



# MACHINE TRANSLATION & ACADEMIA

**EXPLORING EMERGING PERSPECTIVES**

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# THE SENĆOŦEN LANGUAGE

- ÍYNEŁEL SW\_HÁLE.
- Listen on [First Voices](#):
- "Be good to each other."



A screenshot of the FirstVoices website interface. The top navigation bar includes the 'FirstVoices' logo, a 'Dictionary' dropdown, a 'Learn' dropdown, a 'Resources' dropdown, an 'About' dropdown, a 'Kids' dropdown, a 'Sign in' button, and a 'GUEST' button. The main content area features a background image of a forest with tall trees. In the foreground, there is a circular logo for 'SENĆOŦEN' featuring a stylized bird with red and black wings and a red flame-like base. Below the logo is a search bar with the text 'Search SENĆOŦEN' and a search icon. To the right of the search bar is a dropdown menu labeled 'All' and a search icon.

## WORD OF THE DAY

**ŁEŁEN**

get a little one

# A STORY



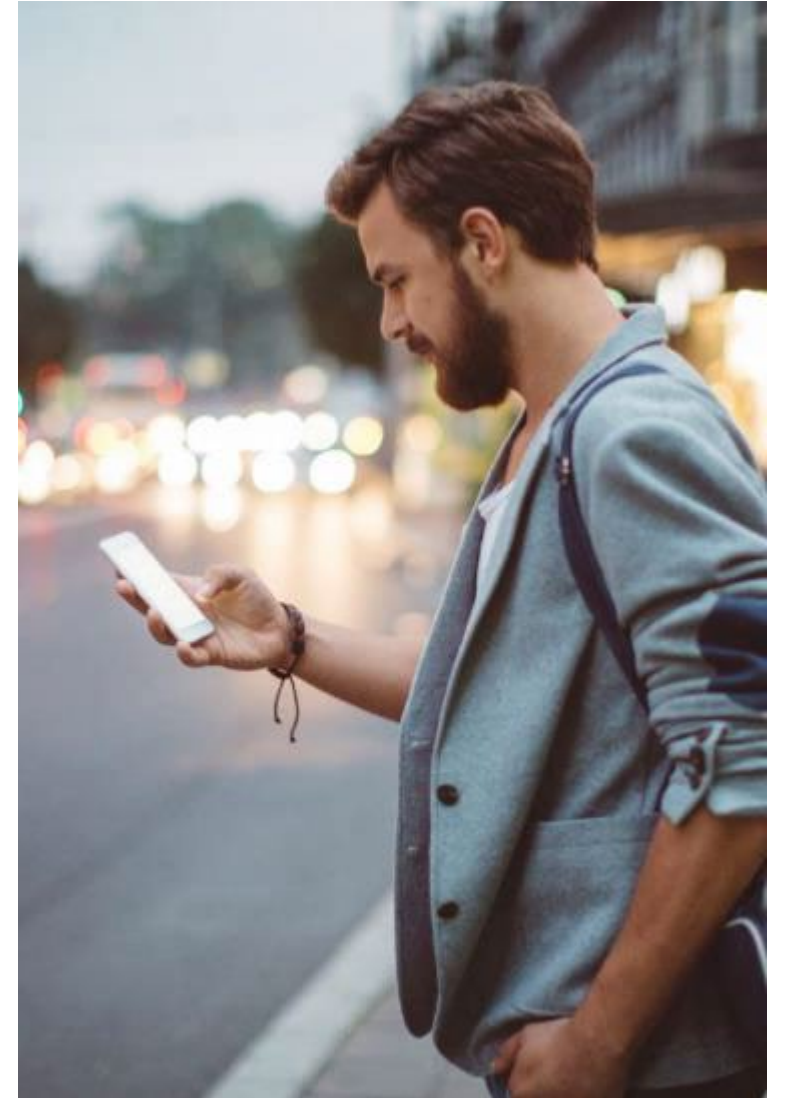
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# AGENDA

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➤ Big Picture Question: What are the arguments for allowing (or disallowing) machine translation (MT) in academia?

