

Does language familiarity affect typing speed?

Sophia Shin¹, Christopher Doucette¹

¹ Lexington High School, Lexington, Massachusetts

SUMMARY

Typed responses have been used as a way to assess an individual's thinking skills and creativity in the field of cognitive psychology. However, there is very little prior research on what could affect an individual's typing speed. We filled this void by examining the relation between language familiarity and typing speed. We hypothesized that individuals who possess a higher degree of familiarity with a particular language would demonstrate faster typing speeds when typing in that language compared to a less familiar language. We collected data from participants at a local high school who underwent typing tests in both English and Latin, with their typing speeds recorded and analyzed. We found that participants exhibited slower typing speeds when typing in Latin compared to English, and that participants with no Latin experience exhibited a greater disparity between English and Latin typing speeds than those with Latin experience, underscoring the influence of word familiarity on typing performance. However, further analysis indicated that the level of Latin education among participants does not significantly affect their typing speed in Latin. These findings offer valuable insights into the cognitive aspects of typing and the impact of language familiarity on typing proficiency.

INTRODUCTION

Typing is a skill that is widely used in modern society. From creative writing to computer coding, the speed at which one types dictates the efficiency at which one's ideas can be expressed as text. In psychology research, divergent thinking is a cognitive ability that entails generating multiple ideas to a given problem and is used to assess creativity (1). There is concern regarding the participant's typing speed as a possible confounding variable in computer-based divergent thinking assessments, where participants must input as many answers as they can in a given time limit (2). Typing speed has been shown to have low correlation with handwriting speed, so divergent thinking assessments could potentially yield different results on paper versus on a computer (3). However, there is very little prior research on the psychology of typing and so the cognitive skills that drive this process are not well understood. We aimed to fill this void by examining the relationship between language familiarity and typing speed. We hypothesized that individuals who possess a higher degree of familiarity with a particular language would demonstrate faster typing speeds in that language, compared to less familiar languages. We collected data from

participants at a local high school who performed typing tests in both English (American) and Latin (Classical). We chose Latin for the comparison because it uses the same alphabet as English, and the Latin typing test we employed does not feature diacritics (i.e., marks added to letters, such as accents or tildes) unlike other typing tests, such as Spanish or French. This minimizes confounding effects from participants being unfamiliar with the locations of characters on the keyboard. Latin is also unique in that it is a "dead" language, so exposure to the language in daily life is very limited in the United States. This creates a clearer divide between those who are familiar with Latin and those who are not. We tested whether English-speaking high school students in the United States would be significantly slower at typing in Latin compared to typing in English. Additionally, we tested whether increased exposure to Latin would reduce the disparity in typing speed between English and Latin.

Our first hypothesis was that individuals demonstrate greater typing proficiency in English than in Latin because they are more accustomed to reading familiar English words, leading to divergences in typing speeds between the two languages. Reading unfamiliar words may create an irregular flow of visual input, leading to slower typing (4). Specifically, we asserted that the mean words per minute (WPM) for English typing is higher than or equal to the mean WPM for Latin typing.

The first hypothesis guided us to the next hypothesis that increased familiarity with Latin reduces the disparity in typing speed between English and Latin. We anticipated that participants with at least one year of Latin learning would exhibit similar typing speeds for both languages, having been exposed to a greater Latin vocabulary and the structures of Latin words. We compared typing speed data for participants who have and have not studied Latin. If language familiarity played a role, we expected that individuals with Latin exposure would show a less pronounced disparity in typing speeds between English and Latin, compared to individuals with no Latin exposure. Based on the above notion, our second hypothesis posited that the difference in WPM between English and Latin would be smaller for the Latin sample compared to the No-Latin sample.

We found evidence that participants in our sample exhibited slower typing speeds when typing in Latin compared to English, and that participants with no Latin experience exhibited a greater disparity between English and Latin typing speeds than those with Latin experience. These observations underscore the significance of word familiarity in the context of typing proficiency.

