



An 'open secret': Is it time to engage more with our international students regarding their use of AI machine translation?

Alan Kean

Teaching Fellow in English for Academic Purposes

alan.kean@ed.ac.uk

With thanks to Philip Davies

philip.davies@ed.ac.uk



English Language Education

The screenshot shows the website for English Language Education at the University of Edinburgh. The browser address bar displays [ed.ac.uk/english-language-teaching](https://www.ed.ac.uk/english-language-teaching). The page features the university's logo and name at the top left, and a search bar at the top right. The main header area has a large image of three students with the text "#English Language Edinburgh". Below this is a teal navigation bar with the text "ENGLISH LANGUAGE EDUCATION". The left sidebar contains a menu with the following items: "English Language Education home", "Pre-sessional English language courses", "In-sessional academic language courses", "Other English language courses", "Programme Partnerships", "Student information", "About us", "Support for Staff", and "Sanctuary English". The main content area has a breadcrumb trail "Home > English Language Education" and a "Contact us" button. It features a section for "Pre-sessional English language courses" with a "prepare" graphic and a photo of students. To the right, there is a section for "Other English language courses" with a sub-section for "English language courses for visiting students and groups" and a button that says "Take a look at our other courses here >". At the bottom right, there is a "Student Information" section with links for "Matriculation Guide" and "Pre-arrival Academic Support".

<https://www.ed.ac.uk/english-language-teaching>



Outline

- Information about AI machine translation technology
- Our investigation into our students' use of AI MT
- Implications for teaching and how we can respond

AI-powered language tools have caught our attention due to

- impressive capabilities
- emergence seemingly without precedence



However, AI has been encroaching into various aspects of some students' academic practice for several years.



Translation technology

Text
Images
Documents
Websites

Detect language Japanese **English** Spanish
Chinese (Simplified) **Japanese** English

However, the early beliefs that the internet and the digital revolution would be a truly democratizing force, giving voices to the voiceless, have been shaken by the ways in which a small number of huge tech companies have gradually come to dominate the world wide web, hoovering up personal data and feeding it through algorithms to create targeted search results and advertising. And just like the internet landscape in general, there are ways in which open education has not quite been able to follow through on all of its early ideals. For example, there is little evidence that the 'finding, composing, adapting, reusing and sharing' model occurs on any meaningful scale (Beaven, 2018 p377), and freely available materials cannot help communities who have limited access to the internet and shortages of essential IT devices such as laptops, tablets and smartphones. In the course of this essay, while acknowledging the significant advantages that open education resources bring, I will argue that OERs still feature significant shortcomings and have a long way to go regarding stated intentions of decreasing global education inequality.

しかし、インターネットとデジタル革命が真の民主化の力となり、声なき人々に声を与えるだろうという初期の信念は、少数の巨大テクノロジー企業が徐々にワールドワイドウェブを支配するようになったことによって揺らいでいる。個人データを収集し、それをアルゴリズムに供給して、ターゲットを絞った検索結果や広告を作成します。そして、インターネット環境全般と同様に、オープン教育でも初期の理想をすべて貫くことができていない面があります。たとえば、「検索、構成、適応、再利用、共有」モデルが意味のある規模で行われているという証拠はほとんどなく (Beaven, 2018 p377)、無料で入手できる資料は、インターネットへのアクセスが制限され、情報が不足しているコミュニティを助けることはできません。ラップトップ、タブレット、スマートフォンなどの重要なITデバイス。このエッセイの中で、私は、オープンな教育リソースがもたらす大きな利点を認識しながらも、OERには依然として重大な欠点があり、世界的な教育格差を縮小するという表明された意図に関しては長い道のりがあると主張します。

Shikashi, intanetto to dejitaru kakumei ga shin no minshu-ka no chikara to nari, goe naki hitobito ni koe o atearudarou to iu shoki no shin'nen wa, shosū no kyodai tekunorojī kigyō ga jojoni wārūdowaidou-ebu o shihai suru yō ni natta koto ni yotte yuraide iru. [Kojin dēta o Show more](#)

1,146 / 5,000
Send feedback



How MT uses AI

AI powered 'neural MT' technology leverages sophisticated neural networks, statistical models, and rule based approaches to explore huge corpora and 'self-learn' in order to predict and translate text (Groves, 2020)

Limitations

Improved collocation and fluency output of MT may obscure inaccuracies in meaning (Castilho et al., 2017, p.126).

MT perpetuates biases, including gender bias, present in the analysed corpora (Vanmassenhove, Hardmeier, and Way, 2018, p.3003).





Concerns

Negative perceptions by educators due to beliefs it has an adverse effect on learning motivation and language development (Briggs, 2018).

Few HE institutions offer official guidelines or regulations regarding MT, which can lead to a lack of engagement between students and teachers in terms of academic practice (Groves and Mundt, 2021).





An 'open secret': Is it time to engage more with our students regarding their use of machine translation?

