

**Supplemental Material S3.** Descriptive statistics for weekly usage, words encountered, and vocabulary levels in Phase 5 pilot study of DictionarySquared 2.0.

| <b>Variable</b>                     | <b><i>N</i></b> | <b><i>M</i></b> | <b><i>SD</i></b> | <b>Min</b> | <b>Max</b> |
|-------------------------------------|-----------------|-----------------|------------------|------------|------------|
| <b>Active minutes</b>               |                 |                 |                  |            |            |
| Week 1                              | 111             | 19.9            | 17.1             | 0.0        | 79.1       |
| Week 2                              | 77              | 23.3            | 21.3             | 0.0        | 87.0       |
| Week 3                              | 196             | 27.3            | 24.4             | 0.0        | 83.2       |
| Week 4                              | 194             | 29.7            | 23.9             | 0.0        | 91.2       |
| Week 5                              | 123             | 28.5            | 26.4             | 0.0        | 87.8       |
| Week 6                              | 18              | 29.6            | 32.6             | 0.0        | 100.7      |
| Week 7                              | 78              | 27.1            | 25.6             | 0.0        | 121.4      |
| Week 8                              | 70              | 17.1            | 18.7             | 0.0        | 79.8       |
| Week 9                              | 66              | 18.8            | 20.0             | 0.0        | 76.6       |
| Week 10                             | 34              | 27.8            | 23.8             | 0.0        | 93.5       |
| Week 11                             | 48              | 19.0            | 23.0             | 0.0        | 82.6       |
| Week 12                             | 21              | 20.6            | 23.1             | 0.0        | 77.6       |
| Week 13                             | 5               | 26.9            | 30.2             | 1.7        | 68.4       |
| Week 14                             | 11              | 15.3            | 24.2             | 0.0        | 79.9       |
| Week 15                             | 9               | 16.6            | 24.0             | 0.0        | 75.2       |
| Week 16                             | 3               | 32.6            | 38.0             | 2.0        | 75.1       |
| Week 17                             | 0               | 0               | 0                | 0          | 0          |
| Week 18                             | 0               | 0               | 0                | 0          | 0          |
| Week 19                             | 2               | 12.5            | 10.7             | 4.9        | 20.1       |
| Week 20                             | 0               | 0               | 0                | 0          | 0          |
| <b>Total values</b>                 |                 |                 |                  |            |            |
| Active minutes                      | 241             | 110.6           | 128.9            | 0          | 1,070      |
| Words studied <sup>1</sup>          | 260             | 34.2            | 62.6             | 0          | 804        |
| Words known (reviewed) <sup>2</sup> | 260             | 52.8            | 70.1             | 0          | 494        |
| Words skipped <sup>3</sup>          | 260             | 0.7             | 3.8              | 0          | 44         |
| Total words encountered             | 260             | 86.9            | 112.3            | 0          | 889        |

*Note.* Students were assigned to use the software for the fall semester. Some students continued to use the site after the assignment ended. Usage minutes are reported for all weeks that students had access to the site prior to posttest administration. The definitions of some variables differ from Phase 3 (DictionarySquared 1.1) to Phase 5 (DictionarySquared 2.0). See footnotes.

<sup>1</sup>Words studied on DictionarySquared includes (a) the number of words rated as “unknown” when first presented and (b) words with incorrect responses on the revised knowledge verification task. These words were reviewed after study.

<sup>2</sup>Words known (reviewed) on DictionarySquared includes (a) the number of words rated as “known” when first presented and (b) words with correct responses on the revised knowledge verification task. These words were still reviewed.

<sup>3</sup>Words skipped on DictionarySquared is the number of words skipped when presented for study or review. This value is low because students had to spend coins to buy skips.