

## TIA: A text input analysis tool

TIA is a cross platform software tool written in HTML5 and javascript which assists in the efficiency analysis of minority language keyboard layouts. The tool is an in browser application in which users can type various languages. The application records the time of the key strike and release, the key struck, and character values which can then be used for keyboard layout analysis. Characters, keyboard touch points and time differentials follow metrics in previous text input research which focuses on majority language (Bellman & MacKenzie 1998, Castellucci & MacKenzie 2013, MacKenzie 1992, 2002, 2007, MacKenzie & Soukoreff 2002, Soukoreff & MacKenzie 2001, 2003a, b). In previous applications and methods of counting characters for text input studies diacritics are often not independently considered for language specific relevance. TIA addresses this issue by focusing on keystroke analysis - all keystrokes even deleted characters.

Designing successful keyboard layouts requires intuitive and efficient layouts. Perceptions about the need to be able to use text based digital communication devices has sufficiently challenged language communities leading some to change their orthographies (Boerger 2007: 133: South Pacific, Cooper 2005: 149, 160: Central Asia, Jany 2010: Americas). TIA can help orthography consultants, and language communities have a data based view on the typing/text input task. It allows the community to ask the question: “does our orthography need redesigned, or do we just need a simpler text input method?”

### References:

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