New research suggests repeating elementary school grades — even kindergarten — is harmful

The already muddy research on whether it’s better to hold back struggling students or promote them to the next grade just got muddier. A new study, “The Scarring Effects of Primary-Grade Retention? A Study of Cumulative Advantage in the Educational Career,” by Notre Dame sociologist Megan Andrew, published Sept. 26, 2014, in the journal Social Forces is an empirically solid analysis that adds more weight to those who say retention — what education wonks call repeating a grade — is ultimately harmful.

Andrew mined two large data sets in a way no researcher has done before and concludes that kids who repeat a year between kindergarten and fifth grade are 60 percent less likely to graduate high school than kids with similar backgrounds, and even 60 percent less likely to graduate high school than siblings in the same family.
Before I discuss Andrew’s paper in more detail, it’s helpful to understand some history. Most early research overstated how harmful it is to be held back a grade. It tended to point out that the struggling kids who repeat a grade don’t fare as well as kids who stay with their class, most of whom are not struggling. But that’s shoddy research. These studies didn’t compare the held-back kids with the kids who were also failing, but were promoted nonetheless.

Related story: Why Los Angeles sends failing students on to the next grade

This article also appeared here.

In data analysis terms, this early research conflated the bad effects being held back with the bad effects of the underlying issue that led a school (or a parent) to hold the child back in the first place. Consider a child who has trouble paying attention, can’t read by the end of fourth grade and is held back. Say, this child continues to get bad grades, tests poorly and eventually drops out of high school. Did the stigma of repeating fourth grade cause the child to become demoralized and to perform worse at school? Or was it his ongoing struggle with attention deficit disorder? If he had been promoted, would his academic career turned out differently? These early studies don’t say.

Even as the low quality research kept showing that holding kids back was bad, a growing chorus of critics urged schools to end “social promotion,” the practice of passing failing students onto the next grade. As my Hechinger Report colleague Molly Callister wrote here, 15 states and the District of Columbia have adopted policies requiring third-grade reading proficiency before a student can move to fourth grade. Two big cities, Chicago and New York City, undertook ambitious experiments in ending social promotion.

Those urban experiments attracted sophisticated researchers. Brian Jacob and Lars Lefgren studied students in Chicago, where the decision to hold a student back was based on a test score. The researchers were able to
compare the experience of students who scored just below the threshold for passing with the experience of students who scored just above the threshold. Because of test measurement errors, these students were effectively testing at the same level — academically identical. But half were held back and half were promoted. In a 2009 paper, Jacob and Lefgren found that the harmful effects of retention largely melted away when comparing these two groups of students. Students held back in older grades still suffered a bit, but there was no decrease in high school graduation for students who’d been held back young. (Jacob, Brian A., and Lars Lefgren. 2009. “The Effect of Grade Retention on High School Completion.” American Economic Journal: Applied Economics, 1(3): 33-58.)

Four years later in 2013, a RAND study looking at New York City’s experiment with ending social promotion came to a similar conclusion — retention isn’t harmful. It also found that the kids who repeated fifth grade were better off than kids who just squeaked by and passed the test and moved on to sixth grade. (Study: “The Academic Effects of Summer Instruction and Retention in New York City.” Educational Evaluation and Policy Analysis, v. 35, no. 1, Mar. 2013, p. 96-117)

So a growing consensus was emerging in the research community that holding a kid back in younger grades isn’t harmful and sometimes helpful if accompanied by support services, such as summer school, tutoring and advising.

And now Andrew’s paper — contradicting the new consensus — lands. It’s a quantitatively rigorous study finding harmful effects for younger children. She looked at more than 37,000 children across the United States from two older multi-year surveys (NLSY 1979 and NELS 1988) and found that about 10 percent had been held back at school, most of them during the 1980s. The surveys included details of the family characteristics of the children. That allowed Andrew to create 6,500 matched pairs of students, where the retained and non-retained students had similar backgrounds. Their mothers had attained the same level of education and their families had the same household income. The students had scored the same on a pre-school cognitive test. (In layman’s terms, they started school with similar IQs). The matched students also had similar behavioral problems, as reported on the surveys. Home environment, gender and race were factored in, too. In other words, Andrew matched the held-back students with students who were equally “at risk” for being held back, but weren’t.

