



PISA FOR DEVELOPMENT TABLET SPECIFICATIONS

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PISA FOR DEVELOPMENT TABLET SPECIFICATION

The PISA-D Strand C assessments and questionnaires are intended to run on a tablet. In order to maintain compatibility with the PISA delivery platform, these tablets must meet the following minimum requirements:

- Microsoft Windows based operating system (Windows 8 or Windows 10 supported)
- Intel CPU 1.33GHz base rate or faster. Minimum model is Intel Atom Z3735F)
- 2GB RAM
- 32GB storage
- 10" touch screen, 1024x768 resolution

These are minimum requirements. The system will perform better with faster CPUs, more RAM and more storage. A preferred configuration would be a tablet with characteristics like the following:

- Microsoft Windows 10
- Intel Atom x7-Z8700 processor
- 4GB RAM
- 64GB storage
- 11" HD Display (1920 x 1280 or greater)

Beyond the technical specifications, it is important to consider logistical and qualitative factors of the tablets. For instance, battery life is quite important due to the administration circumstances. A replaceable battery would be ideal from an operations point of view, but that may not be feasible for many tablet models. Also, ruggedness is important, given the environments in which these tablets will be used.

An important factor is the touch screen. Because this is the primary means of interaction with the tests, the touch screen must be clear and responsive. Many cheaper tablets cut corners in this area and the result is a screen that becomes frustrating to use. This is necessarily a subjective criterion, but it is very important.

We have tested three different tablets in the course of evaluating the requirements for Strand C.¹ They are:

- Microsoft Surface 3 (\$399 for 64GB model)
- Acer Aspire Switch 10E (Approximately \$330 for 64GB model)
- Dell Venue 10 Pro (\$369 for 64GB model with hi-res screen)

These three models were representative of the Windows tablets that are currently available. The PISA software performed acceptably on all three models, although it was clearly faster and smoother on some. We were unable to perform a comparable test of battery life on the three tablets, as we did not have the resources available to do this.

¹ A fourth tablet was considered, one from Lenovo. This was not fully evaluated, though, because of limited availability.

Of the three, the Microsoft tablet was clearly the preferred choice. It was the fastest of the three models, it had the most responsive touch screen, and it appeared (subjectively) to be the most durable of the three models.

The Dell tablet was second in preference. It has a slower processor and that was apparent with some parts of the survey software, especially the background questionnaires. The touch screen was somewhat less responsive, although it was considered acceptable. The battery life seemed to be not as long as on the Microsoft tablet, although we have no formal evaluation of this.

The Acer model was deemed the least of the three and overall we would NOT recommend this or similar tablets. This comes with a keyboard and is a “convertible” tablet/laptop, but the touch screen was not responsive at all. It proved very frustrating to use, and we felt it would negatively impact the data collection. Also, the system seemed slower overall than the other two choices.

In summary, we would highly recommend the use of the Microsoft tablets for Strand C. They are the best choice within a reasonable price range. Second would be the Dell model, but we feel that the small additional increase in price for the Microsoft tablet would yield longer useful lifetimes for the tablets and a more satisfactory data collection experience.

Addendum: Since this report was prepared, Dell and Acer have announced or are rumored to be planning new models of the tablets we tested. These will likely have faster CPUs, enhanced storage and possibly improved screens. The results of this evaluation may be different if these newer models were considered.