them and provide them with tools to do so. On the one hand, we can return to the non-digital forms of assessing L2 learning such as handwritten exams and spontaneous oral productions in the form of one-on-one interviews with the instructor. On the other hand, we can remind ourselves that students' mindsets have been already altered because they grew up with digital technologies. Showing them the greater potential they can harvest from the independent language learning resources they find on the Internet will be advantageous to both students and instructors. Indeed, adopting MT in class and at home, as part of carefully scaffolded activities, can alleviate students' concerns about their linguistic inadequacy in the target language and re-emphasize the importance of clarity and structure for effective and comprehensible communication. Editorial tools, such as spell- or grammar-checkers, used for the final phase of writing, can allow students to receive immediate feedback. Text-to-speech readers can help them 'hear' their final product and check its accuracy against what 'sounds right,' all the while practicing their L2 oral comprehension and pronunciation skills. Speech-recognition apps such as Falou can coach students' pronunciation as the AI-powered Falou Method™ makes them practice speaking L2 and develop fluency as the program points out automatically which words are mispronounced. It also recycles vocabulary-building, speaking, and writing drills for retention and recall purposes. As more instructors and languages are cut from the K-12 and higher education programs, having virtual assistants may be helpful as long as such assistance supplements and does not supplant learning.

In the end, when we revisit our original question—Is machine translation a friend or a foe? —the answer lies in the change of the conjunction: Machine translation is a friend *and* a foe. Indicating the combination of discrete elements, the conjunction 'and' reflects today's evolution of the relationship between learner and instructor. No longer binary, this relationship became triangular as CALL and especially ICALL tools expanded it. Technology offers new ways of learning to students, provided that instructors design new methodologies to include both technological advancements and good old-fashioned teaching techniques. In other words, instructors need to be willing to unlock MT's potential as a teaching tool. It is also our responsibility to bring to the forefront the ambiguous role technology can play in learning: a friend, if it aids students' learning processes; a foe, if it replaces the effort to learn and retain L2. The power of this interaction—the learner-machine-instructor triumvirate—is to understand and negotiate the terms under which learning will take place.

The interventions described above took place before 2020 in face-to-face classrooms. Then the COVID-19 pandemic happened, forcing us to suddenly switch to remote learning using diverse video communication systems. The transition was a challenge to us all. Most of our students found themselves isolated, engaging more than ever with their computers. This situation made it so easy for them to use MT to write their essays or prepare their oral presentations. What the pandemic taught us is that helping our students to navigate digital tools to support their language learning is more important than ever. Digital tools have no empathy, nor are they capable of recognizing our students as language learners who work simultaneously on their linguistic, cognitive, emotional, and interpersonal skills. McCarthy (2014) rightfully states about language and humanity that

... thoughts, actions, feelings, emotions, ideas, the human will—all of these are innate in our mind, innate in our human brain and language is the unique gift we use to

communicate them. Language expresses the soul. Language is not commonplace. It is powerful. It is beautiful. It is effective. It is terrible. It is magical. It is enduring. It is identity. (p. 76)

The pandemic tangibly underscored the limits of technology. It is true that we were able to ‘meet’ our students via screens, but the magic—the human interactions that happen in a classroom—was hardly there. If we want our students to learn the mystery of a new language and reclaim their agency without depending on a machine, we must establish an open communication and honest collaboration between the agents who give language its soul: students and instructors, aka human beings.

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## APPENDICES: CLASSROOM ACTIVITIES AND TOOLS

### Appendix A. Lesson plan—Google Translate demonstration

This is a lesson plan for a 50-minute class. You may implement one activity at a time within a lesson. For example, you can use the Google Translate sequence with a text you study with your students. Instead of using Proust, you can use the text studied in class.