Related story: India data show test scores rise when students are automatically promoted to the next grade

Then Andrew looked at whether these matched students eventually graduated from high school. And that’s where she found that the held-back children were 60 percent less likely to have graduated from high school than their matched “partners” who stayed on grade level. Andrew went one further to see if she could reproduce the results in a different way. Using the 1979 data survey, which included sibling information, she compared children who were held back with their siblings who weren’t held back. Again, she found the same result. Even in the same family, held-back kids were 60 percent less likely to graduate high school than their brothers and sisters. Astonishing!

Andrew acknowledges that held-back students often show a short-term boost in their grades and test scores, but she believes this boost “disappears” after just a few years. A sociologist by training, Andrew hypothesizes that being held back is so psychologically scarring that many students fail to regain their confidence in the long-term. In her paper Andrews argues that being held back is a one of the biggest negative events of a child’s life. “In surveys, students rank being retained in grade second only to a parent’s death in seriousness in some cases,” Andrews wrote.

At first blush, the data seem to defy common sense. (Data have a way of doing that!) Kids, especially boys with fall birthdays, are commonly held back in kindergarten as they get another year to mature. I have a hard time believing that they’re 60 percent less likely to graduate from high school than the kid who stayed with his class and moved on to first grade.

Unfortunately, Andrew wasn’t able to test whether kindergarten retention was less scarring than say, fourth grade retention. But by email she explained that the majority of the students were held back in the earliest
New research suggests repeating elementary school grades — even kindergarten — is harmful | Education By The Numbers

7/10/2017

grades, confirming that she found even held-back kindergarteners less likely to graduate from high school.

How much you buy Andrew’s conclusions depends on how similar you think her paired children are. If there were a characteristic that prompted a parent to hold back one child that his statistical “partner” doesn’t have, then the analysis isn’t clean. Her control group (the promoted partner) isn’t otherwise identical to the treatment group (the retained child). Andrew’s data sets didn’t list every behavioral problem and learning disability, so she couldn’t control for Attention Deficit Hyperactivity Disorder (ADHD) and other many other conditions. It’s quite possible that some of the held-back children had behavior issues or a mild learning disability and the promoted partner child didn’t. Years later, when Andrew found that the held-back child didn’t graduate from high school, it’s possible that factors related to the student’s behavior or learning issues — being placed in an alternative academic track, for example — impeded his academic career and not the psychological scarring of being held back in first grade.

I don’t want to suggest that ADHD makes it hard to graduate from high school, but I am trying to explain how Andrew’s research can fall into the same trap that the early research on retention fell into. It can accidentally conflate the bad effects connected to a behavioral or learning problem with the bad effects of the retention.

I asked Andrew how a parent should factor in her research when deciding whether to hold a student back. “My study is not a parent’s how-to guide on retention,” she replied by email, explaining that holding a child back is a very personal decision. The most important thing is to address your child’s underlying academic problems, whether you’re holding him back or passing him on to the next grade.

She explained her study is aimed at education policy officials who are deciding whether to have high-stakes tests that determine who moves on and who is held back. “My study is an argument about how a very expensive policy, grade retention, may actually undermine our shared goals of ensuring even child gets a quality education,” she replied. “I would argue that my study is evidence that we might take funds used for an expensive and likely deleterious policy and use them for earlier, pre-school interventions and …supplemental services… to help get a student up to speed.”

