

The iPad Effect: How Platform Choice Affects Information Consumption and Retention

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Context

- + From 2003 to 2010, the number of college students who own laptop computers increased from 36 to 83 percent.
- + 57 percent of people in their 30s reported they received news digitally daily in late 2010.
- + Keeping in mind these statistics along with recent implementation of touch screen technology devices such as Apple's iPad and e-readers such as the Amazon Kindle, it is imperative to consider how information is best retained as well as the effects of different media formats on information recall.

Context

- + ACU
- + Mobile Learning Initiative
- + JMC

Literature

- + Kintsch and van Dijk's (1978) Hierarchy of comprehension
 - + the formation of the coherent whole (what does this say?)
 - + the gist (what does this mean?)
 - + new texts (how can I talk/write about it?)
- + Sanchez and Wiley's (2009) Affect of Scrolling
 - + Essay methodology
- + Smith (2010)
 - + complex interruptions (like pop-ups) caused a decrease in retention

Methodology- Participants

- + 90 respondents in 3 conditions
 - + 30 read on iPads
 - + All 30 were frequent iPad users
 - + 30 read from a paper magazine
 - + 30 read from a website on a 27-inch desktop monitor
- + 51 female/39 male respondents
- + Ages 19-24

Methodology - Experiment

- + Based on Kintsch and van Dijk's study on comprehension in 1978.
- + Respondents were assigned a condition and given
 - + 10 minutes to read an article titled "The Nostalgia Trap" from the May 2011 issue of *The Atlantic*. They were told they could read anything else in the issue or do something else when they had finished reading.
 - + 15 minutes to write a brief essay about the piece
 - + 5 minutes to respond to a 13-question multiple choice survey about the piece
- + Students could not refer back to the article after the reading time.

iPad Condition

- + Respondents downloaded *The Atlantic* app and the issue of the magazine, for which they were reimbursed the purchase price plus tax.
- + This took 25 minutes to complete.
- + The iPad version of the article could be read in the magazine style or the reader style, and a slide show of related images was available.

iPad Condition Screenshot

Share Reading View

DISPATCHES

went after the court itself. In Iowa, the governor appoints justices to eight-year terms, after which they are subject to a retention vote—previously, a formality, but Vander Plaats and his followers channeled anger over the decision into a statewide campaign against the three justices on the ballot last November. “The ruling came as a complete shock to most Iowans,” he told me. “They didn’t know how it had happened. The retention vote was the first time they could make their voices heard.” All three justices lost soundly. And Vander Plaats emerged a power broker.

Still, the law stands. And while the marriage decision influenced Iowa’s elections, nationally the GOP has all but abandoned the fight against gay rights: last December, eight Senate Republicans joined Democrats in repealing “Don’t Ask, Don’t Tell.” The combination of a recession and shifting societal norms is a big reason: polls show that voters are preoccupied with the economy and steadily more accepting of gay marriage. Even Iowans are roughly split over the court’s decision—and the most telling number in a recent *Des Moines Register* poll was the 30 percent of respondents who said they didn’t care about it one way or the other.

Such attitudes alarm people like Vander Plaats. But he has a plan to fight back. Because of his standing in Iowa—and because Iowa will be crucial in determining who challenges President Obama—he has seized the opportunity that the presidential nominating process presents to open another front in his crusade against gay marriage, and a potentially transformative one. Having established a position of leverage, he hopes to use the prospective Republican candidates, and the national media that cover them, to amplify his message and ultimately swing momentum in the culture wars back in his favor.

To prime the electorate, he is touring Iowa’s 99 counties under the auspices of the new organization he heads, the Family Leader. He has also invited the presidential hopefuls to travel with him for a lecture series, which will culminate in a candidates’ debate in November. It is expected that anyone who accompanies him will address such issues as abortion and homosexuality—and with a certain zeal, if they’re wise. So far, most

candidates seem willing. “Vander Plaats is a poolie trainer,” says Steffen Schmidt, a professor of political science at Iowa State University. “He makes them jump through hoops, threatens them, and makes them come to him if they want support. And he’s been remarkably and frighteningly successful.”

Indeed, just before a sweep through Iowa with Vander Plaats, Tim Pawlenty, the former Minnesota governor once considered a moderate, made national news by declaring his intention, if elected president, to reinstate “Don’t Ask, Don’t Tell.” “We thought what Governor Pawlenty did was exactly what we’d like to see a lot of the other candidates do,” Vander Plaats told me.