Language	French Intermediate Mid	Minutes	50
Lesson objectives	<ul style="list-style-type: none"> <li>• Review online tools</li> <li>• Empower students</li> </ul>		
Lesson Sequence:	Activities:	Time:	
Google Translate	<ol style="list-style-type: none"> <li>1. Read and quick overview of a short passage of Proust, <i>In Search of Lost Time</i></li> <li>2. Google Translate Demonstration:               <ol style="list-style-type: none"> <li>a. first translation French to English</li> <li>b. second translation English to French</li> <li>c. compare and contrast original French text, French translation, and English translation. (See the example below the lesson plan.)</li> </ol> </li> </ol>	5 minutes	
		8 minutes	
WordReference	<ol style="list-style-type: none"> <li>1. Demonstration of a search English to French with the verb ‘to get’</li> <li>2. Group (2 to 3 students) work: choose a common English word (preferably a verb) and write down all the French translations you can find</li> <li>3. Share with the class: a representative of each group shares the word they looked up and 2 or 3 different translations</li> </ol>	5 minutes	
		3 minutes	
		3 minutes	
Linguee	<ol style="list-style-type: none"> <li>1. Demonstration using the verb ‘to get’ to show differences with WordReference</li> <li>2. Group activity: keeping the same group as above, students check the word they had chosen with Linguee</li> <li>3. Share with the class: a different group representative shares an interesting expression found on Linguee</li> </ol>	3 minutes	
		4 minutes	
		3 minutes	
BonPatron	<ol style="list-style-type: none"> <li>1. Demonstration using a sample text (either from a current volunteer student or an anonymous text from previous quarter)</li> <li>2. Application: give time to students to try BonPatron with one of their texts. This is an individual activity so students can learn from their own writing.</li> </ol>	7 minutes	
		6 minutes	

Wrap-up / Homework	<ol style="list-style-type: none"> <li>1. Exit ticket: What was the most important thing you learned today? Which website will you use in the future?</li> <li>2. Homework Assignment:  You will repeat the activity we did in class with an English text of your choice. I recommend that you select a text you know really well. It will help you in the assessment part of the exercise.</li> </ol> <ol style="list-style-type: none"> <li>1) Select a short text in English (a paragraph).</li> <li>2) Translate the text in French using Google Translate. Make sure to keep a copy of the text.</li> <li>3) Translate the French version of your text back into English.</li> <li>4) Assess the last English translation and compare the three texts.</li> <li>5) Write a paragraph in French summarizing your assessment (5 sentences maximum) and what the experience has taught you (3 to 5 sentences).</li> </ol> <p>If you wish, you may choose a French text instead of an English one.</p>	<p>3 minutes</p> <p>Assignment should also be available on the class website.</p>
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Here is the passage we used from Marcel Proust's first volume of *In Search of Lost Time—Swann's Way*, translated into English and back-translated into French by Google Translate. In class, during the comparison of the translations, we concentrated on the underlined discrepancies/variations.

The Original Text	GT Version from Fall 2019, French to English	GT Version from Fall 2019, English to French
<p>“Mais, quand d'un passé ancien rien ne subsiste, après la mort des êtres, après la destruction des choses, seules, plus frêles mais plus vivaces, plus immatérielles, plus persistantes, plus fidèles, l'odeur et la saveur restent encore longtemps, comme des âmes, à se rappeler, à attendre, à espérer, sur la ruine</p>	<p>But when from the ancient past nothing remains, after the death of beings, after the destruction of things, only, frailer but more vivid, more immaterial, more persistent, more faithful, the smell and flavor remain for a long time like souls, to remember, to wait, to hope, on the ruin of all</p>	<p>Mais quand <u>de l'antiquité il ne reste plus rien</u>, après la mort des êtres, après la destruction des choses, <u>seulement</u>, plus <u>frêle</u> mais plus <u>vif</u>, plus <u>immatériel</u>, plus <u>persistant</u>, plus <u>fidèle</u>, l'odeur et la saveur restent longtemps comme des âmes, <u>souvenez-vous d'attendre, d'espérer</u>, sur la</p>

de tout le reste, à porter sans fléchir, sur leur gouttelette presque impalpable, l'édifice immense du souvenir." (Proust, <i>Du Côté de chez Swann</i> , p. 46)	the rest, to bear, without bending, on their almost impalpable droplet, the immense edifice of memory.	ruine de tout le reste, <u>de supporter, sans vous pencher</u> , sur leur goutte presque impalpable, l'immense édifice de la mémoire.
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## Appendix B. Enhance your Style: Syntactical Exercises in Advanced Level French Classes

Here is an example of an old-fashioned syntactical exercise, teaching students the different parts that constitute a sentence in French. It shows them how to develop their own writing style by playing with the placement of different parts of speech.