You might like:
- [Homeless students increase by 58 percent in past six years](http://radicalscholarship.wordpress.com/2014/09/04/grade-retention-research/)
- [High school wasteland: Demographic changes do not explain test-score stagnation among U.S. high school seniors](http://radicalscholarship.wordpress.com/2014/09/04/grade-retention-research/)
- [Data on teacher absenses, sick days and substitutes](http://radicalscholarship.wordpress.com/2014/09/04/grade-retention-research/)
- [Getting boys - and girls - interested in computer coding](http://radicalscholarship.wordpress.com/2014/09/04/grade-retention-research/)
The research is far from muddy; there are few issues where the research consensus is so strong than on the understanding that holding kids back doesn’t help but merely leads to higher dropout rates. In fact, NYC progress reports take this into account by factoring in overage students as a negative factor in test scores. The two studies you cite are really outliers. See the letter sent to Bloomberg in Feb. 2004, when he first announced his grade retention policy, signed by 107 eminent academics, researchers, and national experts on testing, that the policy was likely to lead to lower achievement and higher drop out rates. The signers included 4 past presidents of the American Education Research Association as well as the chair of the National Academy of Sciences Committee on the Appropriate Use of Educational Testing, and several members of the Board on Testing and Assessment of the National Research Council.

http://tinyurl.com/nnmzn69

Reply
Richard P Phelps
October 16, 2014
at 3:18 pm

Jill,

Do you have a science or social science PhD with an emphasis on quantitative methods? Have you done your own thorough review of the relevant research literature?

If not, phrases such as these below hardly seem objective. You’re promoting the careers of a few researchers based, I suspect, mostly on what they themselves have told you about the quality of their work. Meanwhile, you are denigrating the work of others as inferior, others who had no opportunity to sell themselves or their work to you.

“is an empirically solid analysis”
“mined two large data sets in a way no researcher has done before”
“experiments attracted sophisticated researchers…”

Richard P Phelps

Reply
Jill Barshay
October 16, 2014
at 3:30 pm

@Richard P Phelps Is there a particular research study that you feel I have unfairly denigrated? I will look into it. I wish I did have a PhD but I think it is ok for journalists to write about subjects in which they don’t have doctorates. It is important for us to do our research. In this particular case, I talked with over a half dozen experts and read a number of studies. But of course, I will make mistakes. Please point them out to me.

Reply
Richard P. Phelps
October 16, 2014
at 6:58 pm

Ah, so it is OK for you to dismiss or denigrate the rest of the research literature and the rest of the researchers (those who do not promote themselves), unless I do a literature review. It’s MY responsibility.
Yes, it is OK for journalists to write about subjects in which they don’t have doctoral degrees. But, you do not know that one researcher has “mined data sets in ways that no one has done before” and yet you wrote that. And, how is it your place to decide that some researchers are sophisticated (and others to whom you are not speaking are not)?

It is naive for journalists to assume that all researchers represent the work of other researchers (with whom they are competing for jobs and honors) honestly. Some of the most prominent researchers, especially in squishy, overly-politicized subjects like education, are prominent because they aggressively sell their work and/or they belong to groups that happen to have the resources to publicize and promote their work.

You talked “with over half a dozen experts and read a number of studies”, and you assume that you gathered a representative sample of all the information available on the topic? There is nothing wrong with you reporting what certain researchers found. It is your references and comparisons to an entire, vast, research literature that probably numbers in the thousands that is the problem.

Years ago, I was inspired by the unrestrained braggadocio of one of your “sophisticated researchers”, Brian Jacob, to study a vast research literature that he claimed did not exist. It seemed that in every study he did, he was the first ever to do it, to think of doing it, and, of course, if anyone had studied the issue before, he was doing it better. It took me over a decade, evenings and weekends, and I would guess that I have covered probably over half of the research literature on the effects of testing on student achievement, but probably not three-quarters of it. I’ve read, analyzed, and summarized over three thousand studies, and there are thousands more to read.

How can you think that talking to half a dozen people, probably not even randomly chosen, qualifies you to make judgments about an entire research literature? The proportion of researchers with the resources to promote their work so that journalists will pay attention is tiny. Does that mean that the 99%+ percent of the research done without the resources for promotion is invalid?