That’s not impossible to imagine. Social conservatives traditionally dominate Iowa’s Republican caucus. Last time, 60 percent of participants identified themselves as evangelical Christians, and helped deliver a victory to a former pastor, Mike Huckabee. Vander Plaats was his Iowa campaign chair.

The weak economy ensures that jobs, debt, and the role of government will still be important issues in Iowa, as they are everywhere. And other prominent social conservatives, some of whom regard Vander Plaats as a grandstanding interloper, also expect to be wooed.

Nevertheless, the caucus will be decided by a small and committed group of conservative activists. The winner will be in a commanding position. In the end, Vander Plaats’s offer to the national candidates—with all that it implies—may be one they dare not refuse. ■

ADVERTISING Hear Me Now?

THE VERIZON GUY GETS HIS LIFE BACK.
By Spencer Morgan

ON A RECENT CHILLY afternoon, I met the actor Paul Marcarelli at a wooden bench on University Place in New York City, not far from Washington Square Park. He wore a black down vest, checkered scarf, gray paperboy hat, and wire-rimmed eyeglasses. This last accessory was a concession to reality: Marcarelli had long since realized that, if he hoped to have a relatively normal



life, his favorite glasses—Buddy Holly-style plastic frames he’d worn since his mid-20s—would have to be retired from daily use. The frames, like the actor himself, had become synonymous with his most famous role: Test Man—or, more colloquially, “the Verizon Guy”—the iconic pitchman who has uttered his “Can you hear me now?” catchphrase in hundreds of the cell-phone company’s commercials since November 2001.

After nine years in the role, Marcarelli was informed last September, via e-mail, that Verizon was taking its ads in a different direction. He’ll still do some work for the company, but, as Marcarelli puts it, “I’m no longer committed to them like I was.”

That commitment entailed a strange combination of ubiquity and anonymity. Among other things, his initial five-year contract had prohibited him from doing any other commercial work and stipulated that he not discuss any aspect of the Test Man campaign, including the particulars of his contract. (He is still reluctant to go into detail, since he remains under contract with the company.) A 2003 article in *Ad Age*—titled “Verizon Keeps ‘Test Man’ on Short Leash”—noted that the cellular firm “adamantly maintains... that the actor who plays [Test Man] should certainly not be heard.” (Indeed, Verizon had declined to verify Marcarelli’s identity even after *Ad Age* revealed it, in 2002.) The contract was amended in 2006 to include language articulating Marcarelli’s right to promote his own projects, but he still felt hemmed in by the need to protect the character—and with it, his income.

I contacted Marcarelli two and a half years ago, when I first heard the story of his imprisonment behind horn-rims. But he said to try him again in a year. The next time, he said eight months; the time after that, the end of summer 2010. The revision of his Verizon contract has

made Marcarelli’s decision to finally talk an easier one, as has his desire to publicize his first big post-Test Man project: *The Green*, a film he recently wrote and co-produced, starring Jason Butler Harner and Julia Ormond. The movie centers on how a small town slowly turns against a gay couple when one of the men, a schoolteacher, gets ensnared in scandal.

Walking down West Ninth Street near Fifth Avenue, Marcarelli recalls the day in 1994 when he and his high-school friend (and fellow struggling actor) Jen Davis were looking for housing and found a steal on that very block: a one-bedroom in a pre-war townhouse, featuring a stained-glass skylight and the romance of having served as the model for Jimmy Stewart’s apartment in *Rear Window*. The \$835 monthly rent was split among Davis, Marcarelli, and his boyfriend, Rick Gradone.

Marcarelli landed a job doing 30-second commercial spots for Old Navy. “I thought one of those bells that they have at reception desks at hotels,” he said. “Every time one of us saw the commercial, we would hit the bell, because we knew another check was coming”—one worth anywhere from a couple hundred dollars to a couple thousand, depending on circumstances.

In 1998, Marcarelli, Davis, and a few other actors formed Mobius Group, a theater company in the Village, to put on lesser-known works donated by playwrights such as Eric Bogosian and Warren Leight.

Then came the Verizon gig. “When he called to tell us he got the Verizon job, I was driving and I had to pull over,” says Cynthia Silver, a member of Mobius Group. She remembers him exclaiming, “Think of all the plays we can put on!”

At first, Marcarelli was embarrassed about his role as Test Man, but over time he made his peace with it. “The reality was, it was a job,” he says. His contract obligated him to work a couple hundred days a year, which amounted to between 20 and 40 commercials and a steady flow of live events. He offered his catchphrase in front of 85,000 football fans during the halftime show of the Buffalo Bills’ 2002 season opener. “Up to that point,” Marcarelli says, “I hadn’t played to a house larger than 99 seats.”