<p style="text-align: center;"><b>Prenons un exemple</b></p> <p>Albert Camus, <i>La Peste</i> (1947) : « Il descend les trottoirs sans changer son allure, mais deux fois sur trois remonte sur le trottoir opposé en faisant un léger saut. » (p. 33-34)</p> <p>Il descend les trottoirs sans changer son allure, mais deux fois sur trois remonte sur le trottoir opposé en faisant un léger saut.</p>	<p style="text-align: center;"><b>Les compléments circonstanciels</b></p> <p>Les compléments circonstanciels (CC) sont ajoutés à la phrase basique pour donner les circonstances de l'action.</p> <p>Voici les principaux :</p> <p>CC de lieu à où          CC de temps à quand          CC de manière à comment          CC de cause à pourquoi</p>
<p style="text-align: center;"><b>La phrase basique</b></p> <p>La phrase française est composée de :</p> <p style="text-align: center;">S + V + Objet</p> <p>Ex. : Il descend les trottoirs</p> <p>Il à sujet de la phrase          descend à verbe au présent          les trottoirs à objet direct (il descend quoi ?)</p> <p>L'ordre des mots dans la phrase ne change pas.</p>	<p style="text-align: center;"><b>Les CC peuvent changer de place :</b></p> <p>1)          Sans changer son allure, il descend les trottoirs, mais deux fois sur trois remonte sur le trottoir opposé en faisant un léger saut.</p> <p>2)          Il descend les trottoirs sans changer son allure, mais remonte sur le trottoir opposé en faisant un léger saut deux fois sur trois.</p>

## Appendix C. Writing Rubric to Learn and Recycle Vocabulary for all Levels

This rubric, in French and English, helps students understand what they need to include in their essays. Ideas and organization of the essay are worth more than half of the grade. Twenty-seven points are allocated to reuse the vocabulary and sentence structures that were studied in class. Asking students to underline the vocabulary forces them to engage with their text once it was written. Even if some used MT to write parts of the essays, checking the required vocabulary reinforces their learning.

### COMPOSITION

NOTE : \_\_\_\_\_ /100

Idées et Organisation : \_\_\_\_\_/55

<u>Organisation</u> :	<b>25 points</b>
1/ Paragraphe d'introduction :	8 points
2/ Paragraphes de développement (une idée par paragraphe)	9 points
3/ Paragraphe de conclusion	8 points
<u>Idées</u> :	<b>30 points</b>
1/ Présentation claire du sujet	10 points
2/ Présentation claire avec des détails	10 points
3/ Présentation des exemples	10 points

Vocabulaire et Grammaire : \_\_\_\_\_/45

<u>Vocabulaire</u> :	<b>20 points</b>
1/ <b>QUATRE</b> ou plus noms du vocabulaire dans le chapitre étudié	5 points
2/ <b>TROIS</b> ou plus adjectifs du vocabulaire dans le chapitre étudié	4 points
3/ <b>TROIS</b> ou plus verbes du vocabulaire dans le chapitre étudié	5 points
4/ <b>DEUX</b> expressions apprises depuis le début du trimestre	3 points
5/ Orthographe et genre des mots	2 points
6/ Avez-vous <u>souligné</u> le vocabulaire dans votre composition ?	1 point

<u>Grammaire :</u>	<b>25 points</b>
1/ Les structures de grammaire du chapitre étudié	7 points
2/ Des phrases complètes et correctes	3 points
3/ Les accords entre le nom et l'adjectif	5 points
4/ Les accords entre le sujet et le verbe	5 points
5/ Les choix des temps	3 points
6/ La conjugaison des verbes	2 points

Commentaires :

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### ESSAY

GRADE: \_\_\_\_\_ /100

**Ideas and Organization:** \_\_\_\_\_/55

<u>Organization:</u>	<b>25 points</b>
1/ Introductory paragraph	8 points
2/ Body paragraphs (one main idea/paragraph)	9 points
3/ Concluding paragraph	8 points
<u>Ideas:</u>	<b>30 points</b>
1/ Clear presentation of the topic	10 points
2/ Interesting details	10 points
3/ Examples as an illustration	10 points