		No-Latin Group	Latin Group				Total
			Latin I	Latin II	Latin III	Latin IV	
No. of Participants		57	36	29	22	9	96
Grade	Freshman (9 th)	19 (33%)	26 (72%)	2 (7%)	2 (9%)		30 (31%)
	Sophomore (10 th)	17 (30%)	6 (17%)	21 (72%)	3 (14%)		30 (31%)
	Junior (11 th)	15 (26%)	3 (8%)	3 (10%)	14 (64%)	1 (11%)	21 (22%)
	Senior (12 th)	6 (11%)	1 (3%)	1 (3%)	2 (9%)	7 (78%)	11 (11%)
	Unknown			2 (7%)	1 (5%)	1 (11%)	4 (4%)
English Fluency	Native Speaker	49 (86%)	27 (75%)	27 (93%)	19 (86%)	8 (89%)	81 (84%)
	5 or more Years	6 (11%)	7 (19%)	2 (7%)	2 (9%)	1 (11%)	12 (13%)
	4 Years		1 (3%)		1 (5%)		2 (2%)
	3 Years	1 (2%)	1 (3%)				1 (1%)
	Less than 1 Year	1 (2%)					
Other Foreign Languages	Spanish	31 (54%)	1 (3%)		1 (5%)		2 (2%)
	French	14 (25%)	2 (6%)	1 (3%)	1 (5%)		4 (4%)
	Mandarin	7 (12%)	2 (6%)				2 (2%)
	German	1 (2%)			1 (5%)		1 (1%)
	Italian				2 (9%)		2 (2%)
	American Sign Language	2 (4%)					

Table 1: Demographic Information of Participants. Demographic information of the sampled participants, such as grade, other foreign languages learned, and the fluency of English. The categories for "Other Foreign Languages" are not mutually exclusive, and some participants are counted multiple times in this section.

RESULTS

We conducted our experimental investigation using data constructed from a local high school, consisting of a No-Latin sample and a Latin sample. The No-Latin sample consisted of participants who had no Latin education or experience at all, while the Latin sample consisted of participants who had engaged in at least one year of Latin study. The final data consisted of 153 participants, with 57 students constituting the No-Latin sample and 96 students constituting the Latin sample, representing approximately 6.4 percent of the entire student body of 2,383 students.

We collected demographic information from the participants in our sample (Table 1). Participants in the No-Latin sample were representative of the whole school body. The No-Latin group consisted of 19 freshmen (33%), 17 sophomores (30%), 15 juniors (26%), and 6 seniors (11%). 49 participants (86%) were native English speakers and 6 participants (11%) had 5 or more years of English practice. More than half of the participants (54%) had exposure to Spanish as a foreign language, and a quarter had exposure to French (25%). Two participants had experience with American Sign Language. Participants in the Latin group had similar demographics. The Latin group consisted of 30 freshmen (31%), 30 sophomores (31%), 21 juniors (22%), 11 seniors (11%), and 4 of unknown grade (4%). 81 participants (84%) were native English speakers and 12 participants (13%) had 5 or more years of English practice. The two samples in our experiment, the No-Latin group and Latin group, showed similar distributions in demographics of grade and English fluency. For the different Latin levels, it was not surprising to

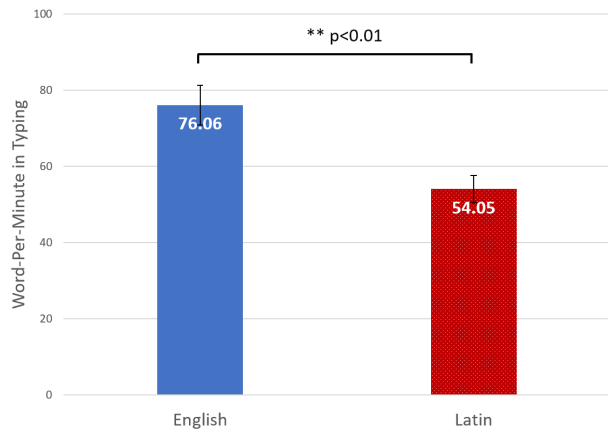


Figure 1: Words Per Minute Difference in English and Latin Typing: The mean words per minute in English (blue) and Latin typing (red). The Y-axis represents the words per minute in typing. Error bars represent a 99 percent confidence interval. A t-test was conducted to identify any statistically significant difference in typing speed between English and Latin. ** denotes a statistically significant difference with p-value less than 0.01.

see that most freshmen were in Latin I, sophomores were in Latin II, juniors were in Latin III, and seniors were in Latin IV, following the curriculum sequence. In the questionnaire we did not specifically ask participants for the number of years spent studying Latin. However, due to the nature of the curriculum, we assume most Latin I students spent 1 year studying Latin, most Latin II students spent 2 years studying Latin, and so on. There was one adult participant who had taken college/graduate level Latin courses. We grouped this participant with the Latin IV participants for our analysis. We did not observe a significant difference in our results when this participant was included versus excluded.