This peculiar brand of fame was frequently awkward, however. At a cousin’s wedding, he wore “the grayest of gray suits,” but still wound up feeling “like a cofone”—Italian for “calf”—when more people lined up to take pictures with him than with the bride. A few months ago, he attended his grandmother’s funeral. As her body was being lowered into the ground, he heard the hushed voice of a family friend: “Can you hear me now?”

Then there were the drive-bys. Marcarelli has a home in Guilford, Connecticut, and five summers ago, kids in an SUV began driving past at night, yelling, “Can you hear me now?” Later, says Marcarelli, “they started screaming ‘faggot’ up at my house. It got progressively more profane as the years went by.” One night, it happened while some friends were over, and he decided to call the police. “As soon as I hung up the phone,” he says, “I realized that in order for them to do anything about it, it would have to become a report that would go into a police log.” Worried about the publicity—and the questions that might ensue if it came out that the actor playing Test Man was gay—he declined to file a report.

In retrospect, Marcarelli thinks his silence during the Test Man years was largely self-imposed. “I definitely think that my reticence to have any kind of persona outside of this job was that I didn’t want to be put in a position to have to answer any uncomfortable question that would affect my income stream. And I never tested it, so I don’t know.”



Once the world’s largest sugar refinery, Brooklyn’s Domino plant closed in 2004.

DISPATCHES

Share Reading View

Now Marcarelli is focused on his movie, *The Green*, which is under consideration by film festivals worldwide. (An earlier screenplay of his, *Sweet Flame*, was optioned in 2008, but the financing was pulled halfway through filming.) “There’s a price to pay,” Marcarelli says of his Verizon years. “Don’t feel bad for me, but I’m definitely glad that chapter is over. Most people my age are now trying to trade in their street cred for money, and I kind of made my money. I still want to make something of value.” He hopes people will be listening. ■