**Vocabulary and Grammar:** \_\_\_\_\_/45

<u>Vocabulary:</u>	<b>20 points</b>
1/ <b>FOUR</b> or more nouns (chapter vocabulary list)	5 points
2/ <b>THREE</b> or more adjectives (chapter vocabulary list)	4 points
3/ <b>THREE</b> or more verbs (chapter vocabulary list)	5 points
4/ <b>TWO</b> expressions you have learnt since the beginning of the quarter	3 points
5/ Spelling and gender	2 points
6/ Did you <u>underline</u> the vocabulary from the chapter in your essay?	1 point
<u>Grammar:</u>	<b>25 points</b>
1/ Grammar structures from the chapter	7 points
2/ Complete and correct sentences	3 points
3/ Adjective agreement with the noun	5 points
4/ Verb agreement with the subject	5 points
5/ Tense choices	3 points
6/ Verb conjugations	2 points

General comments:

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## Appendix D. Teaching *Le Bourgeois Gentilhomme* by Molière with Reasoning Maps (Unit plan)

The play is studied during a four-week unit with biweekly 75-minute sessions. Sessions 1-5 are dedicated to reading each act of the play in the target language, Session 6 for the debate preparation, Session 7 for the class debate, and Session 8 for the essay writing in class.

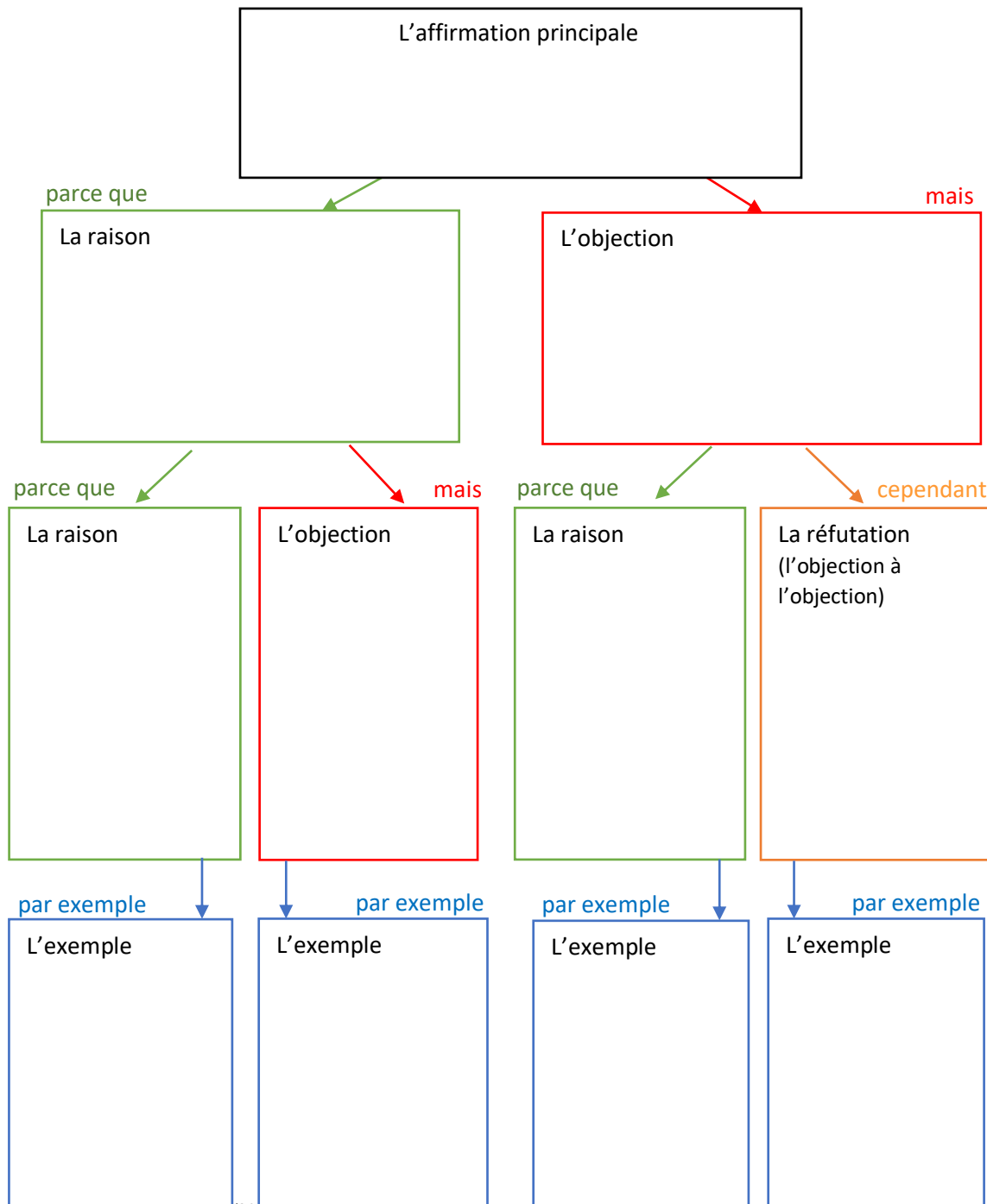
<i>Stages</i>	<i>Learning Objectives</i>	<i>Learning Activities &amp; Assessment</i>
Stage 1: Brainstorming (Sessions 3-6)  <i>Mind or concept maps</i>	1. Build vocabulary related to money and happiness. 2. Help students formulate their positions in response to two affirmations: “ <i>Bonheur passe richesse</i> ”—a French proverb meaning “Happiness prevails over wealth” and “ <i>L’argent achète tout</i> ”—a French saying meaning “Money buys everything.” 3. Engage students in interpersonal oral communication to brainstorm their ideas during pair/group work and class discussions.	1. HOMEWORK (Sessions 3-5): Prepare two maps, choosing between a mind or concept map. Students work on one affirmation at a time and bring both maps to the class. The maps are gradually prepared by students while they read the play over five lessons dedicated to each of the acts.  2. CLASS DISCUSSION (Session 6): Brainstorming and sharing of the maps in class.  <i>Assessment:</i> Instructor conducts formative assessment of the maps in class as students share and discuss their ideas first in small groups and then as the entire class.
