Abusing Research: The Study of Homework and Other Examples
Many experts view these practices as problematic, which may indicate just how poor a measure of learning standardized tests are. But there is more to the story. When we take a closer look at the relationship between homework and academic achievement, the picture that emerges is far from clear.

One of the four citations Bempechat included was to an article by Joyce Epstein and Frances Van Voorhis which, apart from that, provided no additional citations. The authors cautioned that "correlational findings do not lead to direct statements about behaviors teachers should utilize[1]." In fact, the Epstein-Van Voorhis article concludes that "the best teachers vary their use of homework, and provide frequent opportunities to check homework immediately[2]." Cooper, in a later article[3], had also noted that "measurement of homework is an area ripe for study[4]."

The last, and most common, way to measure achievement is with standardized tests. Purely because they're standardized, these tests are often assumed to be objective, unambiguous measures of student learning. But this assumption is misleading. Standardized tests are by definition norm-referenced, which means that they compare a student's performance to a pre-established standard or norm. This standardized approach is problematic because it assumes that there is a single correct answer, which may not always be the case. For example, a student might be able to understand a concept but not be able to apply it in a real-world situation.

However, this lack of empirical substantiation didn't prevent the authors of the No Child Left Behind Act from using the words "scientific" and "scientifically" 116 times in the law's text. This is a prime example of how the failure to raise achievement levels doesn't even matter because other criteria are actually more important after all.

The failure to raise achievement levels doesn't even matter because other criteria are actually more important after all. For example, in a study of the impact of homework on student achievement, Cooper and his colleagues[5] conducted a study in 1998 with both younger and older students (from grades 3-12). The study compared the frequency, total amount, and percentage of teachers who used homework in grading. The results were clear:

- Frequency of homework: The frequency of homework was positively correlated with academic achievement.
- Total amount of homework: The total amount of homework was positively correlated with academic achievement.
- Percentage of teachers who used homework in grading: The percentage of teachers who used homework in grading was positively correlated with academic achievement.

In other words, the frequency, total amount, and percentage of homework were all positively correlated with academic achievement. This suggests that homework is a valuable tool for improving student achievement.

But what about the claim that homework is a "useless task"[6]? This claim is based on a study published in the 1930s that showed no positive correlation between homework and academic achievement. However, this study was conducted in a time when homework was given as a punishment, and the results may not be applicable to today's educational context.

There is no evidence that homework is a "useless task." In fact, research shows that homework is positively correlated with academic achievement. The fact that no independent corroboration exists to show that testing, preceded by a steady diet of test preparation, has any real positive effect means that our children are serving as involuntary subjects in the battle over homework.

The battle over homework has taken place in the last decade or two with younger children even though this is the age group for which studies most clearly fail to show any positive effect. It would be difficult to imagine more compelling evidence of the irrelevance of evidence.

NOTES

1. Zehr, op. cit.
2. Several years earlier, the Department released a statement that boasted: "We will change education. And it will be a revolution[7]."
3. What actually seems to be taking place is a campaign to change education, not scientific techniques to investigate the natural world. This is why the majority of scientific techniques have worked in the past.
5. The initial meta-analysis was published as Harris Cooper, "Results vs. Conclusions," Phi Delta Kappan, September 2006.
7. "The Shaping of that scientific techniques have worked in the past is the lack of understanding of the natural world. This is why the majority of scientific techniques have worked in the past.
8. The fact that no independent corroboration exists to show that testing, preceded by a steady diet of test preparation, has any real positive effect means that our children are serving as involuntary subjects in the battle over homework.