TRANSLATING GOOGLE TRANSLATE:
Instructional Strategies for Machine Translation in the Language Classroom

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Webinar Format

Findings

Instructional Strategies

Reflection & Interaction
Reflection & Interaction

To me, Google Translate is (like).....
What Students Do With MT

Overview of Research Study
Who?

- Spanish: 31.1%, n=23
- French: 35.1%, n=26
- Mandarin: 33.8%, n=25
Instructions: Write a mini essay (around 100 words or 10 sentences) in which you describe your favorite city in **Spanish**. Please consider the following questions:

- What is the name of the city?
- Why is it your favorite?
- What are the best places to visit in the city?
- What can you do at these places?
- Why might someone visit this city?
- Did you ever visit the city?
What?
Instructional Strategies
Training

- Online tools for language learning
- MT input
- MT output
Findings: Online Tools for Language Learning

- Google Translate
- WordReference.com
- SpanishDict
- Google
- Reverso Translation
- Pleco Chinese Dictionary
Findings: Online Tools for Language Learning

Tools Used by Learners of French

<table>
<thead>
<tr>
<th>Tool</th>
<th>% Learners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Google Translate</td>
<td>81%</td>
</tr>
<tr>
<td>Reverso</td>
<td>35%</td>
</tr>
<tr>
<td>Google Search Bar</td>
<td>27%</td>
</tr>
<tr>
<td>Word Reference</td>
<td>27%</td>
</tr>
<tr>
<td>Other</td>
<td>19%</td>
</tr>
<tr>
<td>Linguee</td>
<td>8%</td>
</tr>
<tr>
<td>Textbook</td>
<td>4%</td>
</tr>
<tr>
<td>Notes</td>
<td>4%</td>
</tr>
</tbody>
</table>
Findings: Online Tools for Language Learning

Tools Used by Learners of Mandarin

- Google Translate: 88%
- Other: 36%
- Google Search Bar: 20%
- Textbook: 16%
- Pleco: 16%
- Notes: 0%
Findings: Online Tools for Language Learning

Tools Used by Learners of Spanish

- Google Translate: 52%
- SpanishDict: 52%
- Google Search Bar: 22%
- Word Reference: 17%
- Textbook: 9%
- Notes: 9%
- Other: 4%

% Learners
Findings: Online Tools for Language Learning
I think I wish Google Translate had more of a variety of like answers that it spits out when you translate something. Because I know there's a lot of ways to say like one specific word or like an adverb or something….And then I don't know how to find that word because like it's not giving me the right translation. It's like giving me the literal translation, rather than all like the alternatives, so I kind of wish I had more of that.

-Julie
Findings: Online Tools for Language Learning
So for [Word Reference] giving you all these different options, it's very overwhelming and you're like, well, which I supposed to use? I didn't even know what this word meant, you know? So that's why I like Google Translate sometimes because even though it's not always the most accurate, it definitely is quicker.

-Eliza
Findings: Online Tools for Language Learning

“None of us in class know how to find anything in the book” -Amy

“All textbooks are a little weird to use. In a [physical] textbook, I have to physically flip through the pages and scan up and down and up and down and up and down.” -Ryan
Instructional Strategies: Online Tools for Language Learning

1. Train students how to use a range of tools, including some non-MT tools (and their textbooks)
Instructional Strategies: Online Tools for Language Learning

1. Train students how to use a range of tools, including some non-MT tools (and their textbooks)
2. Metalinguistic awareness: train students how to decipher online tool output
Findings: MT Input
Findings: MT Input

MT Input, All Languages

<table>
<thead>
<tr>
<th>Type</th>
<th>% Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>word</td>
<td>62</td>
</tr>
<tr>
<td>phrase</td>
<td>28</td>
</tr>
<tr>
<td>sentence</td>
<td>16</td>
</tr>
</tbody>
</table>
Findings: MT Input

MT Input, Learners of French

- Word: 57
- Phrase: 26
- Sentence: 16
Findings: MT Input

MT Input, Learners of Mandarin

- Word: 64
- Phrase: 25
- Sentence: 11

% Input
Findings: MT Input

MT Input, Learners of Spanish

- Word: 58
- Phrase: 26
- Sentence: 16
Instructions: Write a mini essay (around 100 words or 10 sentences) in which you describe your favorite city in French. Please consider the following questions:

- What is the name of the city?
- Why is it your favorite?
- What are the best places to visit in the city?
- What can you do at these places?
- Why might someone visit this city?
- Did you ever visit the city?