Stage 2: Class Debate (Session 7)  <i>Argument maps</i>	1. Engage students’ critical thinking skills as they need to formulate quickly a new position defending their group’s character from Molière’s play and his chances for happiness. 2. Engage students in interpersonal oral communication as they prepare their group’s position and fill out the argument map template. 3. Engage students in presentational mode of oral communication as they defend their group’s position by presenting compelling arguments for and advance	1. WARM-UP (15 min): In-class preparation for the debate. Students are given an argument map template to fill out as they are assigned to be part of one of the three groups representing the play’s main characters—M. Jourdain (Group A), Dorante (Group B), and Cléonte (Group C). Filling out the argument map together helps students to prepare for the debate.  2. DEBATE (45 min): Students conduct the debate responding to the question: Which character in the play has the highest chances of attaining happiness?

	counterarguments against the other groups' positions.	<p>3. WIND-DOWN (15 min): Burden of proof. Class discussion to evaluate which group had the strongest arguments and decide if there is “the right answer.”</p> <p><i>Assessment:</i> Instructor conducts summative assessment of oral communication of each student following the Oral Debate Scoring Rubric (French and English versions of this rubric are provided below).</p>
<p>Stage 3: Essay Writing (Session 8)</p> <p><i>Argument maps</i></p>	<p>1. Practice written communication in the target language by composing an essay (<i>un commentaire composé</i>) on the theme of happiness as it is illustrated in the play.</p>	<p>1. WARM-UP (5-10 min): In-class preparation for the essay. Students are given an argument map template to fill out as they gather their thoughts to write an essay. They can also reuse their maps from Stages 1-2.</p> <p>2. WRITING (65-70 min): In-class Students can use dictionaries, class notes, and the play to write their essays.</p> <p><i>Assessment:</i> Instructor conducts summative assessment of written communication of each student following the Written Essay Scoring Rubric (French and English versions of the rubric are provided below).</p>