We measured the effect of language familiarity on typing speed by comparing the typing speeds of participants in two distinct languages: English and Latin. We found that, for all participants, the mean WPM in English typing was 76.06 while mean WPM in Latin typing was 54.05, indicating that participants typed English faster than Latin. This difference was statistically significant ($p < 0.01$, Figure 1) and supported our first hypothesis that language familiarity plays a role in typing speed.

We summarized the main statistical results of the study in table and graph format (Figure 2, Table 2). The mean difference and the scaled percent difference in WPM between English and Latin typing for the No-Latin sample were 24.7

Sample	Sample Size	Data	Mean	Standard Deviation	Q1	Median	Q3
No-Latin	57	Raw	24.7	10.390	18	24	30
		Scaled	0.312	0.085	0.269	0.309	0.368
Latin	96	Raw	20.4	12.047	13.5	20	28
		Scaled	0.257	0.131	0.203	0.276	0.330

Table 2: Comparing No-Latin and Latin Groups: Summary statistics of the raw and scaled words per minute (WPM) for the No-Latin sample and Latin sample. Raw data is WPM in English typing minus WPM in Latin typing, and scaled data is WPM in English typing minus WPM in Latin typing scaled by WPM in English typing.

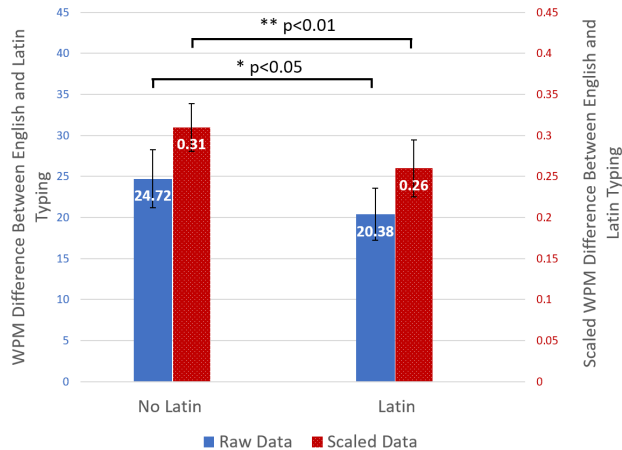


Figure 2: Disparity in WPM Between No-Latin and Latin Groups. Statistics of the raw and scaled words per minute (WPM) differences for the No-Latin sample and Latin sample. The Y-axis represents WPM difference between English and Latin typing. The raw data means are represented by the blue bars, and the scaled data means are represented by the red bars. The formulas used to obtain the raw and scaled data are: $RAW = WPM_{English} - WPM_{Latin}$ and $SCALED = (WPM_{English} - WPM_{Latin}) / WPM_{English}$. Error bars represent a 99 percent confidence interval. One-tailed t-tests were conducted to identify any significant differences in typing speed between English and Latin. * denotes a statistically significant difference with p-value less than 0.05. ** denotes a statistically significant difference with p-value less than 0.01.

and 31.2%, respectively. For the Latin sample, the mean difference and the scaled percent difference in WPM were 20.4 and 25.7%, respectively. One-tailed t-tests (assuming unequal variances) indicated that both the raw and scaled percent differences between the No-Latin and Latin samples were statistically significant (raw: $p < 0.05$, scaled: $p < 0.01$). This strongly suggested that increased familiarity with the Latin language reduces the disparity in typing speed between English and Latin, supporting our second hypothesis.

We further examined the potential impact of the duration of Latin language exposure among participants within the Latin sample. The mean differences (scaled percent differences) in WPM between English and Latin for participants in Latin I, Latin II, Latin III, and Latin IV were 20.13 (26.2%), 19.79 (24.6%), 22.77 (28.0%), and 17.33 (20.9%), respectively (Table 3). We found no significant differences in means between any two groups when we compared Latin I vs. Latin II, Latin I and II combined vs. Latin III, and Latin I, II, and III combined vs. Latin IV using t-tests (Figure 3). We also applied one-way ANOVA (analysis of variance) to the raw mean differences in WPM to test whether at least one of the means in the four different Latin level groups is not equal to the others (Table 4). We found that there was no statistically significant difference among the four different Latin level groups, and so we could not conclude that the number of years of Latin exposure (up to four years) significantly affected the disparity between English and Latin typing speed. We found the same results when we applied ANOVA to the scaled data (unpublished).