Mon ville favorite est Phoenix. Il est mon ville favorite parce que j’ai nagé en Phoenix. Il y a beaucoup villes près Phoenix.
Instructions: Write a mini essay (around 100 words or 10 sentences) in which you describe your favorite city in Spanish. Please consider the following questions:

- What is the name of the city?
- Why is it your favorite?
- What are the best places to visit in the city?
- What can you do at these places?
- Why might someone visit this city?
- Did you ever visit the city?

Mi ciudad favorita es Red Lodge, Montana. Es mi favorita porque las vistas son muy bonitas. Esta son muchas montañas y usualmente mucha nieve. Somos puestos
There are many good places

Hay muchos buenos lugares
Instructional Strategies: MT Input

1. Train students on what to input into MT tools
Instructional Strategies: MT Input

Translations of fly

- fly
- flying
- flying saucer
- flying a kite
- flying kiss

- une mouche
- mouche

- to fly
- to flying
- to fly away
- to fly a kite
Instructional Strategies: MT Input

Discussion Questions

■ What did you observe? How does the output change based on what you search?
■ What happens to MT output when you include/exclude [articles, adjectives, subjects, pronouns, etc]?
■ When would you want to include [articles, adjectives, subjects, pronouns, etc] in your search? Why?
■ How will you use these tools in the future?
Findings: MT Output
### Findings: MT Output

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average time (s)</td>
<td>13.8</td>
</tr>
<tr>
<td>Minimum time (s)</td>
<td>1.7</td>
</tr>
<tr>
<td>Maximum time (s)</td>
<td>71</td>
</tr>
</tbody>
</table>
Instructional Strategies: Output

1. Don’t assume all students are just copy/pasting
2. Train students how to analyze MT results
<table>
<thead>
<tr>
<th>Target word/ phrase</th>
<th>Machine translation output</th>
<th>WordReference outputs</th>
<th>What you chose &amp; why</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>
Appendix 1. Writing assignment worksheet and prompt

Step 1. Write your first draft in Korean on your own. You may use the glossary at the end of your textbook and/or dictionaries.

Step 2. Write what you drafted in Step 1 in English as well.

Step 3. Use a machine translator (name of translator: Google translate, Naver Papago) and edit your writing in Step 1. Please apply the guidelines you learned in the class.

<table>
<thead>
<tr>
<th>Words /Phrases</th>
<th>Purpose*</th>
<th>Translater 1st run</th>
<th>Choice after Image search</th>
<th>Choice after News search</th>
<th>Final choice Of Korean expressions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Step 4. Please compare your own sentences and translated sentences and share your thoughts and experience using the translator to complete this writing assignment.

1. Which translated part was most similar to your own Korean writing?

2. Which translated part was most different from your own Korean writing? Was the translated sentence contextually awkward or appropriate? Why do you think so?

3. In what ways did image or news searches help you with your final draft (if you used either of them)?

4. What were you able to learn from using a translator to complete this writing assignment?

Myers, L., & Pellet, S. (in press). What’s wrong with “What is your name?” > “Quel est votre nom?”: Teaching responsible use of MT through discursive competence and metalinguage awareness. *L2Journal*. myersll@umkc.edu; pelletsh@wfu.edu
Assignments

- Time & Grades
- Goals & Structure
Findings: Time & Grades

“But I feel Google Translate is also helpful if you want something fast. But it's also not 100% reliable so…”
- Ellie

“There's less buttons to click.”
- Kelsey
“Those fun vocabulary words [from Google Translate] make writing more interesting and more advanced and obviously that’s better when you are trying to go for a better grade.”

