

The Best Report in the IDW

by Fred Cohen

Saying something is “the best” is an easy way to get attention, but the assertion gains more credibility if the statement’s author had little to do with the report’s creation. And that is the case with the report featured in this newsletter.

Let’s let the suspense build (What report is it?) while I describe how this wonderful visualization came to be. Just before the pandemic began, in December of 2019, Nassau BOCES was part of a National Science Foundation Grant arranged by Columbia University’s Teacher College. As part of this grant, groups of educators from around the country—school administrators, college professors, and data scientists—gathered at Columbia to study how better data visualizations might improve the teaching process.

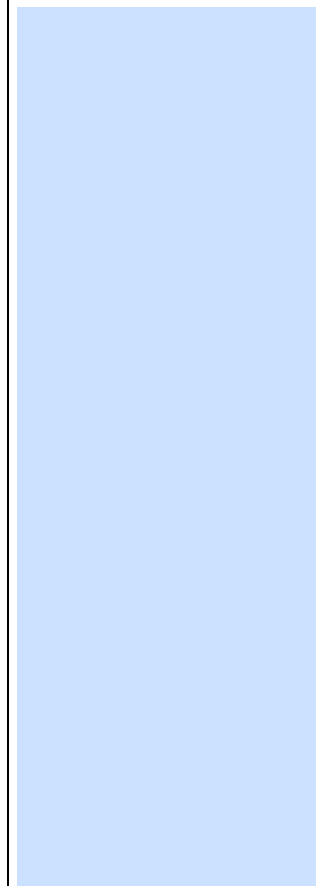
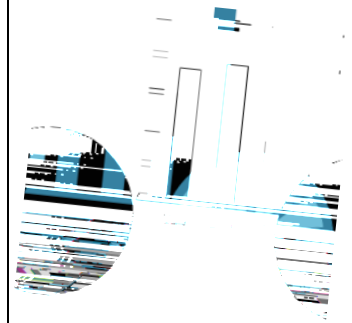
All conference attendees worked in groups to create unique and original visualization to dramatize educational data. Each group was composed of professionals from various backgrounds. Nassau BOCES brought some of our most proficient data practitioners to participate. We were divided into different groups. My group produced the Advanced Placement Chart, a useful (but not spectacular in any way) new report you may have used.

But a second group produced the fourth generation of the Wrong Answer Pattern Analysis. The first generation was a primitive Excel pivot table that I created more than a dozen years ago. It enabled Excel proficient users to see what correct and incorrect answers students selected on a given test. Most useful was the ability to

It was intriguing to discover that mastery students often chose different wrong answers than students who were not proficient. But that original report was amateurish and not user friendly at all.

Very quickly, Nassau BOCES programmers turned that pivot table into a with links to the actual test questions. It was “love at first site” for many Nassau County Instructional Data Warehouse (IDW) users.

But some suggested a simpler, even more user friendly, report which would show wrong answers selected without disaggregating the students by performance level. This report was named the This report became a welcome partner of the Gap Report. Teachers could easily see where their students outperformed or underperformed the Nassau County benchmark and which answers tended to distract them. Each report, of course, offered instant links to the released questions allowing for instant analysis of instructional strengths and areas of needed improvement.



Stephanie Witt, Supervisor II, Instructional Data Warehouse
Phone: 516-608-6623 • Email: switt1@nasboces.org

~ *Proudly Serving the Nassau County School Community* ~



This WASA Report has been one of the most used reports in the IDW enabling teachers to get a better understanding of what students were thinking when they answered questions incorrectly. The only problem was that teachers had to compare numbers, question by question, and pore over a lengthy report to determine key areas of need. The report was extremely useful but not very user friendly, especially for our modern graphic users.

. At first glance, it's visually appealing but not immediately decipherable. A quick explanation, however, makes the report easy to master. It represents the collaborative work of the committee at Columbia who first envisioned it and the genius of the BOCES programmers who perfected it. Even in this small newsletter format, any user can see the answer patterns of the 40 students who took this Global History exam.

The legend at the top explains the color code. Blue represents answer 1, green for answer 2, yellow for answer 3, brown for answer 4, and purple for blanks



Stephanie Witt, Supervisor II, Instructional Data Warehouse
 Phone: 516-608-6623 • Email: switt1@nasboces.org

~ *Proudly Serving the Nassau County School Community* ~