ABOUT THE AUTHOR



Alan Kean
University of Edinburgh, Teaching Fellow
(English for Academic Purposes)
alan.kean@ed.ac.uk

The quality of machine translation software has improved significantly and is now a commonly used tool by students on IFPs. Teachers, however, are generally reluctant to engage proactively with students on the issue. This small-scale research paper summarises interviews with two students on the topic of their usage of and attitudes towards machine translation software. The students' heavy reliance on MT suggest that IFP teachers and administrators may wish to consider a greater incorporation of MT into the academic discourse surrounding study skills and good academic practice.

The vast majority of students on international foundation programmes face the significant challenge of comprehending and transmitting information in a language other than their first. To help with this, many make use of machine translation (MT). In InForm issue 19, Groves (2020) detailed the huge advances in 'neural' MT technology, its widespread adoption by IFP students, and the implications for issues such as academic integrity and assessment.

Despite its increasing ubiquity, student use of MT is often perceived negatively by educators due to concerns that it can have an adverse effect on both learning motivation and language development (Briggs, 2018). However, few if any HE institutions offer official guidelines or regulations regarding MT. This can lead to student use of the technology becoming an 'open secret'. On IFPs, where the stakes are high and the students are often quite young (and therefore likely to have been using new generation MT software for much of their language learning experience) this issue is of growing importance.

A small-scale piece of action research

After noticing that students in my own IFP Academic English class would occasionally shield their screens in order to hide their use of MT, I decided to interview two students regarding their experience of using these tools. Specifically, I asked about the frequency with which they used MT, the process they followed, their attitudes towards the technology, whether or not they felt comfortable discussing MT with their teachers, and if they believed some kind of training on how to use MT effectively would be helpful.

The participants were two 19-year-old students from China (one male and one female) who had recently graduated from the University of Edinburgh's IFP.

Clearly, this is a very small sample and the views expressed may not be representative of the cohort at large. The intention was to learn more about how my own students use MT and consider how educators may wish to more fully engage with the issue.

Use of MT

Both students expressed positive attitudes towards MT and stated they had used it extensively throughout the IFP. Student A reported using MT for 'almost 90% of the programme', and both reported using the technology for a wide variety of reading and writing tasks. Various reasons were given for why they used MT, including time saving, difficulty of the reading requirements, and greater confidence when writing in L1. However, the use of MT was not a habit these two students developed on the IFP, each reported regularly using MT in their language studies since middle school.

In terms of their process, both interviewees described similar methods. Texts were first written in L1 and then translated to English using software such as Google Translate or Badu. Subsequently, the translated texts would be edited and improved with further language tools such as Grammarly or Quillbot, which offer suggestions on how to improve sentence level grammar and structure. The students would then use their own knowledge of both the topic and of academic writing to edit and improve the texts. Interestingly, student A reported that at this late stage of the process she often translated the text back into Mandarin in order to check and assess her work.

Despite having largely positive attitudes towards MT, both interviewees expressed some concerns regarding its use, including the danger of developing an over-reliance on the tools and of experiencing potential issues with accuracy.

MT as an 'open secret'

When the students were asked if they had felt comfortable talking about their use of MT with their teachers both answered that they had not. Student B stated 'I did not tell my teachers I'm using the machine translations. I think some students may be afraid because they think it's unofficial, and they think that teachers may say 'stop it'. Student A agreed with this, recalling 'I think all the teachers know that we use translation but we were not sure whether teachers support us to do so. I remember once a teacher told us that we'd better not use it because it's better to practise English'.

'MT workshops' for IFP students?

At the University of Ottawa, Bowker (2020) trialled workshops for international students in which they were trained to effectively edit their translated texts for clarity and academic register, recognise inaccuracies and bias in translated texts, and use MT in a manner which did not breach academic integrity (e.g. not translating the work of others without citing and referencing). When asked about the idea of offering a workshop like this on an IFP, student B reacted positively, stating 'yes, I think that will help students improve their skills to use translations because they could be more academic or more professional in their writing'. Student A, however, was a little more cautious, speculating 'perhaps it's good but I think most of the students are already good at it'.

Concluding thoughts

This small scale study confirmed how extensively some of my students had used MT throughout their IFP studies and showed they felt unable to discuss their use of MT with teachers. Moving forward, it seems unrealistic to ask IFP students, who may have been using MT for a number of years prior to starting their programme, to significantly change their study habits. As Loyet (2018) expresses, it blocking the use of MT discounts the reality in which our younger students operate: effective use of MT can, in fact, assist and not replace student effort.

Realistically, despite these advances in MT, IFP students are still likely to require subject specific knowledge and academic English tuition in order to produce high quality work. However, the use of MT is now so ubiquitous that we need to ask ourselves: how can we, at some level, acknowledge and incorporate student use of MT into our existing tuition? Perhaps the engagement could occur in the form of a workshop (as described by Bowker). An open two-way dialogue regarding how students can both effectively revise translated texts and maintain academic integrity may be a good place to start.