- Background
  - What is Machine Translation?
  - MT Policies – Camosun and Beyond
- Pros and Cons
- Establishing Pedagogical Methods:
  - Learner Autonomy
  - Develop Metalinguistic Awareness
  - Vocabulary Development
  - Writing Support
  - Discussion





# BACKGROUND





# WHAT IS “MACHINE TRANSLATION”?

**Machine translation (MT)** is the process of automatically translating text or speech from one language into another using computer algorithms and models, without human intervention.

- **How does it work?** MT systems utilize techniques such as **statistical models**, **rule-based approaches**, and **neural network architectures**. These systems:



- **What are the limitations?** MT has achieved high levels of accuracy and fluency, yet it still faces challenges in accurately capturing **cultural nuances**, **idiomatic expressions**, **cultural context**, and **domain-specific terminology**.
- **What is the future of MT?** Applications such as **international communication**, **language learning**, and **content localization**.

*(Based on ChatGPT, Feb. 6, 2024)*

# EXISTING MACHINE TRANSLATION TOOLS

- Google Translate: 133 languages and growing! (no Salishan Languages yet...)
- ChatGPT
- DeepL Translation (translates documents; has a beta writer)
- Baidu Translate (English-Chinese)
- Naver Papago
- Yandex Translate
- PROMT.One
- Etc.....! There are MANY online translators!!!



## WARM UP DISCUSSION

1. Do you support students with using machine translation (MT) software? Why or why not?
2. Have you noticed students using translation software in class and/or noticed significant differences in language level in take-home work?

3. How do you think multilingual students feel about the use of MT in course work?

4. How does a student using translation software in your course make you feel as an instructor?





# CAMOSUN'S POLICY

***“Invigilators will inform students of any rule which may apply to the conduct of a specific examination. This may, but is not limited to, rules for the following:***

***...***

***The use of calculators, cell phones, terminals or other information-processing devices; ...”***

- Whether that includes MT, or translators is not clear. The onus is on faculty to determine its use.

See [Academic Integrity policy](#)



# CAMOSUN EXAMPLES?

- **Business 130:** Generative AI. This course was **not** designed for use with generative artificial intelligence (Gen-AI) tools, e.g. ChatGPT, Quillbot, etc. Use of Gen-AI tools may hinder your learning. As such, use of Gen-AI tools in this course is not allowed unless explicit permission is provided in advance. **If you believe that a specific Gen-AI tool would be useful to support your learning in this course, please talk to me first.**
- Case-by-case? **Translation not specified.**

**Most course syllabi reference Academic Integrity and some mention Gen-AI, but it seems the use of machine translation falls through the cracks. Why?**

**Psych 154:** Technology Exams: No electronic devices are allowed during exams. This includes, but is not limited to; computers, electronic dictionaries, **electronic translators**, cell phones, tablets, and other personal electronic devices.

I checked the following 25 course syllabi (random sampling):  
BIO 103, 126, BUS 130, ECET 120, ECET 251, CIV 131, CIV 262, CRIM 120, ENGL 151 x 2 (J.D & A.M.), ELC 113,  
HCA 130, HCA 174, ICS 110, ICS 280, MASS 105, PSYC 110 x 2, \*PSYCH 154 Marty D has some mention of it for  
exams, PSYCH 215, PSC 104, SPMA 100, TECH 290, SOCW 211, TMGT 100

See Camosun  
past [syllabi](#)

# OTHER INSTITUTIONS...

## University of Victoria

- In a **language course syllabus**: German 302 (Advanced German II) Under Academic Integrity:

“Please note that it is **NOT** allowed to use automated translation programs (such as Google) or have advanced German speakers edit, rework, and/or write your assignments.”

<https://www.uvic.ca/humanities/germanicslavic/assets/docs/outlines/gmst-302-2021-spring.pdf>

Makes sense for a language course!



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# OTHER INSTITUTIONS...

## University of Fraser Valley

### AI Guidelines – AI and Permitted Use policy:

“AI usage may be permitted to support teaching and learning and for purposes of comprehension, **translation**, idea generation, comparative analysis, and research; however, **not** for *generating or completing* the assigned tasks.

See [UFV Guidelines](#)



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# OTHER PLACES OF INTEREST

## Provincial Health Services Authority

- **NO use of MT** for medical conversations that require verification/confidentiality.