Richard P Phelps

Reply
Lady T
October 16, 2014
at 4:26 pm

My daughter’s Math grade teacher was held back in kindergarten and went on to graduate college. My cousin was held back in second grade and just graduated college. My husband was held back in the third grade and retired from the military. I don’t agree with this study!

Reply
Jill Barshay
October 17, 2014
at 10:29 am

@Richard P Phelps. Your comment reminds me that my first newspaper editor once questioned my use of the word “most” in a draft. He asked me if I talked to all the people in the world and knew whether more than half of them felt this way. I quickly changed “most” to “many.” You make a good point about being careful about word choice. I probably should have said “much early research” instead of “most early research.” I’ll be more mindful in the future. But I think the point still stands that a lot of the early retention research conflates the harmful effects of retention with the harmful effects of the student’s underlying learning issues.

Reply
Richard P. Phelps
October 17, 2014
at 11:30 pm
Unless you have read “a lot of the early retention research” yourself, you really have no business saying this. Too many journalists trust whatever ambitious, self-interested researchers tell them about the rest of the research literature (and their own research competition). And because many education journalists seem to talk only to the tiny proportion of researchers affiliated with think tanks and federally-funded centers, those folk have learned that they can easily manipulate journalists to their own career advantage.

The problem of education journalist myopia is far more serious than you seem to be willing to consider. The general problem is the “eyewitness fallacy”—one observes, or is told of, a miniscule, unrepresentative sample of information and assumes that one then understands the whole.

Reply
Risa
January 12, 2015
at 2:38 pm

Question: If a child never had any formal academic training, day care, preschool…. then attends half day kindergarten, where in the beginning really struggled, however now, many signs point to a successful year, do you think moving the student into an all day kindergarten program would be more beneficial than going to first grade. The child is a male with a late summer birthday. He is very immature. What is your suggestion?

Reply
carl walch
February 22, 2015
at 9:16 pm

Greetings, I was held back to repeat the first grade. I did not graduate from high school as my self image was severely damaged by the morons who required me to repeat first grade. I went on to enjoy a carrier in the U.S. Army as a Warrant Officer and helicopter pilot. I tested out with an IQ of 140. I graduated from University with a BBA and a major in Accounting. I have gone on to enjoy success in Banking and Real Estate, and enjoy a very comfortable living. It is my opinion that educators are, for the most part, incompetent, lazy and do not understand, or have any empathy for the children they claim to teach. Unfortunately, public education attracts the bottom of the class in most fields for the most part.

Reply
Sonja
February 24, 2015
at 10:53 am

Richard P. Phelps,
I am very interested in what you have to say about how so many of the data collected in such research is manipulated to fit people’s agendas. I have the same concerns as an educator myself, who has also been held back as a child and continued to do well in university and did not suffer any great social harm. I would love to hear YOUR opinion based on all the various resaerch you have read. You seem to have a well rounded grasp on what has been researched.

Thanks so much,
Sonja

Reply
Jennifer
April 16, 2015
at 11:19 am

I was left back in the third grade. The school did not even inform my parents that it was happening. I did not find out that I was repeating the third grade until the first day of the new school year, when I was sitting in a
fourth grade class, during roll call and the teacher never called my name. Then they called in someone to escort me to my “right class”. Not only did they leave me back, they had the nerve to give me the same third grade teacher that I had the year before. It was painfully embarrassing to have to come home from the first day of school and to tell my mother what happened. When she called the school, I guess that the told her that’s the way it’s going to be. That experience was very painful and it still effects me to this day. From that moment on, I became insecure about my ability to learn and I’ve suffered academically there after. I am now 27 and I am struggling to have a steady career. My financial situation is horrible, and though I went to college, I did not finish my education through lack of confidence and fear of repeated failure. After I repeated the third grade, they actually decided to involve my parents in the decision that I needed to go to summer school in order to make it to the fourth grade. I am scared from this. That’s all I am saying. I grew up believing that I was never good enough or smart enough. They did not even work with me and my parents before making such a drastic choice.