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Our action research

We surveyed 19 IFP students on their use of MT (e.g. Google Translate) for their learning.

Questions centred around the frequency of MT use, for what purpose and the perceived utility of it for learning.





Why we researched our students' use of MT

- Improved quality and availability of online MT
- Students seem to be utilising MT in their studies
- Do we as teachers need to engage with students more on the issue and provide advice and realistic guidelines in line with institutional values?





What our students said

- Nearly all students have used MT (>95%) with 75% using it sometimes or regularly
- Students report using MT extensively for reading activities (e.g. journal articles, course materials) but less so for writing.
- (>70%) thought that MT was helpful for their Foundation Studies
- Many students were unsure of talking about the use of MT with their teachers
- The majority agreed that MT should be incorporated into teaching

This research conducted with Philip Davies in 2023



Continued...

"...for international students, we are competing against native English speakers. No matter how good our English is, it will never reach the heights of a native speaker, so by nature there is some unfairness to us."

International Foundation Programme Student



Implications for our teaching

Students are using MT to facilitate their learning as they might any other (e.g. a dictionary) --> prohibiting its use is unrealistic (Loyet, 2018).

Students use MT as a 'second-audience' to hone their writing (Tsai, 2021, p. 1264) and to raise their awareness of academic writing etc.

Our students use MT less for writing, which might suggest they are reluctant to completely cede control to technology, which aligns with Zhou, Zhao and Groves's (2022) findings, and should be encouraged.





How can we respond in our teaching

Teaching activity

Academic language and literacy skills /
Promoted knowledge





How can we respond in our teaching

Teaching activity	Academic language and literacy skills / Promoted knowledge
Students translate their L1 writing into English then analyse and edit output texts	Proofreading, noticing of discourse (register, objectivity/criticality, hedging), genre analysis, critical reflection
Reflect on AI MT and its relationship with academic integrity	Critical thinking, awareness of good academic practice, referencing, integrating voice
Translating non-English sources into English	Preservation of meaning, Awareness of epistemic issues within HE
General training in applications of MT	(Course design reflects student practices)





Conclusion

Our study suggests, as do others, that MT translation is an integral study tool in many IFP students' academic practice. Therefore, we can and should engage with students on the key academic language and literacies skills that these tools can help develop.

The learning gains from these practices may also result in students being less likely to use MT (and other AI based technology) in ways that undermine academic integrity.





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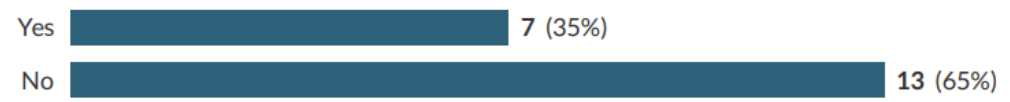
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Generative AI

8 Have you ever used any AI powered chat bots? (E.g. Chat GPT)



9 If yes, for which tasks did you use AI chat bots on the IFP?

Showing all 6 responses	
to write some outline or give some suggestion	1027574-1027556-107533234
Presentation	1027574-1027556-107533423
help me search academic source more quickly	1027574-1027556-107533217
Help me to search some materials and develop some opinions	1027574-1027556-107533379
help me to expand my mind in group discussion	1027574-1027556-107533288
when I needed to find information my presentation quickly	1027574-1027556-107533249



10 Do you believe AI chat bots can help you with your future academic studies? How?

Showing all 15 responses	
No.	1027574-1027556-107533223
No I don't believe because it narrows the scope for us to find the source and the way to express our points,so I don't think it gonna help	1027574-1027556-107533276
AI knows about nothing about intelligence.	1027574-1027556-107533193
I haven't try, but I think it can help.	1027574-1027556-107533257
Yes. Because it is useful in giving easy imformation just like google	1027574-1027556-107533234
Of source AI is developing rapidly in recent years we can use them to search sources quickly and we can add our argument on it	1027574-1027556-107533198
Maybe it can prove some ideas to me?	1027574-1027556-107533348
Sometimes, it can help me think about other ideas	1027574-1027556-107533423
yes give me more idea about my essay topic	1027574-1027556-107533217
Yes. Because it can judge some mistakes and find some opinions	1027574-1027556-107533379
yes. Same as what I've mentioned above.	1027574-1027556-107533288
Probably. AI is the main stream of our technological development. We shouldn't banned them but encounter them more welcoming. Indeed, it can help us more efficiently like searching sources and checking my writing mistakes.	1027574-1027556-107533235
Maybe AI chat can provide ideas for my academic study.	1027574-1027556-107533192
yes	1027574-1027556-107533249
I do not enough about them to answer this question. They may fully write essay about any topic. This may be "good" for students, but awful for educational system.	1027574-1027556-107533195