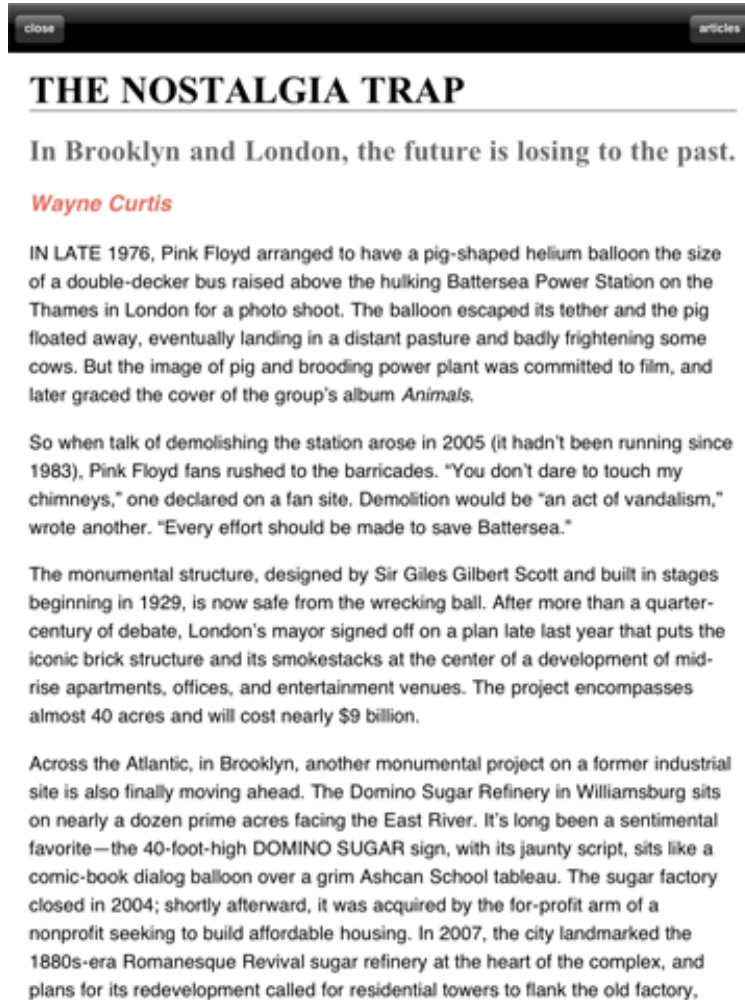
ARCHITECTURE The Nostalgia Trap

IN BROOKLYN AND LONDON, THE FUTURE IS LOSING TO THE PAST.
By Wayne Curtis

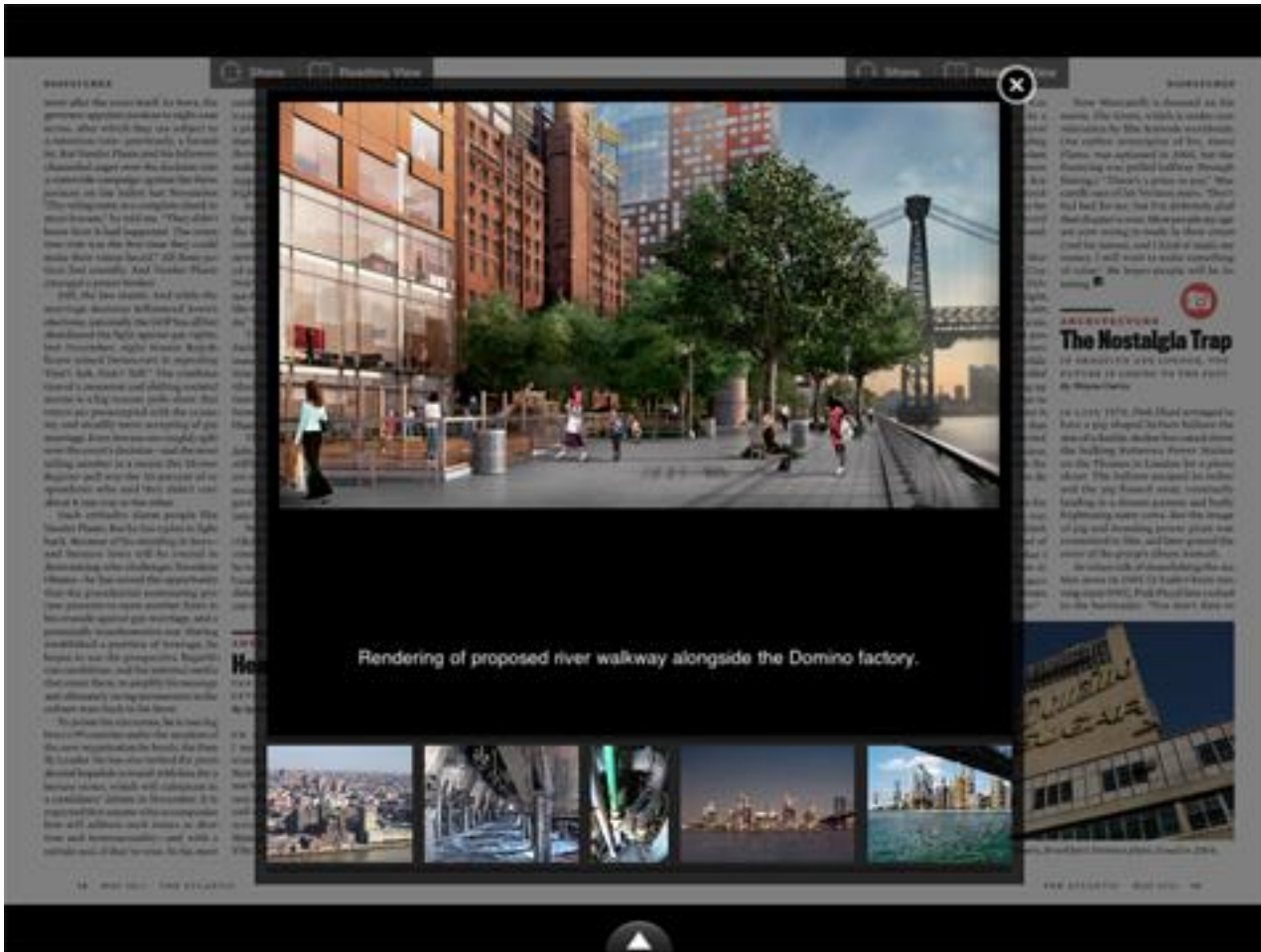
IN LATE 1976, Pink Floyd arranged to have a pig-shaped helium balloon the size of a double-decker bus raised above the hulking Battersea Power Station on the Thames in London for a photo shoot. The balloon escaped its tether and the pig floated away, eventually landing in a distant pasture and badly frightening some cows. But the image of pig and brooding power plant was committed to film, and later graced the cover of the group’s album *Animals*.