DISCUSSION

In this study, we examined the relationship between language familiarity and typing speed among students at a

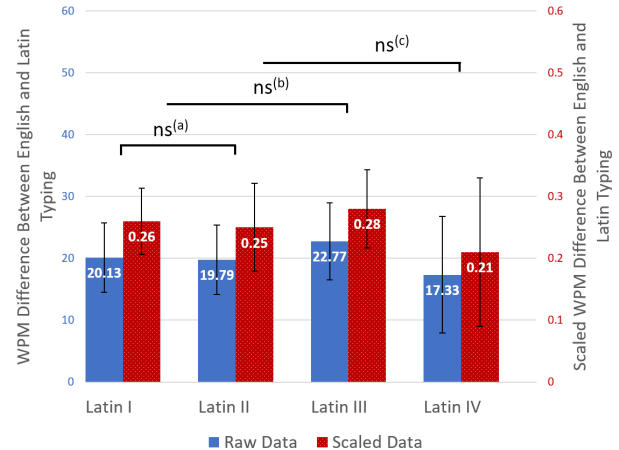


Figure 3: Typing Speed for Four Different Latin Groups. Statistics of the raw and scaled words per minute (WPM) differences for four different Latin level groups. The Y-axis represents WPM difference between English and Latin typing. Raw data is WPM in English typing minus WPM in Latin typing, and scaled data is WPM in English typing minus WPM in Latin typing scaled by WPM in English typing. Error bars represent a 99 percent confidence interval. T-tests were used to identify any significant differences in typing speed between two groups. ns^(a) denotes no statistical significance in WPM difference between Latin I vs. Latin II groups. ns^(b) denotes no statistical significance in WPM difference between Latin I and II combined vs. Latin III groups. ns^(c) denotes no statistical significance in WPM difference between Latin I, II, and III combined vs. Latin IV groups.

local high school. We found that participants in our sample exhibited significantly slower typing speeds when typing in Latin compared to English. This suggests that word recognition is a key factor in the context of typing proficiency. Typing-based tests, such as those used in psychology to assess cognitive abilities, must take participants' linguistic background as a potential confounding variable. We also found that there was a significant difference in typing performance between participants with no previous Latin exposure and those with Latin exposure. A further investigation revealed that there was no significant sign of improvement when comparing Latin students of different levels (I–IV). It is possible that the level of Latin familiarity does not increase significantly from level I through level IV, or that higher language familiarity beyond an introductory level does not produce a lower disparity in typing speed. Future studies with larger sample sizes are necessary to further verify these results, especially with the number of observations in Latin IV being only nine.

While we employed a random sampling procedure to avoid any selection bias when selecting the 240 students to invite to participate, we note that there still exists a self-selection bias in our study. Out of the 240 randomly selected students, those who volunteered to take part in our experiment may have some common characteristics that were not controlled in our experiment. Students who are more confident in their typing skills may be more likely to participate. In contrast, students who are busier may be less likely to participate. While we treated Latin familiarity as an independent variable, choosing to take Latin as a foreign language class may not be completely independent from other variables present in this study. Among high school foreign language classes, Latin is not a popular choice. Students who choose to study Latin

Sample	Sample Size	Data	Mean	Standard Deviation	Q1	Median	Q3
Latin I	36	Raw	20.13	13.125	12.5	17.5	28
		Scaled	0.262	0.125	0.184	0.28	0.344
Latin II	29	Raw	19.79	11.748	13.75	21.5	29
		Scaled	0.246	0.149	0.213	0.273	0.325
Latin III	22	Raw	22.77	11.347	16.5	21.5	29.5
		Scaled	0.280	0.115	0.240	0.302	0.329
Latin IV	9	Raw	17.33	10.954	12	18	23
		Scaled	0.209	0.140	0.190	0.218	0.274

Table 3: Comparing Different Latin Levels. Summary statistics of the raw and scaled words per minute (WPM) for different Latin levels in the Latin sample. Raw data is WPM in English typing minus WPM in Latin typing, and scaled data is WPM in English typing minus WPM in Latin typing scaled by WPM in English typing.

may share other interests that correlate with improved typing skills. Therefore, we could only draw correlative conclusions from our data. This was a limitation of our study being a quasi-experiment, as the group assignment criterion (Latin vs. No-Latin) was not random (5). For future research, if we can identify variables that would affect participants in choosing to study Latin in the first stage, we can control them in the experiment to mitigate self-selection bias.