-Gabby

“If I was submitting [the task,] I would have gone back and chose a better word. If it wasn't for high grade, I probably wouldn't be too concerned with using like the fanciest word.”

-Mailey
Instructional Strategies: Time & Grades

1. Reduce time/grades as a factor in MT use
   a. create open-ended assignments
   b. implement low-stakes scaffolding (e.g., multiple drafts that focus on process and not product)
   c. create evaluations that do not focus solely on grammatical correctness
<table>
<thead>
<tr>
<th>CRITICAL ANALYSIS (40 pts)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Evaluation of possible answers</strong></td>
<td></td>
</tr>
<tr>
<td>Does not evaluate different possible answers/sides</td>
<td>Inclusion and evaluation of some possible answers/sides; mostly superficial</td>
</tr>
<tr>
<td><strong>Synthesis</strong></td>
<td></td>
</tr>
<tr>
<td>Proposed solution/answer to analytical question is not present</td>
<td>Proposed solution/answer to analytical question is simple or obvious, with few connections back to the evaluation of different answer/sides</td>
</tr>
<tr>
<td><strong>Sources</strong></td>
<td></td>
</tr>
<tr>
<td>Draws on unreliable sources from only one discipline</td>
<td>Draws on a mix of unreliable and reliable sources; most from one discipline</td>
</tr>
<tr>
<td><strong>LANGUAGE (40 pts)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Comprehensibility</strong> how well student expresses meaning, how comprehensible text is</td>
<td></td>
</tr>
<tr>
<td>Written expression is incomprehensible.</td>
<td>Written expression is somewhat comprehensible.</td>
</tr>
<tr>
<td><strong>Form</strong> how accurate and appropriate are students' vocabulary, spelling, grammar and choices</td>
<td></td>
</tr>
<tr>
<td>Forms, structures, lexical choices are most often incorrect. No appropriate connection to context.</td>
<td>Forms, structures, lexical choices are often incorrect with little appropriate correspondence to context.</td>
</tr>
<tr>
<td><strong>PRESENTATION</strong> (10 pts)</td>
<td></td>
</tr>
<tr>
<td>Paper is not decipherable to reader.</td>
<td>Paper struggles to guide reader clearly through. Multiple unclear transitions that leave the reader confused.</td>
</tr>
<tr>
<td><strong>CONTENTS</strong> (10 pts) how well student addresses specific assignment</td>
<td></td>
</tr>
<tr>
<td>Paper meets none of the assignment requirements.</td>
<td>Paper only meets a few assignment requirements. Is substantially too short/long or missive multiple sources</td>
</tr>
<tr>
<td>Criteria</td>
<td>Performance Levels</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Unsatisfactory</td>
</tr>
<tr>
<td>A. Position</td>
<td>Your position is clear.</td>
</tr>
<tr>
<td></td>
<td>[Up to 15 points]</td>
</tr>
<tr>
<td>B. Confirmation</td>
<td>No or few relevant reasons are provided.</td>
</tr>
<tr>
<td></td>
<td>[Up to 20 points]</td>
</tr>
<tr>
<td>C. Support and</td>
<td>Little support is provided.</td>
</tr>
<tr>
<td>evidence</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[Up to 20 points]</td>
</tr>
<tr>
<td>D. Refutation</td>
<td>No counter-arguments are provided.</td>
</tr>
<tr>
<td></td>
<td>[Up to 20 points]</td>
</tr>
<tr>
<td>E. Presentation and</td>
<td>The presentation is not convincing.</td>
</tr>
<tr>
<td>style</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[Up to 20 points]</td>
</tr>
<tr>
<td>F. French</td>
<td>Too many mistakes prevent comprehensibility.</td>
</tr>
<tr>
<td></td>
<td>[Up to 15 points]</td>
</tr>
</tbody>
</table>

Klekovkina, V., & Denié-Higney, L. (in press). Machine Translation: Friend or Foe in the Language Classroom? *L2Journal*. vklekovk@uwsp.edu; laurence@humnet.ucla.edu
Findings: Goals & Structures

“What I like about Google Translate is it gives you the answer. Word Reference gives you like, ‘in the adjective, it’s this. Or in the verb, it’s this. Or the whatever, it’s this.”