“Machine translation (Google Translate) and other ad hoc language resources (paper and pen or family/friend) should only be used for non-medical conversations that do not require verification, do not increase the risk in case of miscommunication or breach of confidentiality, and when no other resources are available.”

See [PHSA Language Services](#)



Provincial Language Services provides Interpreting services in more than 200 languages, from American Sign Language to Zyphe. Interpreting services are available 24 hours a day, seven days a week and provided at no charge to patients and/or their families.



# COMMON USES OF MT OUTSIDE ACADEMIA

- International business communication
- Multilingual customer support
- Translation of software and content into new markets
- Collaboration in multinational teams
- Training and development
- Legal and compliance documents
- Market research and analysis
- Translation of internal communications
- Website localization
- Real-time communication





# PROS AND CONS



# REALITY CHECK

Three emerging realities that proceed generally unacknowledged (officially) by most higher education institutions:

1. Machine translators are here to stay,
2. They will only improve in accuracy, and
3. Their use by students to complete course-related work is inevitable. (Paterson, 2020)

Is the use of MT by students “academic misconduct”?

Discrepancies exist between student and instructor perceptions and practices related to MT use.

A Fundamental Contradiction (Jenkins, 2011)

English-medium universities claim to be **internationalized and inclusive to student diversity**.

Yet, language policies and practices may be confined to **monolingual, native-speaker norms**.

# PROS/BENEFITS OF MT

Language support

Engagement

## Students

- Enables more active participation
- Creates pathways to exercise more creativity
- Use for various linguistic purposes (vocabulary, reading comprehension, writing)
- Consolidates academic identities and makes valuable cross-lingual connections

## Faculty

- Potential to shift the emphasis away from “shallow literacies” (e.g., spelling, vocabulary, grammar) to focus more on “deeper literacies” (e.g., sociolinguistic competence, logical organization, critical argumentation)(Groves & Mundt, 2015, in Paterson, 2020, p. 5)
- Allows implementation of intercultural competence and inclusion of diverse perspectives

## Institution

- Removes “gatekeeping” and English as only lingua franca
- Levels the playing field for L2 users; greater access to content

Equity



# CONS/CHALLENGES OF MT

## Students

- Older methods (dictionary/thesaurus) are too slow (Con of NOT using)
- Access (or lack of) to devices/technology with capabilities
- Lack of ability to communicate desired depth of knowledge in English **spontaneously** if students are overusing MT

32.03% and 51.56% indicated that using GT to translate paragraphs or entire texts is completely unethical.

Alhaisoni, E., & Alhaysony, M. (2017).

## Faculty

- College students are required to abide by codes of ethics, but it is increasingly challenging to identify what constitutes a breach of conduct (Ducar & Schocket, 2018, in Paterson, 2020, p. 4).
- Further stigmatization of MT will not limit student engagement with it, but cause them to use it more clandestinely

## Institution

- Lack of defined policy as it relates to academic integrity – falls on instructors to determine
- MT as a “crutch” – student dependency can affect employers post-graduation & have negative real-world effects

Blanket approaches are problematic.



# FUTURE CONSIDERATIONS

- We should keep language expectations in mind due to the continuing demographic shift toward a majority multilingual and multicultural society.
- Reform in assessment methods would mean differentiating between language proficiency and subject mastery
  - Or, potentially, **making specific spontaneous content/context-specific language production or communication skills part of explicit outcomes or curriculum (e.g. HCA program)**

What about workload and content area expertise?

What about entrance requirements?



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# DISCUSSION

- If Ss use MT, (and or rely on it), are they helping or hindering themselves to learn faster? How does context affect this? What's your opinion?
- Most EAL Ss at Camosun aim to immigrate/work in Canada post-graduation. Will they have the language skills to succeed if they are allowed to lean on MT during their programs? Are there program specific considerations, and if so, what are they?
- Faculty should consider what their requirements are around assessments and expectations and whether or not students can use MT. If not, why not? If yes, with what parameters?
- How can we use MT as a tool to help bring equity for multilingual students, but balance this with the demands of studying and living in an English-speaking dominant context?



