Excerpts from Dallas Morning News Stories

1) Analysis shows TAKS cheating rampant
State says it's addressed the problem, but News uncovers more than 50,000 cases
03:34 AM CDT on Sunday, June 3, 2007
By JOSHUA BENTON and HOLLY K. HACKER / The Dallas Morning News

a) “Tens of thousands of students cheat on the TAKS test every year, including thousands on the high-stakes graduation test, according to an in-depth data analysis by The Dallas Morning News.
The analysis – among the first of its kind on this scale – found cases where 30, 50 or even 90 percent of students had suspicious answer patterns that researchers say indicate collusion, either between students or with school staff.”

b) “The study examined statewide scores from 2005 and 2006 on the all-important Texas Assessment of Knowledge and Skills – the state test given in grades three through 11.”

c) “The News' analysis was based on a well-established method for detecting answer-copying developed by Dr. Wesolowsky. Research in these methods dates back more than 80 years; variations of them are used to detect cheating on tests like the SAT, the ACT and some college final exams.

d) "Some of the methods work better than others, but they all work pretty well," Dr. Frary said. "Wesolowsky's is one of the best, maybe the best." Dr. Frary is considered by some to be the modern godfather of the field, having studied it since the 1970s.”

e) “Drs. Robert Frary, David Harpp, and George Wesolowsky, three cheating researchers who assisted with The News' analysis. Dr. Wesolowsky's methodology and computer program were used to perform the analysis. Dr. Harpp, using a different detection method, did a separate analysis of several dozen Texas schools. Dr. Frary examined the results.”
2) How the TAKS scores were analyzed for evidence of cheating

02:58 AM CDT on Sunday, June 3, 2007 by Holly K. Hacker and Joshua Benton / The Dallas Morning News

“Here's how Dr. Wesolowsky's program works. Let's say two students take a multiple-choice test with 50 questions, and answer 48 identically. The program calculates the chances that could happen if they were answering independently, with no cheating. It examines how common those shared answer choices are among other students. Sharing only popular right answers won't trigger red flags – but a long string of uncommon identical wrong answers could. If the odds are extremely unlikely, the students' answers are flagged as suspect.

If two students are flagged, it doesn't mean both are cheaters. In many cases, one could be the innocent victim of the other's wandering eyes.

Dr. Wesolowsky's method considers several factors, including the difficulty of each question and how the entire class performed.”

3) Common questions about analyzing tests for cheating

02:35 AM CDT on Sunday, June 3, 2007 Dallas Morning News |

a) “Here’s another test of the effectiveness of the methodology. At one point, Dr. Wesolowsky purposefully entered answer sheets from more than 100 different schools into his computer program – without telling it which students went to which schools. He then asked his program to determine which pairs of students had answer sheets that suggested cheating. If the program was flagging kids willy-nilly – that is, if it wasn’t catching cases of true collusion between students or adults – you’d expect only a small fraction of the pairs it found to be from within the same school. But that wasn’t the case. The program flagged 8,548 different pairs of students out of that data. Of those, only 57 featured students from different schools. In other words, without knowing where students were, the program flagged pairs within the same school 99.3 percent of the time.”
b) “Couldn’t these kids have all the same answers because they studied together? Or couldn’t they have had a bad teacher who taught them all the wrong answers? Experts say those aren’t valid reasons for the sort of identical answers found in the News study. First, kids study together in every Texas school – but two-thirds of all Texas schools had not even a single student flagged for cheating. If studying together led to flagging, you’d expect flagging to be much more common than it is. In fact, a number of studies have found that studying together does not actually lead to markedly increased similarity among students’ answer sheets. Third, if teachers were teaching the material incorrectly, you’d expect the entire class (or close to it) to get those questions wrong. That’s not true in the vast majority of cases found in the News analysis. The most common form of cheating entailed a small group of students who had identical wrong answers that differed significantly from the rest of their class. Perhaps most importantly, in cheating analyses of places where seating charts were kept, statistical detection correlates strongly with where students sit. In other words, studying together or improper teaching don’t lead to flags – but sitting together does.”

http://www.dentonrc.com/sharedcontent/dws/dn/education/stories/060307dnmetcheating.433e87c.html