-Anne
Instructions: Write a mini essay (around 100 words or 10 sentences) in which you describe your favorite city in Spanish. Please consider the following questions:
- What is the name of the city? Quito
- Why is it your favorite?
- What are the best places to visit in the city? Downtown - el Centro
- What can you do at these places? Monuments
- Why might someone visit this city?
- Did you ever visit the city?

Quito es mi ciudad favorita

Translation:
Quito is my favorite city

Word-by-word translation:
Quito - Quito
es - is
mi - my
ciudad - city
favorita - favorite
“My strategy when I do type things in Google Translate is like get small words and see if I can fit them together on my own because I feel like I learn better that way.”

-Mary
Instructional Strategies: Goals & Structures

1. Assignments that emphasize meaning-making
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<table>
<thead>
<tr>
<th>Criteria</th>
<th>Unsatisfactory</th>
<th>Acceptable</th>
<th>Proficient</th>
<th>Outstanding</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Position</td>
<td>Your position lacks clarity.</td>
<td>Your position is announced but there is no consistency.</td>
<td>Your position is clearly announced.</td>
<td>Your position is clearly announced and intrigues the audience.</td>
</tr>
<tr>
<td>B. Confirmation</td>
<td>No or few relevant reasons are provided.</td>
<td>1-2 relevant reasons are provided.</td>
<td>3-4 relevant reasons are provided.</td>
<td>5+ relevant reasons are provided.</td>
</tr>
<tr>
<td>C. Support and evidence</td>
<td>Little support is provided.</td>
<td>1-2 relevant examples and/or facts are provided.</td>
<td>3-4 relevant examples and/or facts are provided.</td>
<td>5+ relevant examples and/or facts are provided.</td>
</tr>
<tr>
<td>D. Refutation</td>
<td>No counter-argument is provided.</td>
<td>1-2 counter-arguments are provided and they respond to what other participants said.</td>
<td>3-4 counter-arguments are provided and they respond to what other participants said.</td>
<td>Several counter-arguments are provided and they deepen the debate.</td>
</tr>
<tr>
<td>E. Presentation and style</td>
<td>The presentation is not convincing.</td>
<td>The presentation is sometimes weak but fairly convincing in general.</td>
<td>The presentation is convincing.</td>
<td>The presentation is convincing and captivating at the same time.</td>
</tr>
<tr>
<td>F. French</td>
<td>Too many mistakes prevent comprehensibility.</td>
<td>The speech is not always clear but in general is understandable.</td>
<td>Speech is clear despite a few errors.</td>
<td>Speech is clear and almost error free.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grade</th>
<th>D+</th>
<th>C+</th>
<th>B+</th>
<th>A+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>69-0</td>
<td>79-79</td>
<td>89-90</td>
<td>100-90</td>
</tr>
</tbody>
</table>
Reflection & Interaction
Policies & Approaches
Findings: MT Policies
I only know that because my teachers are always like “do not use it. It's not going to be right.” So instead of even risking it, I always just try and do it like what I have learned. Because at the end of the day, they [teachers] say, ‘you'd probably be—Like your grade would be punished more if you use Google Translate versus what I taught you, even if it's not correct.’ So that's, that's why I do it [use Google Translate] word for word.

-Eliza
Findings: MT Policies

“I thought it was cheating because it was like the whole sentence. And I didn't want to copy an entire sentence. So I just reverted back to what I could remember on the top of my head.”

-Kendrick
Instructional Strategies: Policies & Approaches

1. Revise MT policies
   a. Avoid bans and “MT as a dictionary”
   b. Redirect energy to training
2. Reframe MT as opportunity for learning and not an answer key
3. Provide opportunities in the classroom to reflect on MT use output together
Wrap Up
Additional Resources: Website
Reflection & Interaction

To me, Google Translate is (like).....
Thank you!