# ESTABLISHING PEDAGOGICAL METHODS



## USING MT TO SUPPORT LEARNER AUTONOMY

Teachers can utilize MT to **support learner autonomy by providing choices** for how students complete tasks and demonstrate learning, teachers can cultivate greater agency and independence (Paterson, 2020, p. 7).

### Some possibilities for EAL students:

- **Present bilingually or complete a handout/task in their first language (LI)**, using MT to translate. Create peer-led language support materials.
- Use MT for **consolidating new learning and comprehension checks**. Intermittent opportunities to interact with new material in students' LI may contribute to deeper understanding and greater retention.
- Use MT to aid in **comprehending corrective feedback**.



# USING MT TO DEVELOP METALINGUISTIC AWARENESS

1. Negotiating with MT to aid **writing** increases students' **metalinguistic awareness of the L2**, which has been shown to be positively correlated with L2 proficiency (Enkin & Mejias-Bikandi, 2016, in Paterson, 2020, p. 8).
2. MT can help students become **more aware of different language patterns and how they are used**, including common word combinations (collocations), lexical choices, and connections between form and **meaning** (Bernardini, 2016, in Paterson 2020, p. 8).

## Some possibilities for students:

- **Compare equivalent words in L1**, how are the terms similar or different?
- Create **three versions of a response**, L1 version, unassisted English version and an MT-assisted version (can share online collaborative document for example).
- Navigate between the three versions to edit vocabulary and make corrections, and instructors can **view revision history** to gain insight.





## USING MT FOR VOCABULARY DEVELOPMENT

Using MT for vocabulary acquisition can aid in the learning of more advanced or **field-specific lexical items**.

### Some possibilities for students:

- Keep **personal bi/multilingual dictionaries** with translations
- Use **graphic organizers**, and **context-specific uses** that they can refer to when needed
- Collaborate with same LI peers to **create multilingual resources for classroom use** (e.g., diagrams, process maps, short summaries). (Paterson 2020, P. 8)



## USING MT TO SUPPORT L2 WRITING

1. Students use a **variety of writing strategies while engaging with MT**, including drawing on prior knowledge, inferencing, confirming hunches, paraphrasing, and editing (Alhaisoni & Alhaysony, 2017; García & Pena, 2011; Lee, 2020).
2. Need critical **consideration of the desired outcomes** of students' written academic output (e.g., lexicogrammatical accuracy vs. the ability to compose critical arguments) (Paterson, 2020, p.9).

3. One study found that the use of MT produced writing that contained **significantly more ideas and information** when compared to a self-translated version (i.e., student translation of an original L1 text into English) (Tsai, 2020).

### Some possibilities for students:

- Engage with MT in **brainstorming stages**, where it has been shown to help articulate more complex and developed ideas (Tsai, 2020).
- Use MT either in **editing** (i.e., student editing of the MT version) or **during the writing process** (e.g., comparing an MT version with a self-written version in English).



## FINAL DISCUSSION

- Should machine translation play a role in multilingual student success in their college courses? If yes, how?
- How can it be used to support more equitable and inclusive learning?
- Do you think the college should have a policy on the use of translation software? Why or why not?

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“The issue then is not whether instructors can prevent learners from consulting such technologies, but rather how to help learners understand that positive progress toward greater proficiency and ethical use of technologies are critical 21st-century skills” (Ducar & Schocket, 2018, p. 793).

## SUMMARY/ FINAL THOUGHTS

Restriction to English only constrains Ss in showing depth of knowledge and skills. MT can be a solution.

MT can offer a way to create equitable learning opportunities for our multilingual students.

We must carefully consider our expectations and course outcomes as they apply to the real world and applied skills.

We need to get creative in how we assess students and what our goals are for multilingual student success across content areas.

# HELP NEEDED WITH RESEARCH!

1. Faculty Survey link:

[https://camosun.qualtrics.com/jfe/form/SV\\_bdfY4JiGvBvK2vY](https://camosun.qualtrics.com/jfe/form/SV_bdfY4JiGvBvK2vY)



2. Share my letter to students with student survey link on course D2L
3. Be interviewed! 😊



THANK YOU!!

**HÍ, ~~Á~~ E TEL**

Good-bye to each other.



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