

Typing and Data Entry Calculation

Score Calculations for Typing & Data Entry Questions

PeoplogicaSkills provides both Typing Questions and Data Entry Questions (special purpose typing) to test candidates' typing and data input abilities. Data Entry Questions include 10-Key Data Entry and Contact Data Entry. Typing Questions are divided into four subjects: Generic Typing, Business Text, News Text, and Spanish Text. You can also create your own typing and data entry questions, by providing any content you would like. These questions will only be available in your test centre, and no other PeoplogicaSkills clients will be able to view them.

Typing questions have three levels of complexity and length. If you set a time limit for a test that includes Typing questions, the limit set per test will not apply to the Typing questions, since these are timed separately.

When you create a Typing question, PeoplogicaSkills provides a suggested time limit to be allocated to that question. This value is calculated for a typing speed of 40 words per minute for a sample containing words that contain up to six characters. Since the actual text may vary, you may want to modify the recommended time limit.

The scoring engine recognizes four types of errors:

- Capitalization errors -- for example, typing "As" instead of "as";
- Inserted words- - extra words inserted between the question's original words;
- Misspelled words -- for example, typing "wrod" instead of "word";
- Missing words- - word that were not typed.

Each word that triggers one of the rules above is considered wrong. Accuracy is the percent of the words that are typed correctly. The WPM (words per minute) parameter is calculated by counting the number of words typed in the time elapsed between selecting the Start Typing button and either selecting the Finished button or the time limit expiration. This is a real parameter. The KSPH (key strokes per hour) parameter represents an approximation of the number of keys the test-taker would strike during an hour if they were to continue at the same speed. This is not a real parameter, but an approximation.

Please note that punctuation is not independent, but is considered part of the text: for example, "Users, take care!" is considered to contain three words: "Users,", "take", and "care!". However, when the punctuation is separated by spaces for example: "Math -- her favourite subject", we have five words, because "--" is considered to be a separate word.

Another rule is that missing words that were never typed, because the time expired or the test-taker stopped typing, are not considered to be errors. The engine calculates the score on the slice of text that was actually typed, not on the entire original text.

The application does not allow for cutting and pasting from another application, but portions of the text already typed in may be copied later in the same text. This can provide information about the pattern-matching abilities of the test-taker and, at the same time, it does not allow candidates to cheat.

PeoplogicaSkill's methods of calculating typing score metrics are described below.

Terminology:

* actual word = any normally recognizable word (including associated punctuation, excluding spaces)

Please note that punctuation is not independent, but is considered part of the text: for example, "Users, take care!" is considered to contain three actual words: "Users,", "take", and "care!". However, when the punctuation is separated by spaces for example: "Math -- her favourite subject", we have five words, because "--" is considered to be a separate word.

* standard word = 5-char word (including spaces)

For example, "Users, take care!" is considered to contain four standard words: "Users", " ,tak", and "e car" and "e!".

1. Standard Gross WPM

By counting how many standard words are typed and dividing that figure by the number of minutes of the test, a standard gross words per minute score is obtained.

300 characters, including spaces

300 divided by 5 = 60 words

2 minutes test

60 divided by 2 = 30 wpm

2. Errors

An error is an actual word typed in error.

The scoring engine recognizes four types of errors:

- Capitalization errors -- for example, typing "As" instead of "as"; (counted as 0.5 errors)
- Inserted words- - extra words inserted between the question's original words; (counted as 1 error)
- Misspelled words -- for example, typing "wrod" instead of "word"; (counted as 1 error)

Missing words that were never typed, because the time expired or the test-taker stopped typing, are not considered to be errors. The engine calculates the score on the slice of text that was actually typed, not on the entire original text.

Each word that triggers one of the rules above is considered wrong.

3. Standard Net WPM

Standard Net WPM is calculated by multiplying the Standard Gross WPM by Accuracy.

300 characters, including spaces

300 divided by 5 = 60 words

2 minutes test

60 divided by 2 = 30 wpm (standard gross WPM)

accuracy = 90%

standard net WPM = $30 * 90 / 100 = 27$

4. Accuracy

The Accuracy gives the percent of wrong words in a given text.

Accuracy is calculated by taking the number of correct actual words typed, divided by the number of actual words typed, and then multiplied by 100 to provide a percentage.

30 actual words typed

3 actual words typed in error

accuracy = $((30 - 3)/30) * 100 = 90\%$

5. Percent Complete

Percent complete is calculated by taking the number of actual words typed, divided by the number of actual words the reference text contains, and then multiplied by 100 to provide a percentage.

40 actual words included in the typing reference text

30 actual words typed by the applicant (either the time expired or he stopped typing)

percent complete = $(30/40)*100 = 75\%$

6. Actual Gross WPM

By counting how many actual words are typed and dividing that figure by the number of minutes of the test, an actual gross words per minute score is obtained.

30 actual words typed

2 minute test

30 divided by 2 = 15 wpm

7. Actual Net WPM

Actual net WPM is calculated by multiplying the actual gross WPM by accuracy

30 actual words typed

2 minute test

actual gross WPM = 15

3 actual words typed in error

accuracy = 90%

actual net WPM = $(15 * 90)/100 = 13.5\%$

8. Keystrokes per Minute

The KSPM (key strokes per minute) parameter represents an approximation of the number of keys the test-taker would strike during a minute if they were to continue at the same speed. This is not a real parameter, but an approximation.

9. Keystrokes per Hour

The KSPH (key strokes per hour) parameter represents an approximation of the number of keys the test-taker would strike during an hour if they were to continue at the same speed. This is not a real parameter, but an approximation.