Tablet Repair Report
2007-2008
Illinois Math and Science Academy
ITS, June 2008
Summary

- Gateway and Toshiba models have been very similar
- Both have had design flaw issues, but seem to be abating
- Lenovo reliability has been disappointing
- There has been little manufacturer support
Summary

- Gateway/MPC’s models were brand new when the last academic year started, and have only been refreshed with a small hardware update since.

- Toshiba’s M700 is vastly different than the M400, but the M400 is still a good indicator of the speed of service.
ITS’s Role

• We will be reducing the time it takes to repair all of these machines

• We will provide a loaner when a machine breaks

• We will provide the students and teachers with the resources and knowledge to use these tools
What You Can Do

- Contact us - we can help!
- Email: 1to1questions@imsa.edu
- Phone: (630) 907-5012 (ITS Office)
- Jim Gerry, CIO
- Scott Swanson, Strategic Technology Coordinator
- Ralph Flickinger, IT Helpdesk Manager
- Chris Glenn, Instructional Technology Designer
What You Can Do

• Visit us in person: Monday-Friday, 8-4 by appointment

• We have all the models onsite

• June 30th: Last day to purchase to ensure that your machine arrives on time

• Open your machine and get used to it before you come to IMSA!
Glossary

- “Image” or “Re-image” - Wipe the system’s hard drive and restore it to the IMSA image
- “ADP” - Any repair covered by the accidental warranty
- “HDD” - Hard drive replacement
- “DVD” - DVD drive replacement
Repair Rate by Model

Hardware and Software

Problems per 100 Machines

- **E-295C**: 52.94
- **E-155C**: 55.10
- **X60/X61**: 100.00
- **M400**: 60.00

Lower is better

Model

Problems

Problems per 100 Machines

0 20 40 60 80 100 120
Repair Rate by Model

- The Lenovo repairs were predominantly screen and hard drive issues.
- There are many other X60s with unreported problems.
- The numbers are primarily for the X60, whereas only the X61 is offered this year.
- The M400s have been in the fleet for 2 years.
- The E-155C had the established hinge defect.
Repair Times

Repair Turnaround Times

Days to Return

30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40

Lenovo, Toshiba, Gateway, Overall

Shorter is better
Repair Times

- The repair times include ordering parts, receiving parts, installation, and time waiting on the customer to return the loaner tablet after repair.
- Students are given a loaner for the entirety of the period.
Repair Times

- We encountered unexpected difficulty in qualifying enough repair technicians.
- We expect this to be rectified for the coming year.
- Lenovo, however, has made their program so inaccessible that we must send back all repairs to the vendor.
Gateway E-155C

Gateway E-155C - Repairs by Type

- Image: 15%
- HDD: 6%
- Hinge: 13%
- ADP: 2%
- DVD: 9%
- Keyboard/Touchpad: 7%
- Power brick: 48%
E-155C Summary

- The highest rate of repair was for the hinge
- Gateway/MPC had a defect in the initial E-155Cs, and has since changed the hinge design
Gateway E-295C

Gateway E295-C: Repairs by Type

- Latch: 15%
- Pen: 19%
- Fingerprint Reader: 7%
- Speaker: 7%
- Overheat: 15%
- Keyboard: 15%
- ADP: 7%
- Re-Image: 7%
- Hinge: 4%
- Other: 11%
E-295C Summary

- The 295 had a design flaw for the fingerprint reader
- Gateway/MPC has since rectified this
- The 295 had a higher incidence of overheating than the 155C, due at least in part to its far more powerful hardware
Lenovo X60/X61

Lenovo X60/X61: Repairs by Type

- Screen: 37%
- Boot error: 25%
- Latch: 21%
- HDD: 13%
- ADP: 4%

Legend:
- Screen
- Boot error
- Latch
- HDD
- ADP
Lenovo X60/X61

- Nearly every X60 at IMSA had LCD issues
- The plastic bezel around the screen would crack and break away from the screen, and the bottom third would stop functioning
- Lenovo has neither deemed it a flaw or taken measures to rectify the problem
Lenovo X60/X61

- The X60s also had a higher-than-normal rate of hard drive problems
- According to data collected by students (not represented in the graph), there are significantly more machines that have similar problems to those reported, but that have not brought them in for repair, or Lenovo has given difficulty in claiming warranty repairs
Toshiba M400

Toshiba M400: Repairs by Type

- Power Brick: 20%
- Overheat/Fan: 8%
- Blue Screen: 19%
- Pen: 20%
- CD-ROM: 7%
- Latch: 2%
- ADP: 2%
- Keyboard: 2%
- Re-image: 2%

Legend:
- Power Brick
- Overheat/Fan
- Blue Screen
- Pen
- CD-ROM
- Latch
- ADP
- Keyboard
- Re-image
Toshiba M400

• The M400’s purchased by the Class of 2009 and IMSA shipped with power supplies that would fray

• We have noticed this problem went down significantly as time passed

• Many of these laptops are up to two years old now, as opposed to only up to one year of the other brands
Toshiba M400

- M400s frequently overheated
- We strongly urge students to keep their computer clean, with the occasional use of compressed air to clear out dust from the fan
- The M700 is a completely new design and, from preliminary use, has corrected some of the design flaws of the M400
Thanks!

- Thank you for taking the time to research your purchase!
- Have your kids look at the machines as well-their opinions may surprise you!
- Feel free to call or visit us in ITS- we have all the models on-site and have extensive experience with many of them.