So when talk of demolishing the station arose in 2005 (it hadn’t been running since 1983), Pink Floyd fans rushed to the barricades. “You don’t dare to

iPad Condition Screenshot



iPad Condition Screenshot




Paper Condition

- + Respondents were given paper copies of the magazine and instructed to turn to the first page of the article.
- + The article was displayed in three columns. It began on one page, progressed through a double-truck ad to a full page of text, and ended with three lines of text on the last page.

Computer Condition

- + Each respondent was told to open the browser of his or her choice.
- + They were given a piece of paper with the URL of the article on *The Atlantic's* website.
- + They were instructed to open the site and read the article.
- + A slideshow was available near the beginning of the one-page article.

Computer Condition Screenshot


RENEWABLE ENERGY. WE AGREE. 

Let's see what else we can all agree on.

ARCHITECTURE | MAY 2014 ATLANTIC MAGAZINE

The Nostalgia Trap
In Brooklyn and London, the future is looking to the past.

By **WALTER D'ARCY**



IN LATE 1976, Pink Floyd arranged to have a pig-shaped balloon balloon the size of a double-decker bus

JAGUAR OUTPERFORMS THE COMPETITION

JAGUAR | EXCEPTIONAL PERFORMANCE

SEE FOR YOURSELF

JUST IN

DAVIDS, ARCHITECTS | A 22 PM KT
Auto Sales Fall in May on Soaring Economy

VOICES

HELAN WICKOLE | Why You Should Never, Ever, Design a Love Bar...

MARCO CORTEZ | Old Futures

reared above the hulking Battersea Power Station on the Thames in London for a photo shoot. The balloon escaped its tether and the pig floated away, eventually landing in a distant pasture and badly frightening some cows. But the image of pig and brooding power plant was committed to film, and later graced the cover of the group's album *Animals*.

In whose talk of demolishing the station arose in 2003 (it hadn't been running since 1983), Pink Floyd fans fished to the hilt. "You don't dare touch my childhood," one declared on a fan site. Demolition would be "an act of vandalism," wrote another. "Every effort should be made to save Battersea."

The monumental structure, designed by Sir Giles Gilbert Scott and built in stages beginning in 1929, is now safe from the wrecking ball. After more than a quarter century of debate, London's mayor signed off on a plan late last year that puts the iconic brick structure and its smokestacks at the center of a development of mid-rise apartments, offices, and entertainment venues. The project encompasses almost 40 acres and will cost nearly \$1 billion.

DEMOLISHING FACTORIES



- JAMES FELLOWS** | The Big Top Guide to Foreigners and Their Ways
- JEFFREY GOLDBERG** | Sweet Paul Waits to Go to Jail
- CLIVE CROOK** | A Conversation with Three Central Bankers
- JOSHUA GREEN** | An Answer to Sports Politics
- ALEXIS BRADGAL** | Suburban Dreams? A New Urbanism? Or Not?

CORRESPONDENTS

- ANDREW COOPER** | In Cities, Back to the Future For Skid Row
- DAVID DE LA ROSA** | Was Obama or Bill Clinton?
- WESLEY KUMMER** | A History of the Case for Judicial Restraint

In Focus

THE BIGGEST STORY IN PROGRESS



Essay – Measuring Comprehension

- + Similar to Sanchez and Wiley's 2009 study on scrolling, respondents were asked to write an essay using the following prompts:
 - + What's the author's perspective on preservation of old buildings?
 - + How did he support his perspective?
 - + Do you agree or disagree with his perspective? Why?

Essay Coding – Measuring Comprehension

- + Essays were scored by two coders for inclusion of the following themes from the article.
 - + Cities are living entities and must change to adapt.
 - + Nostalgia prevents change and progress
 - + Nostalgia forgets the unpleasant part of history.
 - + Nostalgia disregards or ignores the needs of design.
 - + Decisions based on nostalgia are not based on reason.