### Appendix E. Argument Map Templates, in French and English, for Intermediate and Upper Levels

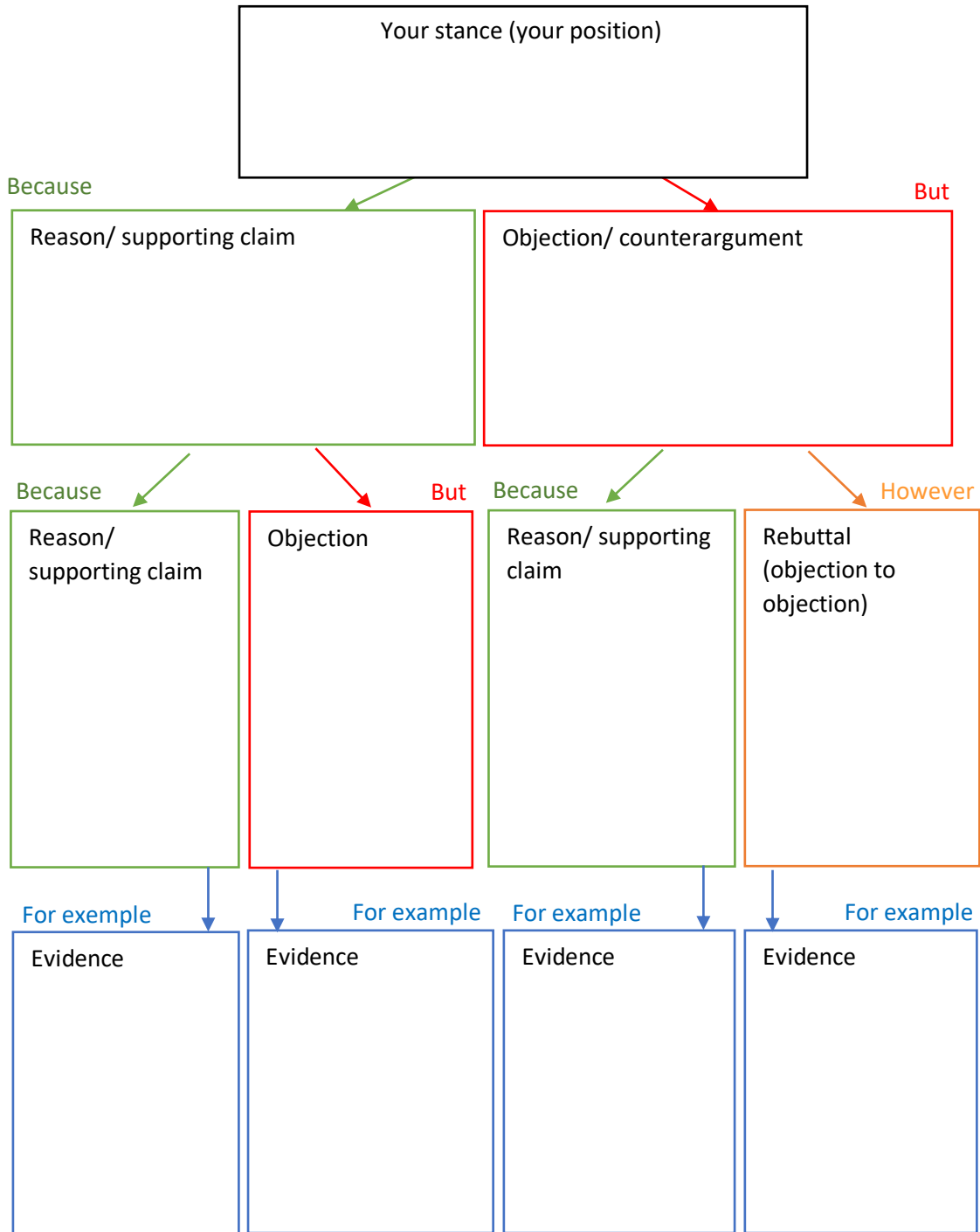
These templates were inspired by <https://www.rationaleonline.com/> and can be used in intermediate or upper-level courses to help students generate their ideas in defense of their positions on an issue in question. Argument maps also train students to think about different types of evidence they can provide to support their claims, such as textual evidence, statistical information, or personal experiences.