We also acknowledge a possibility of misclassification. A few participants who were not in Latin classes at the time of the survey indicated that they had taken Latin classes in the past. We classified them into the Latin group. There is a possibility that these participants did not like Latin and therefore their familiarity with Latin might be similar to someone who had no Latin experience in the No-Latin group. However, this misclassification would make it less likely to find significant differences between the No-Latin and Latin groups. As we found significant differences between the No-Latin and Latin groups even under the possibility of misclassification, our results still support our initial hypothesis.

However, generalization of the findings in this study must be made with caution, as our samples were taken from the whole student body of a local high school. Exposure to Latin through the Latin curriculum of the high school may not be reflective of a larger population. Additionally, in subsequent studies, factors such as keyboard layout and native language should be considered, as the near-ubiquitous QWERTY keyboard layout was designed based on letter frequencies of the English language. The fastest typing occurs when digrams (i.e., pairs of consecutive letters) are typed by alternate hands (6). The QWERTY layout maps frequently used English digrams on opposite sides of the keyboard, which could make it inefficient for Latin typing if the Latin language commonly exhibits digrams that are uncommon in English (4). Additional tests involving random arrangements of letters, as well as “made-up” English words, could potentially be used to further elucidate the role of letter patterns on typing proficiency. Future research can also explore additional factors, such as keyboard layout and multilingualism, to gain a more comprehensive understanding of the fundamentals of typing.

Our study highlights the impact of language familiarity on typing speed, even when the two languages use the same alphabet. These findings contribute valuable insights to our understanding of typing proficiency, especially in the context

Analysis of Variance						
Source of Variation	SS	df	MS	F-value	P-value	F critical
Between Groups	221.907	3	73.969	0.507	0.678	2.704
Within Groups	13419.651	92	145.866			
Total	13641.559	95				

Table 4: Comparing Typing Speed for Four Different Latin Levels. Results of one-way ANOVA to test whether any of the differences between the mean raw difference in WPM in different Latin levels within the Latin sample are statistically significant. SS stands for “sum of squares”, df stands for “degrees of freedom”, and MS stands for “mean square”.

of using typing for the assessment of other cognitive skills, and the broader field of cognitive science.

MATERIALS AND METHODS

Sample

To conduct our experimental investigation, we constructed two samples from Lexington High School (LHS) in Lexington, Massachusetts. The No-Latin sample consisted of participants who had no Latin education or experience at all, while the Latin sample consisted of participants who had engaged in at least one year of Latin study. The No-Latin sample was taken from the entire LHS student body. To avoid any selection bias from the sample, we employed a random number generator from “www.random.org” to select 60 participants from each grade (9th through 12th) for a total of 240 randomly selected LHS students (roughly 10% of the LHS student population). The selected students were invited to participate voluntarily in the experiment via email (**Appendix 1**). If any of the 240 randomly selected participants indicated that they have had Latin experience before, we classified them into the Latin sample, based on the Latin level they indicated on the questionnaire. The Latin sample was taken from the subset of LHS students that took Latin as their foreign language class. The opportunity to voluntarily participate in the experiment was given to each of the Latin classes, which range from level I through IV. We asked Latin foreign language teachers to read out the introduction in the invitation email and post the link to the Google Form (**Appendix 2**) in class. The final sample consisted of 153 participants, with 57 students constituting the No-Latin sample and 96 students constituting the Latin sample, representing approximately 6.4 percent of the entire student body of 2,383 students.

Methodology

We measured the effect of language familiarity on typing speed by comparing the typing speeds of participants in English and Latin. To mitigate potential confounding effects related to the order of the typing tests, participants were directed to the website “random.org/coins/” to simulate flipping a fair coin, randomly determining the sequence in which they would undertake the English and Latin typing tests. Participants who obtained heads began with the English typing test followed by the Latin test, while those who obtained tails began with the Latin typing test followed by the English test. The typing speed data were obtained using the online typing website “monkeytype.com”. Participants configured the test settings to disable punctuation and numbers and selected a test length of 100 words. Images of the correct test settings were shown in the participants’ instructions (**Appendix 2**).

