Rationale for Tutoring Guidelines Regarding ELL Students

Introduction

As part of Dr Liza Bolton's wider project to explore how the Department of Statistics can strengthen support for English language learner (ELL) students, I developed a set of tutor guidelines for interacting with ELL students informed by both pedagogical theory and the lived experiences of our tutoring team. The set of guidelines is presented on a poster, accompanied by this document, which explains the evidence and reasoning behind each recommendation, providing a record of the research and decision-making process for internal use. The sections below are ordered in the same sequence as the guidelines in the poster.

Practices to avoid

Don’t assume

This guideline encourages tutors not to make assumptions about students' knowledge background and capabilities. Tutors should first assess the student's understanding before adjusting their explanations to the student's level.

I based this guideline on the socio-cultural approach of cognitive development, specifically Vygotsky's concept of the zone of proximal development (ZPD): the gap between what a learner can do independently and what they can accomplish with support, where effective teaching occurs when educators identify the gap and the right amount of scaffolding required for students to cross that gap (Shabani, Khatib, & Ebadi, 2010). Additionally, by not assuming students' capabilities and thus seeing students as individuals, tutors start to build unique interpersonal connections with students, which was highlighted by the literacy tutors Knouzi interviewed (2012) as an essential factor that facilitated the development of a ZPD, and is also related to the relational learning anchor in the University of Auckland's Signature Pedagogical Practices.

This guideline is also supported by anecdotal evidence, as respondents in our project's two tutor surveys listed the strategy of regularly checking in with ELL students as one of the helpful approaches in supporting ELL students.

Don’t ask leading questions

The results from our surveys reveal that uncertainty about whether the student actually understood what the tutor was explaining is one of the challenges in interacting with ELL students. This guideline aims to support tutors in assessing ELL students' understanding through effective questioning.

While ELL students' developing English competency may pose a communication challenge, tutors should still avoid simple, verification-style questions, such as "Does it make sense?" that do not require students to explain or demonstrate their thinking (Graesser & Person, 1994). Graesser and Person (1994) suggest that asking open, explanation-seeking questions can create more opportunities for genuine reasoning. Adapting this to our ELL context, our statistics tutors can balance the cognitive burden and learning potential of open-ended questions by asking short concept check questions that require students to provide brief descriptions or explanations that link back to what the tutor had just covered.

Practices that depend on the situation

Using translation tools

Respondents from our tutor surveys also noted that some ELL students would use Google Translate to translate entire pages of course content. Jolley and Maimone's (2020) overview of the research timeline and developments in machine translation (MT) and its implications for language teaching shows that while MT technology itself has improved in terms of accuracy, study results and opinions were divided on whether

MT have lasting effects on learning a new language: positive impact on language learning happened when students were trained in responsible MT use by language teachers.

Due to one, current University assessment regulations only allow the use of translation for words and phrases, and two, the current feasibility, or lack thereof, of tutors or the Department undertaking the role of training ELL students to use MT tools strategically, I recommend that, at this stage, tutors should at least be aware that MT tool use should be discouraged when students use it to translate entire pages of course content.

Using bridging languages

Respondents from our tutor surveys who were also ELL students themselves shared that they had, on occasion, used a shared language with an ELL student because the student asked them to, or because they saw the student struggling. Pierson, Clark, and Brady's (2021) study, which investigated the use of translanguaging — engaging with content knowledge through multiple languages and leveraging students' own linguistic resources — in the context of teaching scientific modelling, showed that this multimodal learning method enhanced both understanding and engagement in the study's multicultural sixth-grade classroom.

In the New Zealand statistics education context, Arnold et al. (2011) investigated how multimodal learning, through the use of well-designed visualisations and gestures, impacts learning in high school classrooms. The results show a positive impact of using this approach for learning about sampling variation. As translanguaging at the level of Pierson, Clark, and Brady's (2021) study is not reasonable to expect from our ELL tutors, this guideline of using shared language for encouragement aims to acknowledge the linguistic diversity of ELL students and build rapport with them, again tying back to relational learning.

Practices to implement

Pausing

The rationale below is based on Christy's research on ELL strategies in the classroom.

Another tutoring guideline intended to support tutors in communicating with ELL students is that tutors can add pauses when speaking to make comprehension easier for ELL students. Blau's (1990) investigation found that slowing speaking speed did not improve ELL students' understanding, but adding a three-second pause at clause or phrase boundaries did, as it broke long sentences into easier-to-understand components. Lesser and Winsor (2009) also argued that pausing has the benefit of accounting for the time ELLs need to perform a roundabout translation in their heads — from English input to their native language for comprehension before producing English output.

Using visual guides

The practice of using visual guides, such as drawing diagrams, to support explanations is already employed by the tutor respondents in both surveys. In terms of theory, visualisation is another form of multimodal learning as discussed above. Konold and Kazak (2008) theorised, through testing a modelling component in Tinkerplots, that the mechanism behind visualisations, and dynamic, interactive visualisation tools in particular, is that they make the abstract, such as the core idea of signal-and-noise, concrete by modelling the creation of distributions over time.

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