Nom, prénom : \_\_\_\_\_



### Argument Map Template

Name: \_\_\_\_\_



## Appendix F. Oral Debate Scoring Rubric in French and English

This rubric, in French and English, helps students understand how they need to prepare for a class debate. It shows how much they should contribute to the debate by clearly stating their points of view, providing claims to confirm their positions and refute their opponents' counterarguments, while paying attention to their physical presentation and comprehensibility of their L2 speech.

Nom, prénom : \_\_\_\_\_

### DÉBAT—Grille d'évaluation

Les critères	Les niveaux de performance			
	Insatisfaisant	Acceptable	Pleinement satisfaisant	Remarquable
<b>A. Le point de vue</b> Le point de vue est clair. [jusqu'à 15 points]	Le point de vue manque de clarté.	Le point de vue est annoncé mais il est sans consistance.	Le point de vue est annoncé clairement.	Le point de vue est annoncé clairement et il intrigue le public.
<b>B. Confirmation</b> Des raisons sont données pour soutenir le point de vue. [jusqu'à 20 points]	Peu de raisons pertinentes sont fournies.	1-2 raisons pertinentes sont fournies.	3-4 raisons pertinentes sont fournies.	5+ raisons pertinentes sont fournies.
<b>C. Soutien et exemplification</b> Des exemples et des faits sont fournis pour soutenir les raisons du point de vue. [jusqu'à 20 points]	Peu de soutien est fourni.	1-2 exemples / faits pertinents sont fournis	3-4 exemples / faits pertinents sont fournis.	5+ exemples / faits pertinents sont fournis.
<b>D. Réfutation</b> Des contre-arguments avancés par les autres équipes sont pris en compte et traités efficacement. [jusqu'à 20 points]	Aucun contre-argument n'est fourni.	1-2 contre-arguments sont fournis et ils répondent à ce que les autres participants ont dit.	3-4 contre-arguments sont fournis et développent plus ce que les autres participants ont dit.	Plusieurs contre-arguments sont fournis et ils compliquent le débat.
<b>E. Présentation et style</b> Le ton de la voix, le contact visuel, l'utilisation des gestes, et le niveau d'enthousiasme sont convaincants. [jusqu'à 20 points]	La présentation n'est pas convaincante	La présentation est parfois faible mais assez convaincante, en général.	La présentation est convaincante.	La présentation est convaincante et captivante à la fois.
<b>F. Le français</b> La compréhensibilité du discours et la grammaire [jusqu'à 15 points]	Trop de fautes empêchent la compréhensibilité.	Le discours n'est pas toujours clair mais en général est compréhensible.	Le discours est clair malgré quelques fautes.	Le discours est clair et presque sans fautes.

	<b>F : D+</b> <b>0-69</b>	<b>C- : C+</b> <b>70-79</b>	<b>B- : B+</b> <b>80-89</b>	<b>A- : A+</b> <b>90-100</b>
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Note : \_\_\_\_\_

Commentaires :

Name: \_\_\_\_\_

### Oral Debate Scoring Rubric

Criteria	Performance Levels			
	Unsatisfactory	Acceptable	Proficient	Outstanding
<b>A. Position</b> Your position is clear.  [Up to 15 points]	Your position lacks clarity.	Your position is announced but there is no consistency.	Your position is clearly announced.	Your position is clearly announced and intrigues the audience.
<b>B. Confirmation</b> Reasons (supporting claims) are provided to defend your position. [Up to 20 points]	No or few relevant reasons are provided.	1-2 relevant reasons are provided.	3-4 relevant reasons are provided.	5+ relevant reasons are provided.
<b>C. Support and evidence</b> Examples and facts (or any sources of evidence) are provided to support the reasons for the position. [Up to 20 points]	Little support is provided.	1-2 relevant examples and/ or facts are provided.	3-4 relevant examples and/ or facts are provided.	5+ relevant examples and/ or facts are provided.
<b>D. Refutation</b> Counter-arguments advanced by the other teams are considered and responded to effectively. [Up to 20 points]	No counter-argument is provided.	1-2 counter-arguments are provided and they respond to what other participants said.	3-4 counter-arguments are provided and they respond to what other participants said.	Several counter-arguments are provided and they deepen the debate.
<b>E. Presentation and style</b> The tone of voice, eye contact, use of gestures, and the level of enthusiasm are compelling. [Up to 20 points]	The presentation is not convincing.	The presentation is sometimes weak but fairly convincing in general.	The presentation is convincing.	The presentation is convincing and captivating at the same time.
<b>F. French</b> Comprehensibility of speech and correct usage of grammar rules. [Up to 15 points]	Too many mistakes prevent comprehensibility.	The speech is not always clear but in general is understandable.	Speech is clear despite a few errors.	Speech is clear and almost error free.
	<b>F : D+</b> <b>0-69</b>	<b>C- : C+</b> <b>70-79</b>	<b>B- : B+</b> <b>80-89</b>	<b>A- : A+</b> <b>90-100</b>