Reply
Alan Yuodsnukis
April 29, 2015
at 8:08 pm

@ Carl Walch….I’m sorry that you had an unfortunate experience with retention. It was, and is, a poor educational practice. The so called “morons” who held you back, however, were only operating with the best information they had at the time. My wife (who has a master’s degree in literacy) and I (master’s in teaching and education) retained our daughter in the first grade believing that it was the best option for her. Looking back, it was a mistake. We didn’t know then what researchers know today. If I had the opportunity to go back, I would not make the same decision. Did my wife and I make that decision because we are morons who did not understand our daughter or have any empathy for her? Hardly. We retained her only after a long, thoughtful, gut wrenching decision process. Thankfully, she will be graduating high school in four weeks and then attending a leading national university to study mechanical engineering. If she falls among the average graduates of that university, she will earn nearly twice my salary in her first year after graduation. In my 30+ years in education as both student and teacher, I have not found that education attracts the bottom of the class. A Nobel Laureate taught me Chemistry in college. A Political Science professor advised 3 presidents and was a Rhodes Scholar. I would match the intellects of several of my grade and high school teachers against those of any of the executives I ever worked with in the private sector. I graduated in the top 1% in my class from a NESCAC school (consistently ranked among the top 20 in the country), had a very successful and lucrative career in business management at a Fortune 500 company, then graduated at the top of my graduate school cohort (4.0 GPA) before going on to work in dropout prevention in an underserved, impoverished, rural school district. Your contention that my colleagues and I are largely incompetent, lazy, and do not understand or have any empathy for the children we teach is also woefully inaccurate in my experience. I work a 70 hour week (about 20 more than I ever did in business); that time is spent planning lessons and preparing detailed feedback on my students’ work. I care about them so much that I took a 70% pay cut so I could spend my days working with them. I continue to work in the same school district even though my income has not kept pace with inflation since I started there 8 years ago. I devote my summers to operating a character development and high school preparation program for at-risk 8th graders and doing research into best practices to improve my own. I understand my students well enough to have reduced their dropout rate every year for the past five. Yes, there are lazy and incompetent teachers out there, just as there are lazy and incompetent bankers and real estate brokers. But they do not constitute the majority, any more than the lazy and incompetent make up a majority of those working in the banking and real estate industries.

Reply
Craig Stover
May 10, 2015
at 10:08 pm

Carl Walch, you really believe those in public education are the “bottom of the barrel”? For somebody that speaks so boldly of his own higher education, that sure was a very unintelligent and shortsighted comment to make.
Being held back in the first grade is what caused you to drop out of school years later? Really? Excuse my skepticism, but I bet that you dropping out was caused by other issues, and not just because you were scarred from being held back when you were 6 years old.

You attack public education officials for the policy of retaining children, but from my experience, it is public education officials (teachers and principals) that have an aversion to holding back when it is actually the parent who wants to hold the child back. School officials are more reluctant to hold kids back because it hurts their promotion numbers, thus affecting money they get from the federal government. So, they commission researchers to conduct biased research like this study to try to prove their notion that holding back a kid in grammar school will cause them to be a high school dropout. Mr. Walch, you were scathing of public school officials, but you actually are helping their argument about being a dropout.

Considering I am a secondary education teacher in the public schools, I tend to ruffle the feathers of those that try to promote because it keeps their numbers looking good. I see high school seniors that can’t read, but they get to graduate for the sake of graduation rates. Then again Mr. Walch, what does my opinion and experience matter to you? After all, you are a more superior person to this “bottom of the barrel” public educator.

FYI…I’m also an Army combat veteran 3/75th Rangers. So, since you were a CWO, I am sure you know how much of the “bottom of the barrel” that makes me.