The test began as soon as the participant started typing. Participants could view the displayed text for an unlimited

amount of time before starting, but only a portion of the 100 words was shown at any given time. Under the instructed test settings, no time limit was imposed, and the test ended automatically as soon as the participant finished typing the 100th word of the test. Participants were instructed to complete the typing tests without any interruptions, while striving to achieve their maximum typing speed. The typing website, “monkeytype.com” calculated the participants’ WPM for both the English and Latin tests. Since the overall WPM calculation accounted for the frequency of errors, no further control for typing accuracy was needed. Participants reported their WPM upon completing each typing test. Upon completing both tests, participants responded to additional questions pertaining to their English fluency and level of Latin study.

We used two measures of typing speed for our study: (i) raw data that took the difference between each participant’s English WPM and Latin WPM and (ii) scaled data that took the raw data scaled by the English WPM of each participant to represent WPM disparities in slow and fast typists equally, which generated a percent difference in typing speed. Statistical analyses were performed on the raw and scaled data to allow for a comparison of performance based on language familiarity. T-tests were used to identify any significant differences in typing speed between the two languages and between experimental groups.

ACKNOWLEDGEMENTS

This project is based on Sophia Shin’s AP Statistics final project. We thank Ms. Haviland, Ms. Zhu, and Ms. Rossi (Latin teachers) for announcing the project during Latin classes.

Received: September 13, 2023

Accepted: March 8, 2024

Published: August 23, 2024

REFERENCES

1. Plucker, Jonathan A. and Joseph S. Renzulli. “Psychometric Approaches to the Study of Human Creativity.” *Handbook of Creativity*, edited by R.J. Sternberg, Cambridge University Press, New York, 1999, pp.35–61.
2. Forthmann, Boris, et al. “Typing Speed as a Confounding Variable and the Measurement of Quality in Divergent Thinking.” *Creativity Research Journal*, vol. 29, no. 3, Sep. 2017, pp. 257–269, <https://doi.org/10.1080/10400419.2017.1360059>.
3. Horne, Joanna K., et al. “Computerised Assessment of Handwriting and Typing Speed.” *Educational & Child Psychology*, vol. 28, no. 2, Jan. 2011, pp. 52–66, <https://doi.org/10.53841/bpsecp.2011.28.2.52>.
4. Buzing, Pieter. “Comparing Different Keyboard Layouts: Aspects of QWERTY, DVORAK and Alphabetical Keyboards.” Jan. 2003, www.researchgate.net/publication/252214871.
5. Jhangiani, Rajiv S., et al. “Quasi-Experimental Research.” *Research Methods in Psychology*, 4th ed., 2019, pp. 207–219.
6. Kinkead, R. “Typing Speed, Keying Rates, and Optimal Keyboard Layouts.” *Proceedings of the Human Factors Society Annual Meeting*, vol. 19, no. 2, Oct. 1975, pp. 159–161, <https://doi.org/10.1177/154193127501900203>.

Copyright: © 2024 Shin and Doucette. All JEI articles are distributed under the attribution non-commercial, no derivative license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>). This means that anyone is free to share, copy and distribute an unaltered article for non-commercial purposes provided the original author and source is credited.

Appendix 1. Copy of Email Sent to Students

Hello randomly selected student!

You have been randomly selected to participate in my AP Statistics Final Project! My project is about language familiarity. It consists of a Google Form providing a series of instructions and questions. It is highly recommended that you complete the activity, but you may choose to opt out of the activity. At any point during the activity, you may stop and close the Google Form if you do not wish to continue. No personally identifiable information will be shared.

Here's the link to the Google Form: (<https://forms.gle/LjD6Lf2McxxR9bmx7>)

Thank you for your time!