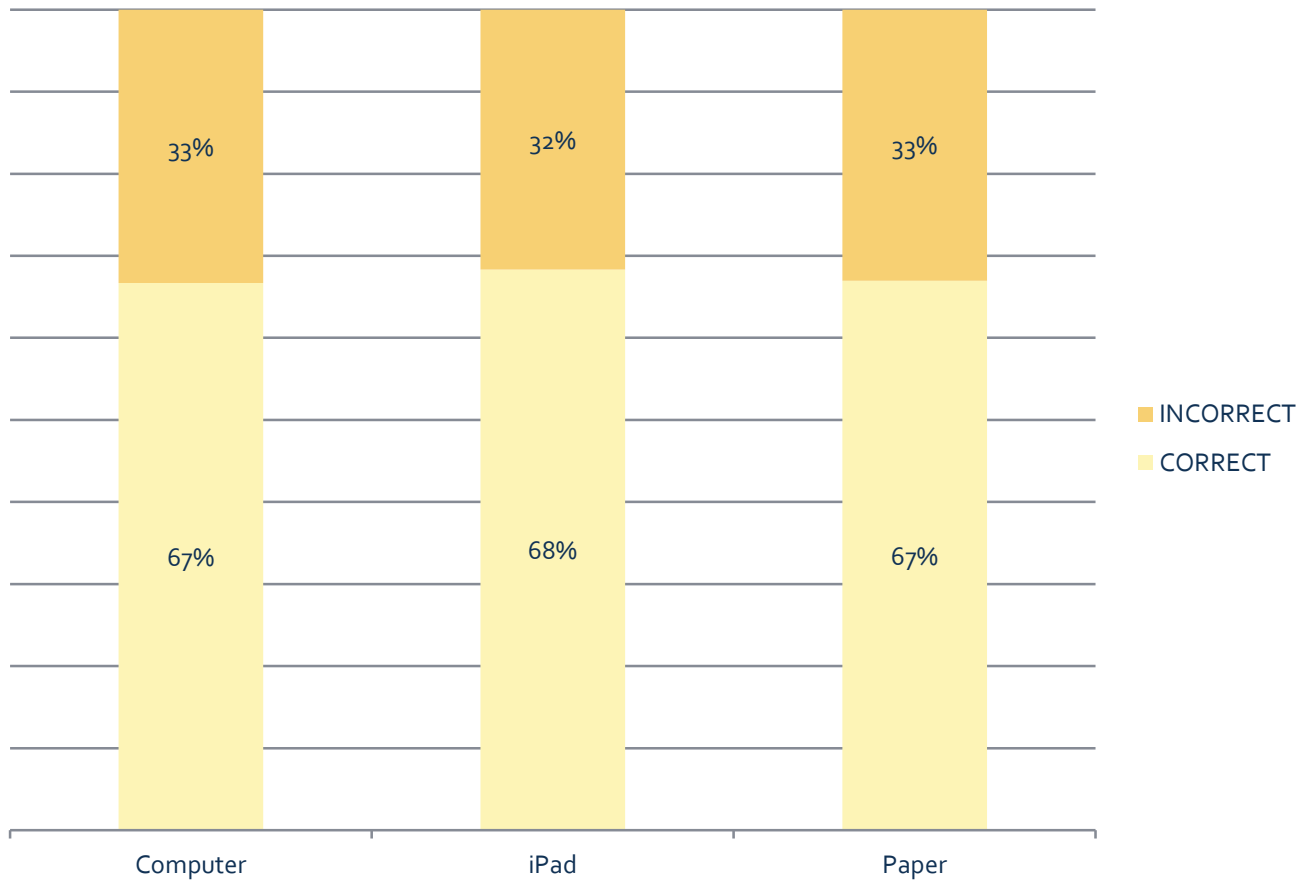
Survey – Measuring Retention

- + Respondents answered 13 multiple choice questions regarding the content of the article.
- + Demographic information was also collected.
- + The questions were objective.
- + The surveys were scored for correct answers.

Essay Findings - Comprehension

- + iPad
 - + 26.6% of respondents didn't write about any of the themes
- + Paper
 - + 16.6% of respondents didn't write about any of the themes
- + Desktop
 - + 40% of respondents didn't write about any of the themes
- + Cohen's Kappa for the essays was an excellent .80

Survey Findings – Retention of facts



Limitations

- + Download time and frustration with iPad app may have affected those readers.
- + Also some iPad users had to be switched to paper readers because they did not have the money in their Apple account to pay for the app.

Conclusions

- + The data seems to suggest that respondents who read on the each type of medium retained the facts of the story at an equal level.
- + Respondents who read on the desktop computer (60% indicated some level) indicated a much lower comprehension of the meaning of the article than those reading on the iPad (73.4%) or paper (83.4%).
- + Of those respondents who indicated comprehension of the themes, the platforms compared more closely – desktop (23%), iPad (27%) and paper (32%).

Future Study

- + Continued analysis of data.
- + Investigation of longer retention of information.