ASL fingerspelling is challenging for L2 learners\(^1\). Student performance on comprehension tasks is better when the fingerspelling signal is modified to mask the transitions (time period between holds), as opposed to the hold (time periods where the entire hand configuration is stable), portion of the utterance\(^3\).

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<td>Fingerspelling identification task in four conditions: clearA, holds only, transitions only, clearB</td>
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### Intervention programs

**Explicit training** teaches about the structure of fingerspelling, variation frequently found in fingerspelling productions, overall shape.

(a) unmasked stimuli, (b) transitions masked, (c) holds masked, (d) Movement envelope\(^4\) schematic of the word S-A-F-E-W-A-Y, (e) Variation in productions of -Y- depending on position in the word, (f) Variation in productions of -I- based on phonetic context, (g) Coarticulation of U-R bigram.

**Implicit training** (re)teaches fingerspelling as it is taught in students’ textbooks including production of double letters.

### Results: Exp 1

* Students perform better in holds-only condition\(^3\)

* Additional findings reveal poorer student performance on items with letters with non-default palm orientation e.g., misinterpreting -P- as -K-

* Can students be trained to improve fingerspelling comprehension with an explicit intervention training as has been the case for spoken language-learning\(^5,6,7\)?

### Results: Exp 2

* The patterns of perception are clear: holds-only is significantly better than transitions-only.

* Words with letters with non-default orientations are perceived less accurately.

* There is a striking trend of improvement over the course of the semester in the explicit training group that is not seen in the implicit training group.

* Just as phonetic instruction has been effective in improving English perception\(^5,6,7\), so too should ASL curricula incorporate this type of formal phonetic instruction.

### Summary

- **References:**