Appendix 2. The Data Collection Google Form

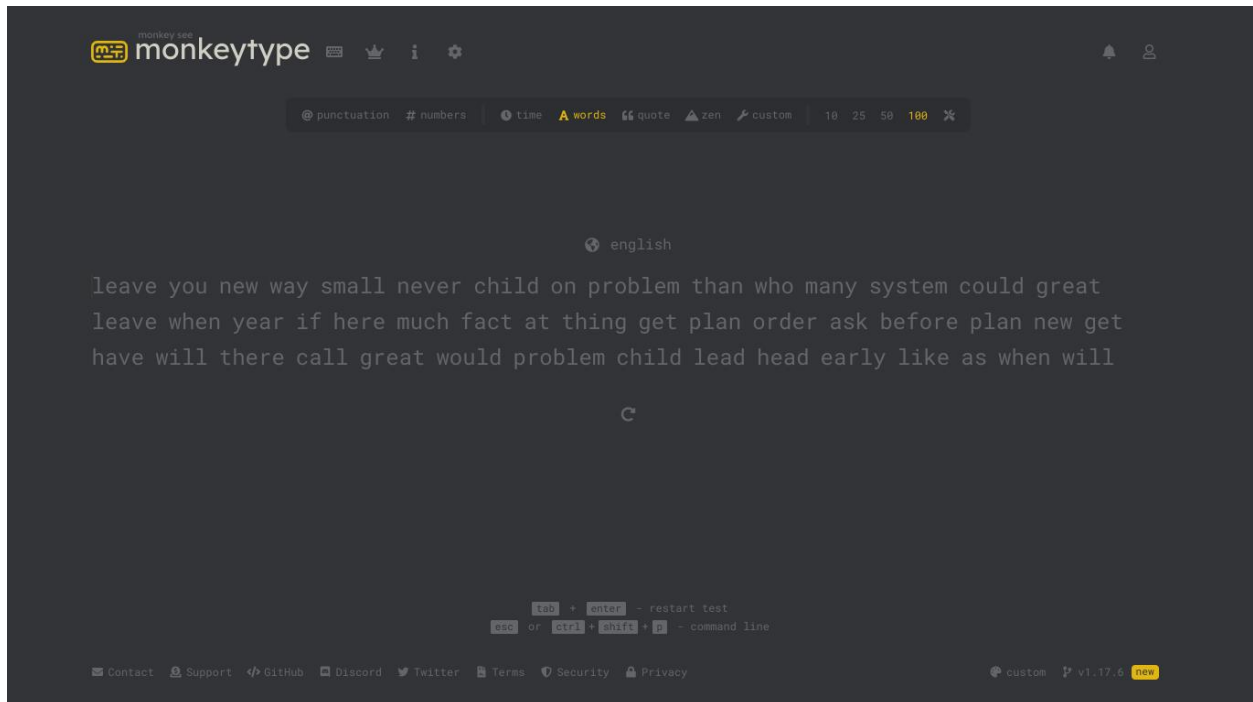
The Google Form in the invitation email contains the following guidelines:

1. Please go to the following website: <https://www.random.org/coins/>
2. Change the first setting to "1" and the second setting to "US 1¢ penny" (US currencies are near the end of the list). It should look like this:

