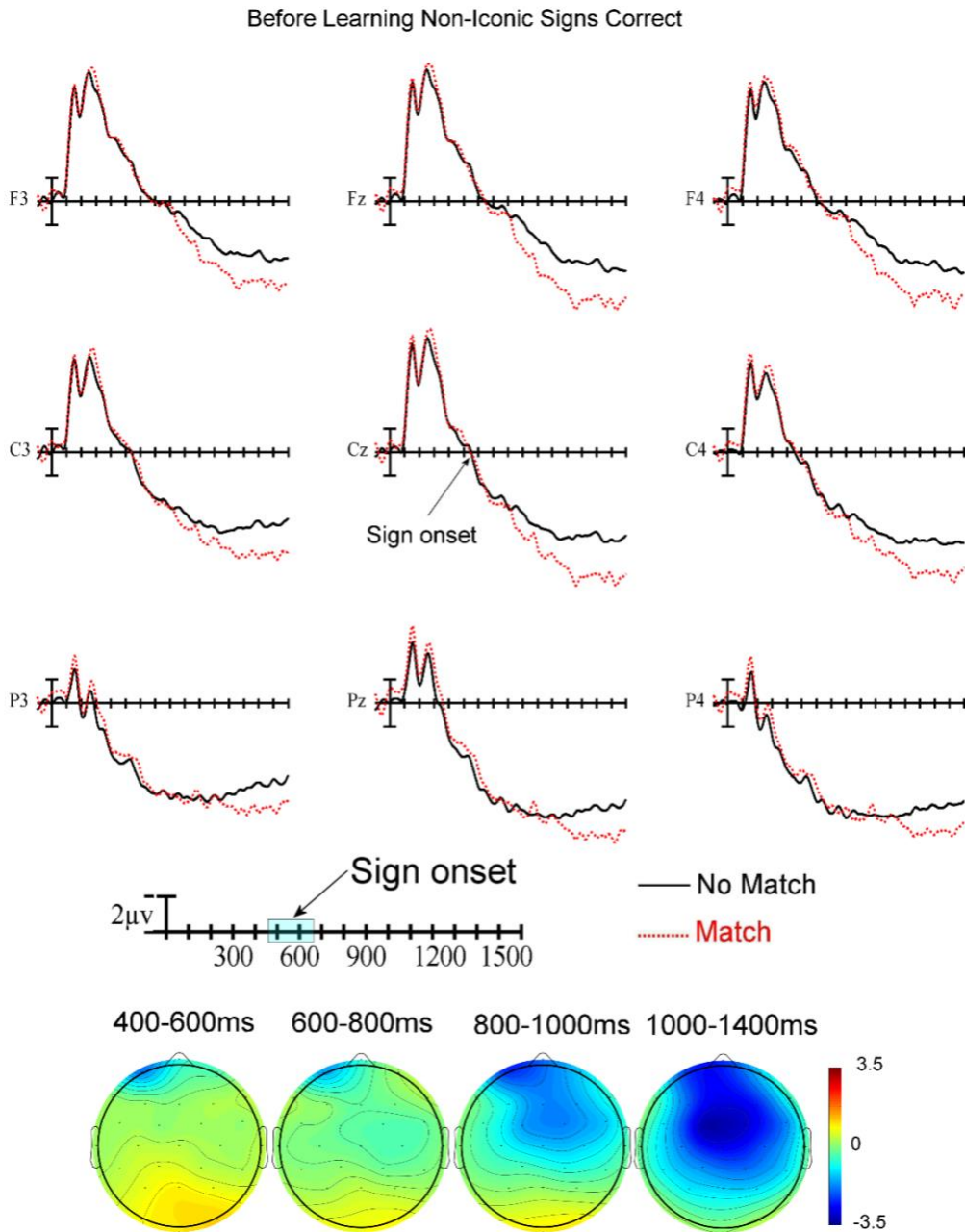


Supplementary Figure 1. Electrode montage and nine analysis sites (sites connected with lines)



Supplementary Figure 2. Top) ERPs to non-iconic ASL signs before learning at the 9 electrode sites used in the ANOVAs. Bottom) Voltage maps formed by subtracting no-match trial ERPs from match trial ERPs in the four latency ranges. **Results:** There were no significant main effects (all p s > .41) from 400-600ms, 600-800ms, or 800-1000ms. There were also no significant interactions (all p s > .23) in the time-windows 400-600ms or 600-800ms. There was a significant

interaction between Match and Anteriority between 800-1000ms ($F(2,62) = 6.3, p = .0126, \eta_p^2 = .0025$). In the 1000-1400ms time-window there was a main effect of Match ($F(1,31) = 13.2, p = .001, \eta_p^2 = .0222$) as well as a significant interaction between Match and Laterality ($F(2,62) = 3.82, p = .0331, \eta_p^2 = .0005$).

D' results

There was a significant main effect of Learning ($F(1,31) = 122.95, p < .001, \eta_p^2 = .2955$); main effect of Matching ($F(1,31) = 32.3, p < .001, \eta_p^2 = .0476$); main effect of Iconicity ($F(1,31) = 131.6, p < .001, \eta_p^2 = .0758$). As well as significant interactions between Learning and Matching ($F(1,31) = 11.55, p = .0019, \eta_p^2 = .031$); between Learning and Iconicity ($F(1,31) = 131.6, p < .001, \eta_p^2 = .0758$); between Matching and Iconicity ($F(1,31) = 23.82, p < .001, \eta_p^2 = .0212$); and between Learning, Matching and Iconicity ($F(1,31) = 23.82, p < .001, \eta_p^2 = .0212$).