Reply
bigger alpha
May 21, 2015
at 9:40 am

Sure they may graduate high school in the end, but has anyone done the research on what kind of seniors we are now graduating? If 60% quit school before they graduate, so what? That 60% more of the losers already added to a society that is becoming swamped with them. Welfare, no losers all winners, Obama Care, blah blah blah. Of those 60% they will either get it when they get older and do better or still be the same piece of crap that quit school. You people don’t get it; if there are no standards, if there is no fear of failure, if no one holds anyone accountable, ultimately you are doing all children and those of us who are trying to teach them a disservice. Look back at our society 60 years ago and compare it now, see the difference? Research, data, pie charts. Teach for a year and come and talk to me then.

Reply
Acasia
June 7, 2015
at 1:53 pm

Good afternoon!
I have a daughter and she is in first grade at Page Primary in Belmont, NC.
On Friday 6/05/15 I was called at 8:30am from her school. On the phone was the principle along with her teacher. I was told that my daughter was having some issues in reading and was on a level E but needed to be on a level J.

They proceeded to tell me that she was going to be held back in first grade and would not be moving onto the second grade. I asked if there was anything at all I could do to prevent this from happening and the principle simply told me that she is the principle and she makes the decision not me. The last meeting I had with her teacher she told me that Emma was drastically improving on her reading levels and things were looking up. Now only three days before school lets out for the summer I am told that there is nothing I can do or say to change what is going to happen.

I expressed my feelings and told her I would do and pay whatever necessary to get her the right tutoring to get her on track and I was told that there is absolutely nothing I can do about this. I am reaching out to everyone possible to try to get some help on this. I believe my daughter is capable of so much more and I truly believe if they hold her back it will do more harm than good. She is already the oldest in her class due to her birthday being in October.
I am asking for help and advise on what I should do here and how I can move forward with this and make them see where I am coming from.
As a mother I am extremely concerned and worried for my daughters future.
I hope someone can help me out and give me some answers on what to do.

Thank you,

Reply

Your email is *never* published nor shared.

Name

Email

Website

Comment

POST
New research suggests repeating elementary school grades — even kindergarten — is harmful | Education By The Numbers
Education By The Numbers is aimed at journalists and researchers. We seek to answer the question of when (and whether) data can improve education.

- absenteeism
- Adaptive learning
- Bullying
- Charter schools
- Class size
- College graduation
- Common Core
- Community college
- Data news
- Datasets
- Disabilities
- Discipline
- Dropouts
- Early childhood
- Education spending
- gender
- Health
- High school quality
- Homework
- Income inequality
- International comparisons
- Math education
- Metadata
- Parenting
- Private schools
- Race
New research suggests repeating elementary school grades — even kindergarten — is harmful | Education By The Numbers

- Reading
- Repeating a year/retention
- Resilience
- School choice
- School climate surveys
- Student loans
- Summer school
- Teaching
- Technology
- Tests
- University college costs
- Vocational training
- Writing

- Archives
  - February 2015
  - January 2015
  - December 2014
  - November 2014
  - October 2014
  - September 2014
  - August 2014
  - July 2014
  - June 2014
  - May 2014
  - April 2014
  - March 2014
  - February 2014
  - January 2014
  - December 2013
  - November 2013
  - October 2013
  - September 2013
  - August 2013
  - July 2013
  - June 2013
  - May 2013
  - April 2013
  - March 2013
New research suggests repeating elementary school grades — even kindergarten — is harmful | Education By The Numbers
New research suggests repeating elementary school grades — even kindergarten — is harmful | Education By The Numbers
New research suggests repeating elementary school grades — even kindergarten — is harmful | Education By The Numbers
New research suggests repeating elementary school grades — even kindergarten — is harmful | Education By The Numbers
New research suggests repeating elementary school grades — even kindergarten — is harmful | Education By The Numbers
New research suggests repeating elementary school grades — even kindergarten — is harmful | Education By The Numbers
New research suggests repeating elementary school grades — even kindergarten — is harmful | Education By The Numbers
New research suggests repeating elementary school grades — even kindergarten — is harmful | Education By The Numbers
New research suggests repeating elementary school grades — even kindergarten — is harmful | Education By The Numbers