Grade: \_\_\_\_\_

Comments:

## Appendix G. Written Essay Rubric in French and English

This rubric, in French and English, helps students understand how their written production will be evaluated. It reinforces the importance of structure and organization as well as vocabulary 'recycling', i.e., reusing of the studied vocabulary.

Nom : \_\_\_\_\_

### Grille d'évaluation d'un devoir écrit :

#### Commentaire composé

<b>Contenu (40%)</b>	Faits textuels et historiques, concepts et idées, raisonnement logique, etc.
<b>Organisation (25%)</b>	Introduction & bref résumé de l'intrigue, analyse, conclusion
<b>Vocabulaire (10%)</b>	Vocabulaire spécifique (Ex. : pièce de théâtre, dramaturge, personnage, public, genre, etc.)
<b>Français (25%)</b>	Grammaire : accords, conjugaison, accents, etc. Syntaxe : structures de phrase, conjonctions, etc. Style : soutenu vs. parlé, élégant vs. maladroit, etc.

Name: \_\_\_\_\_

### Written Essay Rubric

<b>Content (40%)</b>	Textual & historical facts, concepts & ideas, logical reasoning, etc.
<b>Organization (25%)</b>	Introduction & brief plot summary, analysis, conclusion
<b>Vocabulary (10%)</b>	Specific vocabulary (e.g., play, playwright, character, audience, genre, etc.)
<b>French (25%)</b>	Grammar: agreement, conjugation, accents, etc. Syntax: sentence structure, conjunctions, etc. Style: sustained vs. spoken, elegant vs. awkward, etc.

## Appendix H. Contract in Color or a Grammar Exercise for all Levels

This exercise was inspired by the ACTFL “I can do” statements which became here “I checked” statements. It aims at reviewing grammar and different parts of speech, for all levels, in French or English. It shows students how they can structure their sentences and how they may use similar parts of speech in French or English to communicate their ideas but how their placement may differ. It also shows quickly if students know their parts of speech and what review is needed in class. For instance, some students forget that the past tense in French—*le passé composé*—is comprised of two verbs. When they fail to highlight the past participle of a conjugated verb in the past, it indicates that they need to review their tenses and verbs.

### UN CONTRAT EN COULEUR—AVEZ-VOUS VÉRIFIÉ LES VERBES, NOMS ET ADJECTIFS ?

Partie I : Après avoir écrit votre paragraphe, surlignez avec des couleurs différentes les parties de la phrase—tous les **verbes** en bleu, tous les **noms** avec leurs **articles** en jaune et tous les **adjectifs** en vert.

Partie II : Maintenant, vérifiez et signez :

A. J'ai vérifié la conjugaison de tous les **verbes** : \_\_\_\_\_

(votre signature)

B. J'ai vérifié l'orthographe et le genre de tous les **noms** : \_\_\_\_\_

C. J'ai vérifié l'accord de tous les **adjectifs** avec leurs noms : \_\_\_\_\_

### CONTRACT IN COLOR—DID YOU CHECK YOUR VERBS, NOUNS, AND ADJECTIVES?

Part I: After having written your paragraph (or short composition), highlight with different colors the parts of speech—all **verbs** in blue, **nouns** with their **articles** in yellow and **adjectives** in green.

Part II: Now, check and sign:

A. I checked the conjugation of all the **verbs**: \_\_\_\_\_

(your signature)

B. I checked the spelling and gender of all the **nouns**: \_\_\_\_\_

C. I checked the agreement of all the **adjectives**: \_\_\_\_\_