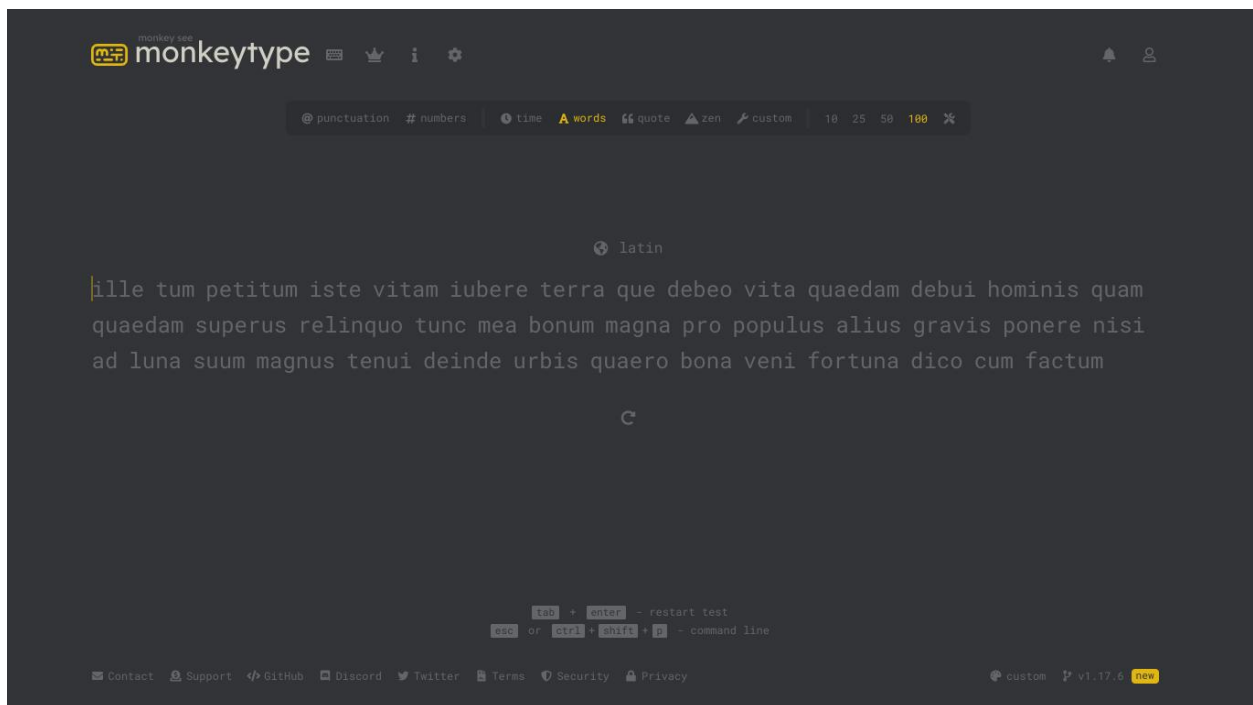
The screenshot shows the RANDOM.ORG website. At the top, there is a navigation menu with links: Home, Games, Numbers, Lists & More, Drawings, Web Tools, Statistics, Testimonials, Learn More, and Login. The main heading is "RANDOM.ORG" in large, bold, black letters. To the right of the heading is a search bar with the text "Search RANDOM.ORG" and a "Search" button. Below the heading is a yellow advisory box with the text: "Advisory: We only operate services from the RANDOM.ORG domain. Other sites that claim to be operated by us are impostors. If in doubt, contact us." Below the advisory box is the "Coin Flipper" section. It has a sub-heading "Coin Flipper" in blue. The text below reads: "This form allows you to flip virtual coins. The randomness comes from atmospheric noise, which for many purposes is better than the pseudo-random number algorithms typically used in computer programs." Below this text is a form with a dropdown menu for "Flip" set to "1" and another dropdown menu for "virtual coin(s) of type" set to "US 1c Penny". There are two buttons: "Flip Coin(s)" and "Reset Form". Below the form is a paragraph of text explaining the concept of obverse and reverse sides of a coin. At the bottom of the page, there is a footer with the text: "© 1998-2023 RANDOM.ORG Follow us: Twitter | Facebook Terms and Conditions".

3. Click "flip coin(s)". Your result should show one penny with either heads or tails.
4. On your first flip, did you get heads or tails?
 1. heads
 2. tails

5. If you got heads, you will start with the English typing test.
6. If you got tails, you will start with the Latin typing test.
7. Please go to the following website: <https://monkeytype.com/>
8. Change the settings (near the top of the screen) so that they are as follows: Punctuation OFF, Numbers OFF, Words, 100



Example screen of the English typing test.



Example screen of the Latin typing test.

9. To set the language of the test, click the word next to the globe symbol in the middle of the screen. For English, type “English” into the search bar that appears, or click the first option in the full list beneath the search bar (make sure to choose “English”, not “English 1k”, “English Contractions”, etc.). For Latin, type “Latin” into the search bar and click the first option in the results (make sure to choose “Latin”, not “Pig Latin”). The test will likely be set to English by default.
10. IMPORTANT: If you got HEADS, you will take the ENGLISH test FIRST and the LATIN test SECOND. If you got TAILS, you will take the LATIN test FIRST and the ENGLISH test SECOND. Once you select the language you will type first, begin the test of the correct language. The test will be 100 words with no capitalization, punctuation, or numbers. The test does not have a time cutoff, and will end once you finish typing all 100 words. Type as fast as you normally can. Try not to stop in the middle of a test. If something goes wrong and you have to start over, you may do so, but please try to minimize restarts. You will record your WPM for both languages in the following questions.
11. How fluent are you in English?
 1. Native speaker
 2. 5 or more years of practice
 3. 4 years of practice
 4. 3 years of practice
 5. 2 years of practice
 6. 1 year of practice
 7. less than 1 year of practice
12. Select the highest level of Latin education you have completed: (note for Latin students: since it is nearing the end of the school year, you may count the Latin level you are currently taking)
 1. Latin I
 2. Latin II
 3. Latin III
 4. Latin IV
 5. AP Latin (note: not offered at LHS)
 6. College/Graduate level Latin studies
 7. None of the above (no Latin education)
13. Indicate which language class(es) you take at LHS: (multiple select)
 1. Spanish
 2. French
 3. Mandarin
 4. German
 5. American Sign Language
 6. Italian
 7. Latin
 8. English as Second Language
 9. None of the above